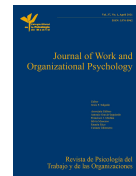




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## Self-care at Work Matters: How Job and Personal Resources mediate between Self-Care and Psychological Well-being

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### ABSTRACT

The aim of this study is to analyze the relationship between self-care activities (mindfulness and physical exercise) and the use of personal and work resources and their relationship with well-being. The sample consisted of 294 workers recruited from 20 organizations from different socioeconomic sectors in Spain. Results showed that mindfulness is positively related to well-being through the mediating role of work resources and personal resources. However, whereas personal resources showed a full mediating role in the hypothesized model, work resources did not show a significant relationship with mindfulness. Finally, results showed positive and significant relationships between the mindfulness x physical exercise interaction and all the dependent variables, and also the interaction between physical exercise and mindfulness had a significant effect on each of these three dependent variables.

### El autocuidado en el trabajo es importante: como los recursos personales y del puesto median entre el autocuidado y el bienestar psicológico

### RESUMEN

El objetivo de este estudio es analizar la relación entre las actividades de autocuidado (*mindfulness* y ejercicio físico) y el uso de recursos personales y laborales y su relación con el bienestar. La muestra está formada por 294 trabajadores contratados de 20 organizaciones de diferentes sectores socioeconómicos en España. Los resultados muestran que el *mindfulness* se relaciona positivamente con el bienestar a través del papel mediador de los recursos laborales y personales. Sin embargo, mientras que los últimos muestran un papel mediador completo en el modelo hipotético, los primeros no muestran una relación significativa con el *mindfulness*. Finalmente, los resultados presentan una relación positiva y significativa entre la interacción *mindfulness*-ejercicio físico y todas las variables dependiente; igualmente la interacción entre ejercicio físico y *mindfulness* tiene un efecto significativo en cada una de estas tres variables dependientes.

In recent years, a growing amount of attention has been paid to workers' self-care, especially in people who care for and assist others in their daily work (Wise et al., 2012). In fact, self-care is even an ethical responsibility for mental health professionals. For example, the American Psychological Association's Ethics Code (American Psychological Association, 2017) states that psychologists strive to be aware of the possible effects of their own physical and mental health on the ability to help those with whom they work. Moreover, with the growth of positive psychology, self-care has been increasingly emphasized as a means of enhancing well-being.

In work settings, people are the core of organization, and employees with high levels of well-being are crucial for organizational life. Thus, caring for their emotional, physical, and psychological health really matters. Organizations can implement different practices and job

resources (e.g., work family balance programs, wellness, and well-being protocols, transparent communication channels) to cultivate well-being (Salanova, 2021). Furthermore, also the employees can self-implement different deliberate activities to cultivate their own well-being. Although there is considerable research on healthy organizational practices (Acosta et al., 2019; Alfes et al., 2012), self-care practices and their effects on individuals' well-being have been explored less and seem to be a relevant topic in psychosocial research (Rupert & Dorociak, 2019).

A sustained effort to promote a culture of self-care in healthcare professionals can be seen throughout the scientific literature (Depner et al., 2020; Jiang et al., 2020), as well as in specialized books with suggestions and tips for improving self-care (Baker, 2003). However, there is still a gap in the literature about the role of self-care

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activities in other fields or types of employees (i.e., non-healthcare organizations). The current challenge is to identify the activities that have the greatest impact on the psychosocial health of employees, considering that each self-care strategy is unique and personal and depends on multiple individual and contextual factors. Furthermore, in the opinion of [Rupert and Dorociak \(2019\)](#), it is also important to identify the most effective self-care behaviors within the work context for maintaining personal and professional well-being while dealing with work demands.

Psychosocial well-being at work has been related to work demands and the job and personal resources of workers. Two models have been essential to understand the role of personal resources in well-being at work: the Conservation of Resources theory (COR) ([Hobfoll, 2012](#)) and the Job Demands-Resources Model ([Bakker & Demerouti, 2017](#)). In this context, self-care activities can act as personal resources to cope with work demands and increase well-being ([Callan et al., 2020](#)).

On the one hand, the Conservation of Resources theory (COR) ([Hobfoll, 1989; 2012](#)) proposes that resources can be objects, conditions, energies, and personal characteristics. This theory predicts that people who obtain more resources will be able to cope better with diversities and, thus, create a gain spiral and show less stress than people who have a worse supply of resources. Therefore, people who use more resources will have greater well-being ([Hobfoll et al., 2018](#)). On the other hand, according to the Job Demands-Resources Model (JD-R) ([Bakker & Demerouti, 2017](#)), employee well-being is highly influenced by individual and organizational factors, such as job demands and resources, which are associated with employee motivation and job performance. Job demands refer to physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological effort, whereas job resources refer to physical, psychological, social, or organizational aspects of work that can be useful to achieve objectives, reduce job demands and the associated physiological and psychological costs, and stimulate growth and personal development. [Bakker and Demerouti \(2017\)](#) also incorporate personal resources, which consist of the psychological capital (e.g., emotional and mental competences) built up in order to successfully adapt to the environment. These personal resources can be instrumental in coping with demands, managing stress, and promoting a healthy work environment. Additionally, the JD-R model contemplates actions employees take based on their job demands and resources (e.g., job crafting, self-undermining, self-care).

Work context is quite complex, and there are many interactive variables related to personal and professional well-being. In this relationship, it is essential to consider the effect of personal and job resources on well-being. Self-care activities can act as personal resources or interact with them. Each person uses these activities for his/her own benefit.

Based on this reality and drawing on the COR and JD-R theories, we examine the role of self-care activities in workers' well-being through the mediation role of job and personal resources. Few studies have been carried out on activities and behaviors, such as self-care activities, that can increase the appropriate use of job and personal resources. [Bakker and Demerouti \(2017\)](#) point out the importance of some actions that workers carry out in relation to their resources, such as self-care activities. Our proposal can help to understand the role of self-care activities in achieving a more positive perception of the work environment, obtaining better resources, and increasing workers' well-being. Self-care activities, such as mindfulness, facilitate the positive perception of job and personal resources through a cognitive and emotional mechanism. These positive emotional and cognitive states resulting from self-care activities favor the optimal use of resources, which, in turn, affects well-being. When workers perform self-care activities, they make better use of their resources to respond to demands and, thus, increase their well-being. Therefore, the aim of this study is to show

the positive relationship between self-care activities and the use of resources and workers' well-being. We analyze the role of self-care activities in well-being through the mediation of job and personal resources in a sample of workers from organizations from different socioeconomic sectors.

### Self-Care and Self-care Activities

Myers and colleagues ([Myers et al., 2012](#)) define self-care as the conscious participation in behaviors that maintain and promote physical, emotional, and psychological well-being. In other words, it refers to a set of activities people perform, such as mindfulness, seeking social support, and physical activity, to maintain and improve their life, health, and well-being. Thus, self-care involves different dimensions of personal and professional life, and contains an intentionality component, a decision to engage in specific activities or behaviors ([Wise et al., 2012](#)) that involves self-reflection and adaptation to one's changing needs. Hence, self-care is a multidimensional, multifaceted process of purposeful engagement in strategies that promote healthy functioning and enhance well-being.

This definition implies potential activities, such as healthy nutrition, exercise, mindfulness, maintaining a good sleep schedule, engaging in hobbies or leisurely activities, and using adaptive coping strategies ([Carrol et al., 1999](#)). All these activities involve a purposeful effort to engage in them in order to maintain well-being. These activities are not only able to enhance well-being, but can also reduce unwell being. In this line, [Zahniser et al. \(2017\)](#) conceptualize self-care as an anti-stress mechanism, and research has found that reducing stress increases job performance. In a way, self-care is the process of actively initiating a method to promote well-being ([Bressi & Vaden, 2017](#)).

Research has also shown a positive relationship between self-care and positive outcomes, such as less psychological distress and greater life satisfaction, among others. In a meta-analysis, [Colman et al. \(2016\)](#) found that people who practiced self-care activities (mindfulness, seeking social support, or other self-care activities) experienced more benefits (i.e., self-compassion, decreased psychological distress, and greater life satisfaction) than people who did not. [Myers et al. \(2012\)](#), in a research with a sample of 488 people, using multiple regression analysis, indicated that self-care activities, such as sleep hygiene, social support, emotion regulation, and acceptance within a mindfulness framework, were significantly related to decreased levels of perceived stress.

Some of the most important self-care activities used in research are mindfulness and physical exercise activities ([Colman et al., 2016](#)). On the one hand, mindfulness can be defined as a form of awareness that stems from paying attention to the present moment in a nonjudgmental and accepting manner ([Bishop et al., 2004](#)). Effective mindfulness programs include breathing, body scan, anti-stress, and self-compassion practices, among others ([Coo & Salanova, 2018](#)), and different studies provide evidence that the development of mindfulness leads to positive affect and cognition, which are key aspects of well-being. Mindfulness plays a crucial role in the achievement of positive results related to well-being ([Depner et al., 2020; Garland et al., 2017](#)); therefore, it is a key variable in the present study.

On the other hand, the term physical exercise will be used to refer to voluntary physical activity ([Nägel et al., 2015](#)). Physical exercise is "a subset of planned, structured, and repetitive physical activity with the ultimate or intermediate goal of improving or maintaining physical fitness" ([Caspersen et al., 1985](#) p. 128). Different activities can be considered physical exercise if they meet the voluntary requirement. In this study, activities of running, walking, cycling, etc. were included. It is widely understood that physical activity improves individual health and well-being ([Biddle](#)

et al., 2019; Piercy et al., 2018). Physical exercise sustained in time leads to a series of physical benefits, such as improvements in cardiorespiratory functions and, therefore, less risk of cardiovascular diseases (Després, 2016).

### Self-Care and Psychological Well-being

From Positive Psychology, the study of psychological well-being has been addressed not only to improve the negative aspects, (e.g., anxiety, depression, or burnout), but also to enhance the positive aspects (e.g., self-efficacy, work engagement, resilience) (Salanova et al., 2019). Furthermore, Ryan and Deci (2001) noted that two types of psychological well-being can be differentiated: hedonic and eudaimonic well-being. Hedonic well-being involves ‘feeling good’, and the concept most frequently used to measure it is subjective well-being, which consists of high levels of positive affect and life satisfaction along with low levels of negative affect. Also Salanova et al. (2019) understand employee well-being to refer to the level of positive psychological resources of workers with a high degree of control and a positive impact on organizational results such as performance. Some indicators of well-being in healthy workers are efficacy beliefs, work engagement, vertical and horizontal trust, and resilience.

Efficacy beliefs are defined as “beliefs about one’s ability to organize and implement courses of action necessary to produce certain achievements or results” (Bandura, 1997 p. 3), and could be considered a dimension of “cognitive well-being” (Diener & Emmons, 1984). Work engagement is defined as a key indicator of employee well-being, specifically “organizational well-being” at different levels (individual, group, leader, and organization), as well as a core dimension of a healthy organization, as in the Healthy and Resilient Organization (HERO) Model (Salanova et al., 2012; Salanova et al., 2019). Thus, employees with high levels of work engagement (i.e., vigor, dedication, and absorption) are characterized by a positive pattern of psychological well-being at work. Team engagement or collective engagement exists at different levels in organizations (Salanova et al., 2003) and is an indicator of a healthy organization. Research views trust as a relevant psychological construct related to psychological well-being. It is defined by Mayer et al. (1995) as “the willingness of one party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party” (p. 712). Trust can be vertical (aggregated levels of trust that employees have in their supervisors and top managers) and/or horizontal (aggregated levels of trust that team members have in their fellow teammates; Peñalver et al., 2019). Finally, resilience is considered a relevant dimension of employee well-being (Salanova et al., 2012). Resilience is usually defined as a person’s ability to recover after a traumatic situation or experience (Tugade et al., 2004). From a positive psychology perspective, much of the research focuses on well-being and the adaptation of responses to stress based on resilience (Denovan et al., 2016). Resilience is an important personal factor that can help individuals to deal with day-to-day exhaustion and stress.

The self-care activities have been related to well-being. Considering voluntary physical exercise and mindfulness as self-care activities, we highlight the work by Nägel et al. (2015), who make it clear that employees who do physical exercise after a stressful day have higher levels of well-being than those who do not. In addition, physical exercise has emotional effects. Positive affective states are important antecedents of results related to work and success (Ilies & Judge, 2005; Lyubomirsky et al., 2005; Tsai, 2007). After an exhausting day at work, when affective states could be deteriorated, it is crucial for employees to do activities such as PE in their free time to restore these affects. Team sports have also received significant attention,

showing the benefits of team sports on health and well-being (Reinboth & Duda, 2006). Some studies even analyze the relationship between physical activity and health and well-being depending on the type of physical activity and intensity (Klussman et al., 2021).

Various studies have highlighted physical exercise as an important behavior for health and well-being and this is the reason for including it as another key variable in our research. For example, Gil-Beltrán, Meneghel, et al. (2020), in a sample of 319 employees (156 sedentary and 163 non-sedentary employees), showed that non-sedentary employees are more empathetic and absorbed in their jobs than sedentary ones. Similarly, in another study with a sample of 485 workers from different Spanish and Latin American companies, Gil-Beltrán, Llorens, et al. (2020) showed that physical exercise is related to higher levels of vigor, which in turn is positively related to organizational well-being. Doing physical exercise seems to create a process of recovering and obtaining more resources, according to the COR theory, which makes workers experience greater well-being at work.

Likewise, Hülshager et al. (2013) showed that mindfulness improves job satisfaction, and Coe and Salanova (2018) found that employees who completed a structured mindfulness program obtained significant growth in their levels of happiness, work engagement, and performance. More recently, Martín-Hernández et al. (2020) indicated that workers who increased their mindfulness capacity when facing job demands were more innovative in the future. Moreover, in a meta-analysis about the efficacy of self-care programs carried out by Colman et al. (2016) results showed that programs that focused on life satisfaction and self-compassion obtained better results than those that focused only on reducing stress, although the results of the latter were also positively significant. In summary, self-care activities (physical exercise and mindfulness) are positively related to well-being. These results indicate that self-care activities can help people to improve their self-perception and feel more effective due to having a greater flow of (job and personal) resources with which to positively face moments of greater stress.

### The Present Study

As stated above, each self-care strategy is unique and personal and depends on multiple individual and contextual factors. Therefore, it is important to study each self-care activity separately to find out its effect on the psychosocial health of workers. Some of the most important self-care activities used in research are mindfulness and physical exercise activities (Colman et al., 2016). In our case, we focus on these two activities. We pay attention to two self-care activities related to two different aspects of health. Physical activity is mainly related to physiological health, whereas mindfulness activities are related to psychosocial health. In addition, these two activities can be carried out without supervision, and workers can record and measure them. No specific research has been found that reports the mediating role of job and personal resources in the relationship between self-care and well-being, although there are isolated studies, mentioned above, on the impact of mindfulness and physical activities on well-being. Moreover, the scientific literature has emphasized the impact of self-care programs on healthcare workers. However, there is still a gap to fill in the study of self-care for the promotion of well-being in other occupational sectors, such as the industrial, commercial, NGO, and public administration sectors, among others. For this reason, our purpose is to address this issue in workers from different socioeconomic sectors: services, productive, commercial, education, and health.

The main objective of this study is to test the mediating role of job/personal resources in the relationship between self-care activities (mindfulness and physical exercise) and psychological well-being.

Based on the above, we formulate the following hypotheses (see Figure 1 and Figure 2):

*H1:* There is a positive and significant relationship between mindfulness activities and psychological well-being through the mediating role of job resources.

*H2:* There is a positive and significant relationship between mindfulness activities and psychological well-being through the mediating role of personal resources.

*H3:* There is a positive and significant relationship between physical exercise activities and psychological well-being through the mediating role of job resources.

*H4:* There is a positive and significant relationship between physical exercise activities and psychological well-being through the mediating role of personal resources.

As a complementary approach, we go a step further and test an interaction hypothesis to determine whether the effects of each self-care activity (mindfulness, physical exercise) on the dependent variables (personal resources, job resource, well-being) are independent or interactive (mindfulness  $\times$  physical exercise).

*H5:* There is a two-way interaction effect of mindfulness  $\times$  physical exercise on personal resources, job resources, and well-being.

## Method

### Participants and Procedure

A total of 622 workers from Spain were invited to participate in the study. Participation was voluntary, and the final sample consisted of 294 participants (47.27%) from 20 private organizations. Participants ranged in age from 18 to 69 years (18-24 age range = 5.8%, 25-34 age range = 25.8%, 35-44 age range = 30.3%, 45-54 age range = 29.55, > 54 = 9.5%); 52% were female.

The average age was 41 years old ( $SD = 9.9$ ), average tenure time was 10.04 years ( $SD = 9.58$ ). Participants were recruited from different organizations that belonged to different socioeconomic sectors: services (45%), productive (30%), commercial (13%), education (9%), and health (3%). Job positions were diverse: CEOs (3.84%), directors (16%), department heads (9%), coordinators (9.8%), administrative (18%), secretaries (6.5%), teachers (5%), among other positions.

### Procedure

This study is part of a broader project called "People Who Shine" (PWS), which is a non-profit association that brings together 46 Spanish organizations committed to promoting health and well-being at work. This project is divided into three main stages: organizational diagnosis, implementation of healthy practices, and solidarity collaboration with NGOs. To be part of this association, it is necessary to implement all the stages. The organizational diagnosis stage was carried out by the research team of this study.

The procedure followed different steps. First, 46 organizations from the PWS association were contacted and invited to participate voluntarily in the validation process of a tool for the identification of psychosocial factors developed by the WANT research team. Finally, 20 organizations filled out the questionnaires, and employees reported the self-care activities required by the study (56% sample mortality). Data collection consisted of identifying stakeholders from each organization who were representative in terms of gender, age, position held, hierarchy, and seniority. Second, semi-structured interviews were carried out by researchers from the WANT research team at the Universitat Jaume I, evaluating quantitative and qualitative aspects of the variables (i.e., job and personal resources and psychological well-being). The stakeholders who provided data

on their organization were informed that participation was voluntary and that data would be protected according to the General Data Protection Regulation (EU) 2016/679. The Ethics Committee of the University approved this study.

Third, workers from the PWS organizations were invited to voluntarily use a mobile phone app called Run to the Moon. Through this app, employees can access different mindfulness exercises and record physical activities. The purpose of this mobile phone app is to foster healthy habits and good practices through technological and collaborative resources that improve quality of life in participants and in the organization in general. Run to the moon app is available on IOS and Android store. This smartphone application was easy to use, and it was exclusively for the employees who worked in organizations included in the People who Shine association.

Finally, participants were informed that the data obtained from their recorded self-care activities (mindfulness and physical exercise) through the Run to the Moon app would be analyzed only for scientific purposes and under the confidential and ethical-professional commitment of the researchers.

## Measures

### Mindfulness Activities

Mindfulness was measured with the Run to the Moon mobile app. This smartphone application delivers short daily activities based on mindfulness practices, which include breathing, body scan, anti-stress, self-care, and various activities. Practice audio files could be used every day, and lasted from 5 to 30 minutes. Mindfulness activities were recorded in the span of one year, and recording activities were based on the amount of time spent. We evaluated the time invested in these activities by the user of the Run to the Moon app.

### Physical Exercise Activities

Physical exercise activities were measured with the Run to the Moon mobile app. This mobile app worked as a record sheet of physical activities such as walking, biking, running, and various physical exercises. The physical activities were recorded during a period of one year and were evaluated based on the time invested in these activities by the user of the app.

The participating organizations of the People Who Shine partnership invited their employees to use the app and record their physical exercises and mindfulness activities. For this study, it was considered the sum of the minutes recorded of the mindfulness and physical activities of each organization.

### Job Resources

Job resources were measured with the Healthy and Resilient Organization (HERO) questionnaire (Salanova et al., 2012). The responses range from 1 (*never*) to 6 (*always*), and the scale includes five items: autonomy, feedback, social support climate, coordination, and positive leadership (i.e., "Degree to which people are coordinated with each other to act in work situations"; coordination).

### Personal Resources

Personal resources were measured with the Healthy and Resilient Organization (HERO) questionnaire (Salanova et al., 2012). The responses range from 1 (*never*) to 6 (*always*), and the scale includes two items: mental competence and emotional

**Table 1.** Means, Standard Deviations, Internal Consistency, and Inter-correlations of the Study Variables ( $N = 294$ )

Variables	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5	6	7
1. Age	40.67	10.28	-	-	-	-	-	-	-	-
2. Gender	1.52	0.50	-	.01	-	-	-	-	-	-
3. Tenure	10.04	9.58	-	.61**	-.03	-	-	-	-	-
4. Mindfulness	27.65	43.36	.78	.14*	-.06	-.01	-	-	-	-
5. Physical Activity	168.50	72.52	.72	.18**	-.05	.03	.26**	-	-	-
6. Job Resources	4.52	0.87	.66	-.05	.04	-.06	.09*	-.03	-	-
7. Personal Resources	4.36	0.79	.70	-.04	-.01	-.09	.11*	-.02	.48**	-
8. Well-being	4.60	0.77	.80	-.06	.05	-.07	.12*	.01	.67**	.59**

\*\* $p < .01$ .

competence (i.e., “Degree to which employees feel they have the emotional competence to cope with the job demands”; emotional competence).

### Well-being

Well-being was measured with the HERO questionnaire (Salanova et al., 2012). Responses range from 1 (*never*) to 6 (*always*), and the scale includes five items: collective efficacy, commitment, vertical trust, horizontal trust, and resilience (i.e., “Degree to which both you and the organization are able to emerge stronger in the face of adversity and failures at work”; resilience).

### Statistical Analyses

First, descriptive statistics (e.g., means, standard deviations, and Cronbach's alpha coefficients) were calculated, in addition to the bivariate correlations between all the variables, using IBM SPSS Statistics 25.0 package. Second, Harman's single-factor test (Podsakoff et al., 2003) was applied with confirmatory factor analysis for the study variables (mindfulness, physical exercise, job resources, personal resources, and well-being), using the SPSS AMOS 23.0 [analyses of moment structures] (Arbuckle, 2010) software package to test for possible common method variance bias.

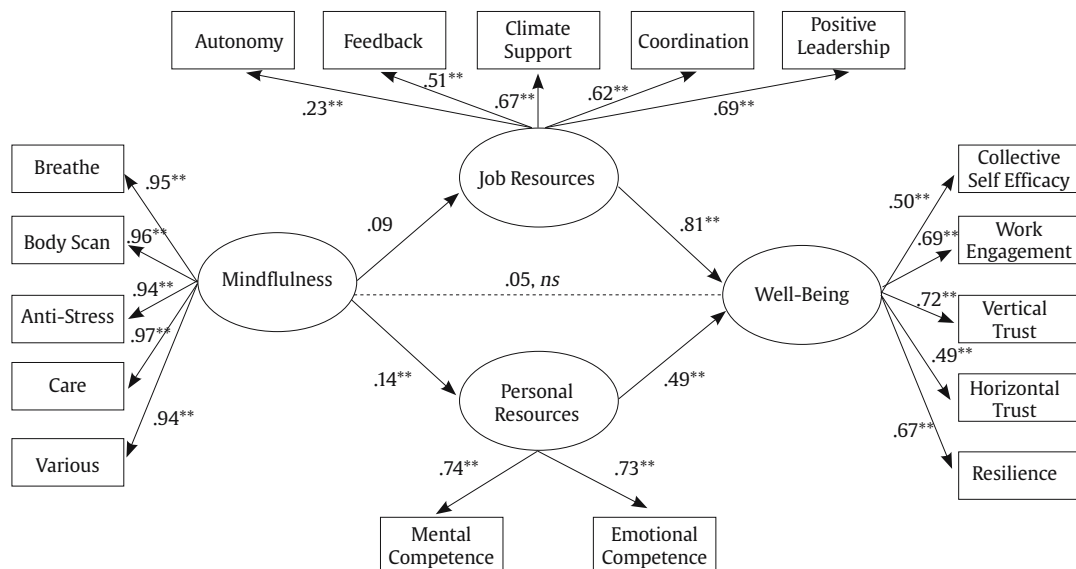
Third, structural equation modelling (SEM) was applied to test the structural relations in the hypothesized models using AMOS. The maximum likelihood method was used, and the goodness of fit

of each model was determined by considering absolute and relative indices (Schermelleh-Engel et al., 2003):  $\chi^2$ ,  $\chi^2/df$ , incremental fit index (IFI), comparative fit index (CFI), normed fit index (NFI), root mean square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), and Akaike information criterion (AIC). Furthermore, the product of coefficients method (MacKinnon et al., 2002) was employed to test the mediation hypothesis.

## Results

### Preliminary Analyses

Table 1 shows means, standard deviations, Cronbach's  $\alpha$  indices, and Pearson's correlations among the study variables. Data show positive relationships between mindfulness activities and resources and well-being, whereas physical exercise activities do not show significant relationships with resources or well-being. A one-factor ANOVA did not reveal any significant gender, age, or tenure differences in the study variables. Next, results of preliminary data analyses revealed a significantly poorer fit of the Harman single-factor model to the study variables (See Table 2, M0; Podsakoff et al., 2003). Therefore, common method variance cannot be considered a serious deficiency in this dataset. Additionally, the same analysis was performed to compare a single-factor model of (job and personal) resource subdimensions with a bifactorial model (job and personal resources separately). Results indicated a poor fit of the single factor model to the data,  $\chi^2(14) = 64.533$ ,  $p < .001$ ,



**Figure 1.** Research Model 1.

RMSEA= .11, IFI = .87, CFI = .87, NFI = .85, TLI = .81, AIC = 92.53, and a good fit of the two-factor model,  $\chi^2(13) = 23.435, p < .001$ , RMSEA= .05, IFI = .97, CFI = .97, NFI = .95, TLI = .96, AIC = 53.43, as expected.

**Model Fit: Structural Equation Modelling**

Mindfulness, job resources, personal resources, and well-being are represented as latent variables in the structural model shown in Figure 1. Following James et al. (2006), different models were tested to verify the hypotheses. Our research model (M1) assumes that job resources and personal resources play full mediating roles in the relationship between mindfulness activities and well-being. The results in Table 2 show that M1 presented an acceptable fit to the data, and that almost all the fit indices met the criteria. The path from mindfulness to job resources was positive, but not statistically significant ( $\beta = .09, p = .19, ns$ ). The path from mindfulness to personal resources was positive and statistically significant ( $\beta = .14, p < .05$ ), as was the path from job resources to well-being ( $\beta = .81, p < .05$ ) and from personal resources to well-being ( $\beta = .49, p < .001$ ). Furthermore, the sociodemographic variables age, gender, and tenure were included in the initial SEM model as control variables. Upon examination, none of them showed significant relationships with the dependent variables (job resources, personal resources, and well-being), and so they were excluded from further models.

Next, a new model (M2) was developed that proposes that job resources and personal resources play partial mediating roles between mindfulness and well-being, which means that there is also a direct relationship between mindfulness and well-being. The results indicate that, although M2 also fits the data, given that most of the fit indices met the criteria, the data fit M1 better, and most of the relationships between the variables in M2 were not significant. Specifically, the path from mindfulness to job resources was positive, but not significant ( $\beta = .07, p = .31, ns$ ), as was the path from mindfulness to personal resources ( $\beta = .12, p = .06, ns$ ) and from mindfulness to well-being ( $\beta = .05, p = .28, ns$ ). Although the difference between the two models (M1 and M2) was not significant,  $\Delta\chi^2 M2-M1(2) = 517, ns$ , M1 showed significant relationships between the variables. Thus, we opted for our research model (M1), which assumes that mindfulness is positively related to well-being through the full mediating role of job resources and

personal resources. However, whereas personal resources showed a full mediating role in the hypothesized model, job resources did not show a significant relationship with mindfulness. These results ruled out our Hypotheses 1 and confirmed our Hypothesis 2.

Furthermore, the structural model for Hypotheses 3 and 4, shown in Figure 2, consisted of physical exercise, job resources, personal resources, and well-being, which are represented as latent variables. Our research model (M3) proposes that job resources and personal resources play full mediating roles in the relationship between physical exercise and well-being. The results presented in Table 2 show that M3 did not fit the data, and that not all the fit indices met the criteria. Additionally, although the relationships between the variables were positive, neither the path from physical exercise to job resources ( $\beta = .02, p = .63$ ) nor the relationship between physical exercise and personal resources ( $\beta = .04, p = .28$ ) was statistically significant.

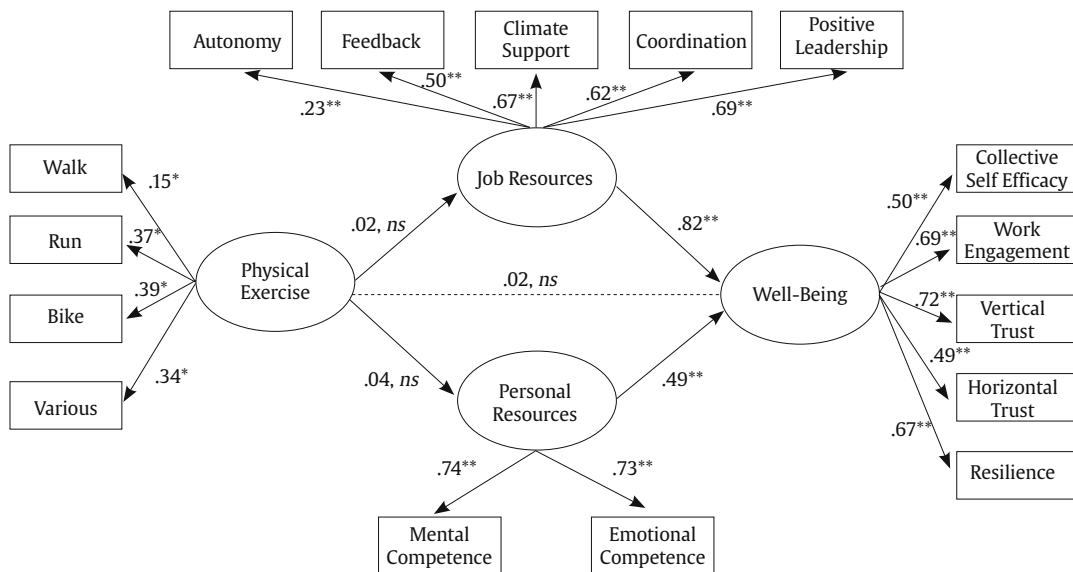
Next, another model was developed (M4) that assumes that job resources and personal resources play partial mediating roles between physical exercise and well-being, which means that there is also a direct relationship between physical exercise and well-being. Results indicate that this new model did not fit the data, and that most of the relationships between the variables were not statistically significant, specifically the path from physical exercise to job resources ( $\beta = .009, p = .79, ns$ ), physical exercise to personal resources ( $\beta = .05, p = .30, ns$ ), and physical exercise to well-being ( $\beta = .02, p = .47, ns$ ). These results did not confirm our Hypotheses 3 and 4.

**Table 2.** Fit Indices of the Structural Equation Models

Model	$\chi^2$	df	RMSEA	IFI	CFI	NFI	TLI	AIC
M0	2288.363	179	.21	.66	.66	.64	.60	2434.33
M1	289.491	111	.07	.97	.96	.95	.95	407.491
M2	288.974	110	.07	.96	.96	.94	.95	408.359
M3	430.249	98	.11	.81	.81	.77	.77	538.249
M4	429.584	97	.11	.81	.81	.77	.77	539.584

Note. M0 = Harman's single factor test; M1 = Model 1; M2 = Model 2; M3 = Model 3; M4 = Model 4.

Based on MacKinnon et al. (2002), the product of coefficients method was estimated to test the mediation hypotheses for H2. The



**Figure 2.** Research Model 3.

mediated effect of personal resources in the relationship between mindfulness and well-being was statistically significant ( $P = Z_{\alpha} \cdot Z_{\beta} = 24.14, p < .05$ ). This result suggests a full mediation effect of personal resources, thus supporting *H2*.

### Interactive Effect

To determine whether the effects of each self-care activity (mindfulness, physical exercise) on the dependent variables (personal resources, job resources, well-being) are independent or interactive (mindfulness  $\times$  physical exercise), we tested an interaction hypothesis (*H5*) via linear regression. We expected a two-way interaction effect of mindfulness  $\times$  physical exercise on the dependent variables. That is, the combination of practicing mindfulness and physical exercise activities would enhance personal resources, job resources, and well-being.

A centering methodology was used to reduce multicollinearity. Thus, each independent variable was centered, followed by the creation of a new centered product variable by multiplying mindfulness and physical exercise. Next, bivariate correlations among the study variables were calculated, and the results showed positive and significant relationships between the centered mindfulness-physical exercise interaction and all the dependent variables (personal resources = .13,  $p < .05$ ; job resources = .12,  $p < .05$ ; well-being = .15,  $p < .05$ ). With these results, we proceeded to carry out linear regression analysis to determine to what degree the centered mindfulness-physical exercise interaction variable contributes to each dependent variable. Results revealed that this interaction variable was a significant predictor of personal resources ( $R^2 = .017, \beta = .13, p < .05$ ), job resources ( $R^2 = .014, \beta = .12, p < .05$ ), and well-being ( $R^2 = .024, \beta = .15, p < .05$ ) in our research model. This means that the interaction between physical exercise and mindfulness has a significant effect on each of these three variables. Following Cohen (1983) and Jaccard et al. (1990), regression lines were drawn separately for each regression equation to interpret the relationship between mindfulness, physical exercise, and our dependent variables at high levels (+1 *SD*) and low levels (-1 *SD*) of the moderator variable.

### Discussion

Based on the COR (Hobfoll, 1989; 2012) and JD-R (Bakker & Demerouti, 2017) models, we examined in the current study the mediating role of self-care activities (i.e., mindfulness and physical exercise) and the use of personal and work resources and their relationship with well-being. In other words, we proposed job resources and personal resources as mediators in the relationship between self-care activities and well-being.

More and more attention is paid to the self-care of workers because its relationship with well-being and performance has been shown. Specifically, the present study draws on the Conservation of Resources Theory (COR) (Hobfoll, 1989, 2012) and the Job Demands-Resources Model (JD-R) (Bakker & Demerouti, 2017) to test the mediating role of job resources and personal resources in our research model. Therefore, our purpose was to study the complexity of the effect of job resources and personal resources on the well-being of workers.

### Theoretical and Practical Implications

From a theoretical point of view, this study expands the investigation of the COR model (Hobfoll, 1989) and the JD-R model (Bakker & Demerouti, 2017; Demerouti et al., 2001) by providing evidence that personal resources, such as emotional and mental competence, are mediators in the relationship between mindfulness,

self-care activities, and well-being at the workplace. Thus, a new aspect of the relationship between resources and well-being is shown by knowing variables that activate and make resources more effective.

From a practical point of view, our results provide evidence for promoting and implementing self-care activities, such as mindfulness, which at the same time are related to a better perception of job and personal resources and better well-being-related outcomes. These positive practices may contribute to promoting healthy organizations and providing evidence about useful digital tools (i.e., Run on the Moon app) for organizations that want to optimize healthy self-care practices in the work environment.

Therefore, it is important to study each self-care activity in order to determine its effect on workers well-being. In our case, we focused on physical exercise activities and mindfulness activities. The results led to different conclusions about each self-care activity. Regarding mindfulness activities, our results confirm the proposed hypotheses, although in a specific way. Personal resources are mediators in the relationship between mindfulness self-care activities and workers' well-being. There is a positive relationship between mindfulness activities and personal resources and between the latter and well-being. In addition, we found a full mediation because it cancels the direct relationship between mindfulness activities and well-being. This result is interesting given that mindfulness care activities involve mental, cognitive, and emotional processes and are related to personal resources and these to well-being through a total mediation. This mediation reveals the effect process of mindfulness activities on the dependent variables. However, job resources are not mediators in the relationship between mindfulness activities and workers' well-being. Mindfulness activities show a positive relationship with well-being, but job resources do not intervene in this relationship. These results have important practical implications for practitioners, because the promotion of well-being can come from mindfulness activities when workers have personal resources. But this relationship does not occur in the case of job resources. Our results show different results for each self-care activity and are important for scientific development and the practice of professionals. Given that a study of the direct relationship between self-care activities and well-being would be incomplete, it is important to analyze the effect of the mediating variables. Considering mediating variables involves identifying specific aspects that might affect the relationship. In the case of resources, considering general effects of "resources" could produce unrealistic results. Therefore, we analyzed the differential effects of each type of resource (job and personal).

Regarding physical exercise activities, we were not able to establish a relationship between these activities and the use of job and personal resources. The relationship between these activities and well-being was not significant either. Therefore, we cannot confirm the hypotheses about the potential effect of physical exercise activities on resources as a way to increase well-being. However, it is important to keep in mind that our study was carried out with a sample of workers from different socioeconomic sectors: commercial, education, productive, health, and services. Our results are not consistent with previous studies carried out with samples of workers who care for and assist others in their daily work, which obtained positive effects of physical exercise on well-being (Gil-Beltrán, Meneghel, et al. 2020; Nägel et al., 2015). We think it is important to study the specific effects of self-care activities in different occupations with different demands and working conditions.

However, our Hypothesis 5 was confirmed, suggesting that there is a significant effect of physical exercise on the dependent variables (personal resources, job resources, well-being) when it is combined with the practice of mindfulness. This result is in line with the self-care literature, which sustain that self-care is a multidimensional process of engagement in strategies of personal and professional life (i.e., mindfulness and physical exercise) that

promote healthy functioning (Wise et al., 2012). This idea suggests that mindfulness and physical exercise should be combined, and thus interact in a synergetic way to have a greater impact on coping with work demands, using resources and enhancing employee well-being, than independently (Callan et al., 2020). Furthermore, these results are consistent with the meta-analysis conducted by Colman, et al. (2016), which highlighted mindfulness and physical activities as the self-care activities more closely related to well-being. These findings also support the complexity of the COR and JD-R models, since considering the interaction between variables is fundamental to knowing the antecedents of well-being.

### Limitations and Future Research

Some limitations of this study must be acknowledged. First, the groups of people who participated were not randomly chosen because the organizations sent a general invitation to all the workers. The second limitation is that it is a cross-sectional study. Finally, we think that the use of digital technologies can discriminate the sample based on the skills of using technology. Future studies should include longitudinal designs in order to compare the effects of practicing self-care activities at different times, using pre-post measurement points and randomized controlled trials with experimental and (waiting list)-control assignments. Moreover, the use of diary studies could be interesting for future studies in order to obtain relevant information about the psychological mechanisms underlying the use of self-care activities that can influence the outcome variables. Finally, replications with smartphone Apps are welcome, in order to include the use of other self-care activities, such as social support, gratitude interventions, optimism increment, as well as diverse physical exercises, and analyze their impact on various organizational outcomes such as organizational commitment and in-role and extra-role performance, among others.

### Final Note

In conclusion, self-care activities have a different effect on the well-being of workers depending on the work context. Physical exercise activities, which have been shown to have benefits for the well-being of care workers in past studies (Gil-Beltrán, Meneghel, et al., 2020; Nägel et al., 2015), do not show this relationship with the well-being of workers in the socioeconomic sectors included in this study. Mindfulness activities show a positive and significant relationship with well-being, and this relationship is even more powerful when the mediated effect of personal resources is considered. However, the more powerful driver of workers' well-being is just the interaction between the body (physical activity) and the mind (mindfulness) as we demonstrated in the current study and that could be replicated in future research. Mind (mindfulness) and body (physical exercise) are potential drivers of wellbeing when they work in an interaction way. Thus, when physical exercise interacts with mindfulness activities, they are positively and significantly related to job and personal resource variables and to well-being. These interaction results are very important and show the convenience of analyzing the effect of each of the self-care activities on well-being and going one step further by also analyzing the interaction between them.

### Conflict of Interest

The authors of this article declare no conflict of interest.

### References

Acosta, H., Llorens, S., Escaff, R., Díaz-Muñoz, J.-P., Troncoso, S., Salanova, M., & Sanhueza, J. (2019). ¿Confiar o no confiar? El rol mediador de

- la confianza entre el trabajo en equipo y el work engagement. *Revista Interamericana de Psicología Ocupacional*, 38(1), 85-99. <https://doi.org/10.21772/ripo.v38n1a07>
- Alfes, K., Shantz, A., & Truss, C. (2012). The link between perceived HRM practices, performance and well-being: The moderating effect of trust in the employer. *Human Resource Management Journal*, 22(4), 409-427. <https://doi.org/10.1111/1748-8583.12005>
- American Psychological Association (APA, 2017). *Ethical principles of psychologists and code conduct*. APA Publishing.
- Arbuckle, J. L. (2010). *IBM SPSS Amos 19 user's guide*. <https://doi.org/10.4135/9781526402257.n4>
- Baker, E. K. (2003). *Caring for ourselves: A therapist's guide to personal and professional well-being*. American Psychological Association. <https://doi.org/10.1037/10482-000>
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. <https://doi.org/10.1037/ocp0000056>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman/Time Books/Henry Holt & Co.
- Biddle, S. J. H., Ciacconi, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. *Psychology of Sport and Exercise*, 42(August), 146-155. <https://doi.org/10.1016/j.psychsport.2018.08.011>
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230-241. <https://doi.org/10.1093/clipsy/bph077>
- Bressi, S. K., & Vaden, E. R. (2017). Reconsidering self-care. *Clinical Social Work Journal*, 45(1), 33-38. <https://doi.org/10.1007/s10615-016-0575-4>
- Callan, S., Schwartz, J., & Arputhan, A. (2020). Training future psychologists to be competent in self-care: A systematic review. *Training and Education in Professional Psychology*, 15(2), 117-125. <https://doi.org/10.1037/tep0000345>
- Carroll, L., Paula, G., & Murra, J. (1999). The moral imperative - self-care for women psychotherapists. *Women & Therapy*, 22(2), 133-143. [https://doi.org/10.1300/J015v22n02\\_10](https://doi.org/10.1300/J015v22n02_10)
- Caspersen, C. J., Powell, K. E., & Christensen, G. M. (1985). Physical activity, exercise, and physical fitness: Definitions and distinctions for health-related research. *Public Health*, 100(2), 126-131.
- Cohen, J. (1983). The cost of dichotomization. *Applied Psychological Measurement*, 7(3), 249-253. <https://doi.org/10.1177/014662168300700301>
- Colman, D. E., Echon, R., Lemay, M. S., McDonald, J., Smith, K. R., Spencer, J., & Swift, J. K. (2016). The efficacy of self-care for graduate students in professional psychology: A meta-analysis. *Training and Education in Professional Psychology*, 10(4), 188-197. <https://doi.org/10.1037/tep0000130>
- Coo, C., & Salanova, M. (2018). Mindfulness can make you happy-and-productive: A mindfulness controlled trial and its effects on happiness, work engagement and performance. *Journal of Happiness Studies*, 19(6), 1691-1711. <https://doi.org/10.1007/s10902-017-9892-8>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Denovan, A., Crust, L., & Clough, P. J. (2016). Resilience at work. In L. G. Oades, M. F. Steger, A. Delle Fave, & J. Passmore (Eds.), *The Wiley Blackwell handbook of the psychology of positivity and strengths-based approaches at work* (pp. 132-149). Wiley Blackwell. <https://doi.org/10.1002/9781118977620.ch9>
- Depner, R. M., Cook-Cottone, C. P., & Kim, S. (2020). Structural relationship between mindful self-care, meaning made, and palliative worker's quality of life. *International Journal of Stress Management*, 28(1), 74-87. <https://doi.org/10.1037/str0000209>
- Després, J. P. (2016). Physical activity, sedentary behaviours, and cardiovascular health: When will cardiorespiratory fitness become a vital sign? *Canadian Journal of Cardiology*, 32(4), 505-513. <https://doi.org/10.1016/j.cjca.2015.12.006>
- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47(5), 1105-1117. <https://doi.org/10.1037/0022-3514.47.5.1105>
- Garland, E. L., Kiken, L. G., Faurot, K., Palsson, O., & Gaylord, S. A. (2017). Upward spirals of mindfulness and reappraisal: Testing the mindfulness-to-meaning theory with autoregressive latent trajectory modeling. *Cognitive Therapy and Research*, 41(3), 381-392. <https://doi.org/10.1007/s10608-016-9768-y>
- Gil-Beltrán, E., Llorens, S., & Salanova, M. (2020). Employees' physical exercise, resources, engagement, and performance: A cross-sectional study from HERO Model. *Journal of Work and Organizational Psychology*, 36(1), 39-47. <https://doi.org/10.5093/jwop2020a4>
- Gil-Beltrán, E., Meneghel, I., Llorens, S., & Salanova, M. (2020). Get vigorous with physical exercise and improve your well-being at work! *International Journal of Environmental Research and Public Health*, 17(17), 1-10. <https://doi.org/10.3390/ijerph17176384>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524. <https://doi.org/10.1037/0003-066X.44.3.513>



- Hobfoll, S. E. (2012). Conservation of resources theory: Its implication for stress, health, and resilience. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 127-147). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195375343.013.0007>
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103-128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Hülshöger, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of mindfulness at work: The role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, 98(2), 310-325. <https://doi.org/10.1037/a0031313>
- Ilies, R., & Judge, T. A. (2005). Goal regulation across time: The effects of feedback and affect. *Journal of Applied Psychology*, 90(3), 453-467. <https://doi.org/10.1037/0021-9010.90.3.453>
- Jaccard, J., Wan, C. K., & Turrissi, R. (1990). The detection and interpretation of interaction effects between continuous variables in multiple regression. *Multivariate Behavioral Research*, 25(4), 467-478. [https://doi.org/10.1207/s15327906mbr2504\\_4](https://doi.org/10.1207/s15327906mbr2504_4)
- James, L. R., Mulaik, S. A., & Brett, J. M. (2006). A tale of two methods. *Organizational Research Methods*, 9(2), 233-244. <https://doi.org/10.1177/1094428105285144>
- Jiang, X., Topps, A. K., & Suzuki, R. (2020). A systematic review of self-care measures for professionals and trainees. *Training and Education in Professional Psychology*. Online publication. <https://doi.org/10.1037/tep0000318>
- Klussman, K. Julia Langer, J., & Lee Nichols, A. (2021). The relationship between physical activity, health, and well-being. *European Journal of Health Psychology*, 28(2), 59-70. <https://doi.org/10.1027/2512-8442/a000070>
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803-855. <https://doi.org/10.1037/0033-2909.131.6.803>
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104. <https://doi.org/10.1037/1082-989X.7.1.83>
- Martín-Hernández, P., Ramos, J., Zornoza, A., Lira, E. M., & Peiró, J. M. (2020). Mindfulness and job control as moderators of the relationship between demands and innovative work behaviours. *Journal of Work and Organizational Psychology*, 36(2), 95-101. <https://doi.org/10.5093/jwop2020a9>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734. <https://doi.org/10.5465/amr.1995.9508080335>
- Myers, S. B., Sweeney, A. C., Popick, V., Wesley, K., Bordfeld, A., & Fingerhut, R. (2012). Self-care practices and perceived stress levels among psychology graduate students. *Training and Education in Professional Psychology*, 6(1), 55-66. <https://doi.org/10.1037/a0026534>
- Nägel, I. J., Sonnentag, S., & Kühnel, J. (2015). Motives matter: A diary study on the relationship between job stressors and exercise after work. *International Journal of Stress Management*, 22(4), 346-371. <https://doi.org/10.1037/a0039115>
- Peñalver, J., Salanova, M., Martínez, I. M., & Schaufeli, W. B. (2019). Happy-productive groups: How positive affect links to performance through social resources. *Journal of Positive Psychology*, 14(3), 377-392. <https://doi.org/10.1080/17439760.2017.1402076>
- Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A., George, S. M., & Olson, R. D. (2018). The physical activity guidelines for Americans. *JAMA - Journal of the American Medical Association*, 320(19), 2020-2028. <https://doi.org/10.1001/jama.2018.14854>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise*, 7(3), 269-286. <https://doi.org/10.1016/j.psychsport.2005.06.002>
- Rupert, P. A., & Dorociak, K. E. (2019). Self-care, stress, and well-being among practicing psychologists. *Professional Psychology: Research and Practice*, 50(5), 343-350. <https://doi.org/10.1037/pro0000251>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Salanova, M. (2021). Work-engagement: A key to HEROs - healthy and resilient organizations. In J. P. Meyer & B. Schneider (Eds.), *A research agenda for employee engagement in a changing world of work* (pp. 53-65). Edward Elgar Publishing. <https://doi.org/10.4337/9781789907858.00011>
- Salanova, M., Acosta-Antognoni, H., Llorens, S., & Blanc, P. Le. (2021). We trust you! A multilevel-multireferent model based on organizational trust to explain performance. *International Journal of Environmental Research and Public Health*, 18(8), Article 4241. <https://doi.org/10.3390/ijerph18084241>
- Salanova, M., Llorens, S., Cifre, E., & Martínez, I. M. (2012). We need a hero! Toward a validation of the healthy and resilient organization (HERO) model. *Group and Organization Management*, 37(6), 785-822. <https://doi.org/10.1177/1059601112470405>
- Salanova, M., Llorens, S., Cifre, E., Martínez, I. M., & Schaufeli, W. B. (2003). Perceived collective efficacy, subjective well-being and task performance among electronic work groups: An experimental study. *Small Group Research*, 34(1), 43-73. <https://doi.org/10.1177/1046496402239577>
- Salanova, M., Llorens, S., & Martínez, I. M. (2019). *Organizaciones saludables. Una mirada desde la psicología positiva*. Editorial Aranzadi.
- Schermele-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *MPR-Online*, 8(2), 23-74.
- Tsai, J. L. (2007). Ideal affect: Cultural causes and behavioral consequences. *Perspectives on Psychological Science*, 2(3), 242-259. <https://doi.org/10.1111/j.1745-6916.2007.00043.x>
- Tugade, M. M., Fredrickson, B. L., & Barrett, L. F. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of Personality*, 72(6), 1161-1190. <https://doi.org/10.1111/j.1467-6494.2004.00294.x>
- Wise, E. H., Hersh, M. A., & Gibson, C. M. (2012). Professional psychology: Research and practice. *Professional Psychology: Research and Practice*, 43(5), 487-494. <https://doi.org/10.1037/a0029446>
- Zahniser, E., Rupert, P. A., & Dorociak, K. E. (2017). Self-care in clinical psychology graduate training. *Training and Education in Professional Psychology*, 11(4), 283-289. <https://doi.org/10.1037/tep0000172>

