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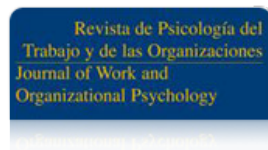
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# Our Boss is a Good Boss! Cross-level Effects of Transformational Leadership on Work Engagement in Service Jobs

¡Nuestro jefe es un buen jefe! Los efectos transnivel del liderazgo transformacional sobre el *engagement* en el trabajo en puesto de servicio

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**ABSTRACT:** In service work, emotional demands are important due to their effects on social interactions with customers, patients, pupils, etc. The purpose of this study is to examine how emotional demands and leadership are related to engagement of the team members. The sample consists of 1,079 employees nested in 124 work teams from four Spanish public organizations. Multilevel analyses showed: 1) a positive effect of emotional demands on work engagement, 2) a cross-level effect of leadership on work engagement, and 3) a cross-level moderation effect of leadership on the relationship between emotional demands and work engagement. Results suggest that shared perceptions of leadership by teams affect their work engagement levels directly and through an interaction effect on the emotional demands-engagement relationship. When employees feel emotionally overloaded, their leaders can relieve this negative impact on their levels of work engagement. Practical and theoretical implications are presented.

**Keywords:** Leadership, Emotional demands, Engagement, Multilevel.

**RESUMEN:** En el trabajo de servicio, las demandas emocionales son importantes debido a sus efectos sobre las interacciones sociales con clientes, pacientes, alumnos, etc. El propósito de este estudio es examinar cómo se relacionan las demandas emocionales y el liderazgo con el *engagement* en el trabajo de los miembros del equipo. La muestra consiste en 1,079 empleados anidados en 124 equipos de trabajo de cuatro organizaciones públicas españolas. Los análisis multinivel mostraron: 1) un efecto positivo de las demandas emocionales sobre el *engagement* en el trabajo, 2) un efecto, a través de los niveles, del liderazgo sobre el *engagement* en el trabajo y 3) un efecto de moderación, a través de los niveles, del liderazgo sobre la relación entre las demandas emocionales y el *engagement* en el trabajo. Los resultados sugieren que las percepciones compartidas sobre el liderazgo que tiene el equipo afectan a sus niveles de *engagement* en el trabajo directamente y a través de un efecto de interacción sobre la relación demandas emocionales- *engagement*. Cuando los empleados se sienten emocionalmente sobrecargados, sus líderes pueden aliviar este impacto negativo en sus niveles de *engagement* en el trabajo. Se presentan implicaciones teóricas y prácticas.

**Palabras clave:** Liderazgo, Demandas emocionales, Engagement, Multinivel.

## Introduction

In recent decades, the nature of work has changed. A transition has taken place from mechanical jobs to work in service segments. Employment changes involve changing emotional demands that require some kind of emotional labor from employees. Many occupations require significant emotional competences, such as coping with difficult social interactions with customers, students, or colleagues, emotional regulation at work, and so on. Occupations that require emotional work include face-to-face or voice-to-voice contact with others. In these circumstances, employees need to deliver positive emotional states to others, and employers can manage (to some degree) the emotional activities of their employees (Hochschild, 1983). This is a vital part of the work in service jobs.

In the past two decades, interest in affective and emotional psychological experiences at work (Brief & Weiss, 2002) has grown, and research has examined the role of emotions and their effects on job performance and wellbeing (Martins et al., 2010; O'Boyle et al., 2011), prosocial behavior (Nozaki, 2015), and motivation (Sherdell & Waugh, 2012).

In service work, feelings and emotional demands are critical due to their impact on interactions and social connections with customers, patients, pupils, and so on. As service jobs increase in number, emotional labor becomes a more common part of work. The effect of emotional demands on employees has been a pertinent subject in research on emotional labor. These consequences incorporate both financial and non-economic costs and rewards. In service job contexts, like the one in this study, employees generally anticipate showing positive feelings and suppressing negative feelings when interacting with customers (Diefendorff & Richard, 2003). However, they cannot find positive feelings in every situation, and sometimes feel uncomfortable but “have” to express positive emotions to others. This emotion-rule dissonance can be harmful to employee wellbeing (Morris & Feldman, 1996).

Because of the widespread movement toward a team-based organization in companies, managers frequently have to lead and energize individuals and teams (Hackman, 2002; Kozlowski & Bell, 2003). The role of managers and leaders has moved from managing individuals to managing teams, defined as two or more individuals who share common task goals, perform interrelated undertakings, and are mutually responsible for and in charge of collective goals. Most of the research on teams recognizes that knowledge about leading people can extend to the group level, and that there is a need for a genuine multilevel theory of team leadership. Moreover, research must consider top-down effects of contextual factors (such as leadership) on individuals' functioning in teams, as well as bottom-up effects of individual factors on leadership and the organizational context.

This study is carried out with employees who provide services to customers, and focuses on emotional demands and the role of leadership in employees' work engagement. There is a large body of literature on

work environment factors related to employee wellbeing and stress (Danna & Griffin, 1999), and this study assumes that supervisors affect employees' emotional experiences. Miner et al. (2005) discovered that employees rated 80% of their interactions with supervisors as positive and 20% as negative. In any case, negative interactions had effects on employee affect that were, all in all, five times stronger than those of positive interactions.

Work engagement is a motivational state involving work-related wellbeing, and it is composed of three dimensions, i.e., vigor, dedication, and absorption. Engaged workers spend high levels of energy at work, feel enthusiastic and strongly involved in their jobs, and are completely immersed in the work they do (Schaufeli et al., 2002). Some studies have shown the relationship between leadership and in-role performance and work engagement (Mehmood et al., 2016). We propose that leadership is a moderator variable of the effects of emotional demands on work engagement. Leadership will have an interaction effect on the relationship between emotional demands and work engagement. Thus, when emotional demands are high but there is positive leadership, the impact on work engagement will be less negative. In these types of situations, supervision and leadership roles are a vital resource for employers.

### *Theoretical Background*

#### *Emotional Demands and Work Engagement*

The Job Demands-Resources (JD-R) model displays a balanced approach to explaining both negative and positive aspects of work. This model (JD-R) determines that employee wellbeing (work engagement) may result from particular working conditions, i.e., the specific combination of job demands and job resources (Bakker & Demerouti, 2013). The basic assumptions of the JD-R model have also been supported by cross-sectional, longitudinal, and diary studies using multilevel designs (Bakker & Demerouti, 2017).

Emotional demands can be defined as job aspects that require sustained emotional effort due to social connections with customers (De Jonge et al., 2008). Emotional demands have to do with emotionally charged interactions at work (e.g., customer/colleague misbehavior) (Heuven et al., 2006) that are sometimes viewed as an important source of job stress (Van Woerkom et al., 2016). Some of the effects, such as burnout and job (di)satisfaction, have been studied extensively. Employees who manage high emotional demands will probably display more mental and emotional distress (Castillo-Gualda et al., 2018; Wang et al., 2013), which places them at higher risk of mental health disorders and reduced performance (Johannessen et al., 2013). Only a couple of studies have researched their potential positive effect on wellbeing (Bakker et al., 2007; Xanthopoulou et al., 2013). These studies discovered that emotional demands can be beneficial, especially when job resources are

accessible at work. Ashforth and Humphrey (1993) suggested some time ago that emotional labor may be related to greater job satisfaction because interaction regulation makes interactions less surprising. Concurring with this idea, Côté and Morgan (2002) discovered that employees who had more positive feelings when sincerely engaging in emotional interactions with others felt more satisfied at work. However, results from studies on work engagement also reveal some inconsistencies. For example, Bakker et al. (2007) found that dealing with pupil misbehavior is negatively associated with work engagement, and that when emotional demands are high, the positive relationship between resources and work engagement becomes significantly weaker (Bakker & Sanz-Vergel, 2013). However, Van den Tooren and Rutte (2016) found no relationship between emotional labor and work engagement in airline crew members. These inconsistent findings may be explained by other variables that moderate the relationship between emotionally demanding conditions and work engagement, such as social job resources (e.g., leadership).

As mentioned above, work engagement is a positive and fulfilling work-related state of mind characterized by factors such as vigor, dedication, and absorption (Schaufeli & Bakker, 2010). Vigor refers to high levels of energy and mental resilience at work, willingness to try hard in one's work, and persistence when facing challenges and difficulties. Dedication refers to feelings of significance, energy, motivation, and pride in one's work. The third dimension of engagement is called absorption, which is characterized by being completely focused on and joyfully engrossed in one's work, where time passes quickly and it is hard to detach oneself from work. In this way, engaged employees have a lot of vitality, feel vigorous and strong, are energetic while working, and are exceptionally focused on their work.

High levels of work engagement have positive effects on people, such as better mental health (Upadaya et al., 2016). Other evidence additionally links engagement to better work performance (Ferreira et al., 2019) and other gainful outcomes, such as proactive behavior and organizational commitment (Vecina et al., 2012).

Drivers of work engagement can be viewed from the perspective of occupational stress models. The hypothetical underlying foundations of our study lie in the Job Demand-Resources (JD-R) model (Bakker & Demerouti, 2017), which expects people's work environments to differ, dividing their work characteristics into two categories: job demands and job resources. The fundamental proposal of the JD-R model highlights the relations among job demands and job resources, wellbeing, and performance. Based on the premises of the JD-R Model, we can hypothesize that job demands (i.e., emotional demands) and job (social) resources (i.e., effect of the leader's role in the workplace) are likely to impact employee wellbeing (i.e., work engagement).

A few studies have shown a positive relationship between resources and wellbeing in the form of work engagement (see Burke & Page, 2017). Llorens et al. (2006) revealed a positive relationship between job autonomy and work engagement. Other studies found that work



engagement relied on personal resources (e.g., self-efficacy and optimism) and emotionally demanding conditions at work ( Xanthopoulou et al., 2013). Furthermore, this effect was mediated by other personal resources, such as efficacy beliefs. In Finnish teachers, work engagement was positively associated with several job resources, e.g., job control, social support from the supervisor, and positive workplace climate ( Hakanen et al., 2006). Research showed that job demands and resources operate as antecedents or drivers of work engagement. On the one hand, in service contexts, such as public administrations, as in this study, employees are usually expected to display positive emotions and suppress the expression of negative emotions in interactions with customers ( Diefendorff & Richard, 2003). Emotional demands require energy expenditure, and job strain will probably occur. On the other hand, job resources exist and may be related to work engagement. In this study, we consider that leadership has a crucial role in organizations and, therefore, it is an important social resource that positively affects work engagement.

### *Transformational Leadership*

Transformational leadership is performed by leaders who transform values, needs, aspirations, desires, and priorities of followers, and persuade them to perform beyond expectations ( Bass & Avolio, 1994). Bass (1985) further described transformational leadership as a process that emerges from four elements: “charismatic leadership or idealized influence” (i.e., leaders focus on their followers’ individual needs in order to achieve general wellbeing); “inspirational motivation” (i.e., leaders are able to inspire their followers by introducing an appealing perspective on things to come); “intellectual stimulation” (i.e., leaders challenge their followers to look at issues from various perspectives and create new ideas); and “individual consideration” (i.e., leaders pay personal attention to the particular needs and capacities of their followers). Transformational leaders influence others because they are able to motivate and inspire them to achieve organizational goals in an efficacious way ( Bass & Avolio, 1994; Yukl, 2002). Furthermore, transformational leadership behaviors may make job resources more available to the followers, who will probably feel supported by their leader and experience greater autonomy in doing their tasks when s/he takes their needs into account. Finally, transformational leaders delegate tasks based on followers’ needs and competences (intellectual stimulation), which means that they provide each follower with challenging but reasonable tasks, thus helping their followers to develop and create.

Research has found that transformational leaders influence organizational outcomes such as organizational commitment, organizational citizenship behavior, job satisfaction, and in-role performance ( Kovjanic et al., 2012; Kovjanic et al., 2013). Associations between transformational leadership and work-related attitudes and behaviors, such as job satisfaction, have been well established ( Bass et al., 2003; Kovjanic et al., 2013). Basically, both empirical and meta-analytic

studies suggest that followers with transformational leaders show more job involvement, job satisfaction, and motivation in the workplace, as well as greater organizational trust and commitment (see Christian et al., 2011).

Many studies have shown the relationship between leadership and wellbeing (Nielsen & Daniels, 2012). Arnold (2017) published a review paper focusing on this relationship. Leaders also have a strong influence on employee happiness by creating less psychological distress and other negative outcomes and improving general psychological wellbeing and positive states of mind (Syrek et al., 2013). In addition, a diary study showed the positive relationship between transformational leadership and positive affective states, and the negative relationship between this leadership style and negative affective states (Lanaj et al., 1916). Wu and Wand (2015) also showed the effect of leadership on proactivity through positive affect, and Kranabetter and Niessen (2017) indicated that when managers are role models for health, employees benefit more from the transformational leadership style. Less clear, however, are the psychological mechanisms that explain why leaders can foster positive health and wellbeing outcomes in their followers (Tuckey et al., 2012).

Through cross-sectional and longitudinal designs, research has shown that transformational leaders positively influence work environment (Nielsen et al., 2008; Tuckey et al., 2012). The present study contributes to the literature by providing information about the effect of leadership on followers' perceptions of job demands (i.e., emotional demands). Leadership can affect workers' perceptions of emotional demands and, therefore, the effects of these demands on work engagement.

The present study contributes to the literature by examining the relationship between transformational leadership and followers' perceptions of job demands, using a multilevel model to explain the effectiveness of transformational leadership in dealing with job demands (i.e., emotional demands) and their effects on work engagement.

Within this theoretical framework, we hypothesize:

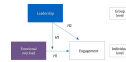
*Hypothesis 1:* Individual level effect: emotional demands are negatively related to work engagement.

*Hypothesis 2:* Cross-level effect: leadership (level 2) is positively related to work engagement (level 1).

*Hypothesis 3:* Cross-level moderation effect: leadership (level 2) moderates the relationship between emotional demands and work engagement (level 1).

In summary (Figure 1), the aim of this study is to determine how emotional demands and transformational leadership are related to work engagement in a multilevel analytical context (i.e., individual and group levels). In general, we propose two levels of analysis: individual-level analysis (emotional demands and work engagement) and group-level analysis (i.e., transformational leadership). Moreover, another important aspect of our multilevel model consists of cross-level influences between group- and individual-level variables (i.e., leadership and work engagement).





**Figure 1**  
Multilevel Relational Model.

## Method

### *Sample and Procedure*

Convenience sampling was used to obtain a sample of 1,079 employees from four Spanish municipal public administrations. These employees were nested in 124 work teams. Participants' jobs were similar because the organizations were all public administrations. The sample consisted of 59.6% females. Group size ranged from 5 to 15 people. For data collection, we previously contacted stakeholders in each organization, presenting main objectives and study aims and requirements. Then, we explained that participation was voluntary, that only aggregated data would be reported, and that all identifying information would be removed in order to guarantee anonymity. Groups were natural work teams that usually worked together and were supervised by a leader. Employees were considered members of a team if they had the same supervisor and set of standards and guidelines in working to achieve common goals and their tasks were interdependent. Data collection was performed using an online questionnaire. Each group was identified by a code, and all the people in the group were identified with the same code.

### *Measures*

**Emotional demands.** We assessed emotional demands from the RED.es Questionnaire (Resources, Emotions, and Demands; Salanova et al., 2007), referring to emotional demands at work. This scale includes four items (e.g., "My job requires me to deal with difficult and special people").

**Transformational leadership.** We measured transformational leadership using four items from the RED.es Questionnaire (Salanova et al., 2007), based on Bass and Avolio's (1990) scale, (e.g., "My supervisor is capable of organizing and allocating responsibilities").

**Work engagement.** We measured work engagement using the Spanish version of the UWES (Utrecht Work Engagement Scale; Schaufeli et al., 2006), with three dimensions: vigor (three items; e.g., "At my work, I feel bursting with energy"), dedication (three items; e.g., "I am enthusiastic about my job"), and absorption (three items; e.g., "I feel happy when I am working intensely"). Scores ranged from 0 (*never*) to 6 (*always*) on the three response scales.

### *Data Analyses*

Different data analyses were performed. First, internal consistencies were calculated (Cronbach's alpha), as well as intercorrelations and descriptive data for the study variables using SPSS 21.0. Second, because the leadership variable is measured at work-unit level, we aggregated individual perceptions to group level, and checked the agreement among individual perceptions. Thus, in order to justify the use of aggregated scores for the study variables, we calculated interrater agreement on these measures with the rwg(j) index (James et al., 1993). Then, we examined the intraclass correlations, ICC (1) and ICC (2), at work-unit level. ICC (1) estimates the proportion of variance between participants that could be explained by differences in group membership, and ICC (2) estimates the reliability of aggregated scores at group level (James, 1982). Analyses of variance (ANOVAs) were also performed in order to test whether there was any statistically significant between-group discrimination for measures used in the study.

Finally, our statistical analysis considers a macro-micro multilevel context (Snijders & Bosker, 1999). In a macro-micro multilevel situation, a dependent variable measured at lower level (i.e., individual) can be explained by variables measured at a higher level (i.e., group level). In this study, a dependent variable (i.e., work engagement) measured at lower level (level 1) is assumed to be affected by an antecedent and contextual variable (i.e., emotional demands), also measured at lower level, and by explanatory variables (i.e., transformational leadership) measured at higher level (level 2).

Our data were hierarchically structured, so that 1,079 individual cases (level 1) were nested in 124 work- units (level 2). We analyzed data through hierarchical linear modeling (HLM) (Hofmann & Gavin, 1998; Hox, 1995) using LISREL software. This method is suitable for the analysis of data in a nested structure, constructing a separate model at each level in data structure (Bryk & Raudenbush, 2002). Thus, we can simultaneously make inferences about the effects of variations in independent variables at the individual level (i.e., emotional demands) and at the group level (i.e., transformational leadership) on dependent variables (i.e., work engagement), as well as about the cross-level moderating effect of the independent variable on the dependent variable. We also decided to center predictor scores relative to the mean of the entire sample – grand-mean centering, as Hoffman and Gavin (1998) recommend. Finally, we carried out an analysis focused on the interaction effect of leadership x emotional demands on engagement.

## Results

### *Descriptive Analyses*

Table 1 shows means, standard deviations, internal consistencies (Cronbach's alpha), and intercorrelations. All the scales showed acceptable internal consistency. As expected, all the variables were significantly related to work engagement (see Table 1).

**Table 1**  
Means, Standard Deviations, and Correlations among variables (  $N = 1,079$ )

|                                   | <i>M</i> | <i>SD</i> | $\alpha$ | 1     | 2    |
|-----------------------------------|----------|-----------|----------|-------|------|
| <b>Group level (level 2)</b>      |          |           |          |       |      |
| 1. Transf. leadership             | 3.74     | 1.65      | .94      |       |      |
| <b>Individual Level (level 1)</b> |          |           |          |       |      |
| 2. Emotional demands              | 3.85     | 1.46      | .81      | -.09* |      |
| 3. Work engagement                | 4.17     | 0.98      | .80      | .42*  | .16* |

\*  $p < .01$ .

### *Aggregation Analyses*

To statistically demonstrate within-team agreement and between-team differences, we conducted several analyses. First, we tested within-group interrater reliability by computing rwg ( James et al., 1993). For the team variable (transformational leadership), results of the rwg(j) index revealed strong agreement among team members. The rwg(j) value for group transformational leadership was .72. Traditionally, an rwg of .60 provides sufficient evidence to warrant aggregation ( Glick, 1985).

Next, we compared the variability between and within a sample of teams by computing intraclass correlation coefficients. ICC (1) and ICC (2) values for the group transformational leadership variable were .15 and .62, respectively. Conventionally, values greater than .12 for ICC (1) and .60 for ICC (2) provide sufficient evidence to warrant aggregation ( Bliese, 2000; James, 1982; LeBreton & Senter, 2008).

### *Multi-level Analyses and Testing of Hypotheses*

Although problems with common method variance due to data self-reported from one source may be overstated, there are potential concerns that common method variance might influence the results. Using AMOS 23.0, Harman's single factor test ( Podsakoff et al., 2003) was carried out for the study variables in order to test for common method variance bias. The results revealed a poor fit of the one-factor model (RMSEA = .203, IFI = .665, NFI = .658, TLI = .390, CFI = .657). Additionally, a model with three latent factors (emotional demands, transformational leadership, and engagement) was tested. The three latent factor model provided a better fit to the data (RMSEA = .060, IFI = .978, NFI = .966,

TLI = .951, CFI = .979). Therefore, we found no evidence that common method variance had a significant impact on the results.

Next, data were analyzed via hierarchical linear modelling (HLM). Table 2 summarizes the results of the effects of emotional demands and transformational leadership on work engagement.

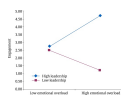
**Table 2**  
Hierarchical Linear Model Results (individual level,  $n = 1,079$ ; group level,  $n = 124$ )

| Parameters                     | Model 0        | Model 1        | Model 2        | Model 3        |
|--------------------------------|----------------|----------------|----------------|----------------|
| Individual level               |                |                |                |                |
| Intercept                      | 4.18 (0.41)*** | 4.17 (0.04)*** | 4.17 (0.04)*** | 4.17 (0.04)*** |
| Emotional demands              |                | 0.18 (0.03)*** | 0.17 (0.02)*** | 0.18 (0.02)*** |
| Group level                    |                |                |                |                |
| Leadership                     |                |                | 0.30 (0.05)*** | 0.31 (0.05)*** |
| Emotional demands x leadership |                |                |                | 0.10 (0.04)**  |
| $\sigma^2$ individual level    | 0.88 (0.04)*** | 0.80 (0.04)*** | 0.83 (0.04)*** | 0.80 (0.04)*** |
| $\sigma^2$ group level         | 0.10 (0.03)*** | 0.11 (0.03)*** | 0.06 (0.02)**  | 0.06 (0.02)**  |
| -2 x log                       | 2991.93        | 2926.90        | 2908.30        | 2900.36        |
| $\Delta - 2 \times \log$       |                | 65.03***       | 18.61***       | 8.03*          |
| df                             | 3              | 6              | 7              | 8              |
| $R^2$                          |                | 5.4%           | 6.8%           | 9.1%           |

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

In this table, Model 0 refers to the Null Model. Model 1 proposes a relationship at individual level. This model predicted a negative relationship between emotional demands and engagement (H1). The relationship was positive and significant ( $\beta = .18, p < .001$ ). Overall, these results do not support Hypothesis 1.

Hypothesis 2 proposed a cross-level relationship and predicted that transformational leadership would have a positive influence on work engagement. As Model 2 shows, this relationship was positive and significant ( $\beta = .30, p < .001$ ) and, thus, supported Hypothesis 2. To test Hypothesis 3, we entered the cross-level moderation (Model 3), which predicted that transformational leadership would moderate the relationship between emotional demands and work engagement. In the analysis of engagement, the cross-level transformational leadership x emotional demands interaction was significant and positive ( $\beta = .10, p < .01$ ). These results show the moderator effect of transformational leadership on the relationship between emotional demands and work engagement. Through subsequent tests, we have calculated the effect size ( $f^2$ ) in the three hypotheses ( $f^2 = .06, f^2 = .07$ , and  $f^2 = .11$  respectively). In all cases the value has been low-moderate (Chen et al., 2010).



**Figure 2**

Interaction Effect Leadership x Emotional Demands and Work Engagement.

Finally, we carried out an analysis focused on the interaction effect of leadership x emotional demands on work engagement, in order to examine the differential effect on engagement of high scores on emotional demands (emotional overload) and low scores on emotional demands and leadership. Values of the moderator variable were chosen at 1 SD above

and below the mean (Cohen & Cohen, 1983; Jaccard et al., 1990). This result shows that workers who have more work engagement also have high leadership perceptions. In the case of low emotional demands, the level of engagement is similar at both leadership levels, high and low, but the level of engagement is different when there are high emotional demands. Workers with high levels of emotional demands and high levels of leadership have high levels of engagement. The level of engagement is low in workers with high levels of emotional demands and low levels of leadership. Leadership buffers the relationship between emotional demands and work engagement in such a way that these effects become strongly negative for employees with emotional overload. This significant interaction effect is graphically represented in Figure 2.

## Discussion

This study contributes to the current knowledge about leadership's positive effects in various ways. First, we demonstrated the positive effect of leadership on work engagement using a multilevel model with two levels of analysis (i.e., individual and group). However, cross-sectional and longitudinal designs have been used (Nielsen et al., 2008; Tuckey et al., 2012) to demonstrate that a transformational leader positively influences work environment. The results confirm that perception of transformational leadership by team members is positively related to their levels of work engagement. Thus, the higher the perception of our boss as a positive leader, the higher our levels of engagement at work. Previous studies have shown the relationship between transformational leadership and followers' wellbeing (Arnold, 2017). However, these studies were cross-sectional and did not consider collective and multilevel aspects in this relationship. Our study contributes by moving the research a step forward and considering leadership as a multilevel phenomenon.

In addition, we extended the JD-R Model (Bakker & Demerouti, 2017) to other levels in organizations, analyzing team members' shared perception of their transformational leader (level 2) and the psychological mechanism of emotional demands (i.e. emotional overload) to explain the effects of leadership on work engagement (level 1). Therefore, transformational leadership plays a role as a buffer or stimulator of work engagement through the interaction effect between emotional demands and engagement. Transformational leadership has been related to job resources, which in turn may be related to lower strain levels in followers (Schaufeli & Bakker, 2004). To summarize our findings, the hypothesized relationships among transformational leadership, emotional demands, and work engagement are supported by highly significant positive multilevel relationships.

Moreover, we found a counter-intuitive result regarding the relationship between emotional demands and work engagement. Research has shown that emotional demands are sometimes negatively related to wellbeing and sometimes not. For example, research has shown that employees with emotional overload display more mental and

emotional distress and worse performance (Castillo-Gualda et al., 2018; Johannessen et al., 2013; Wang, et al., 2013), whereas other findings have shown a potential positive effect of emotional demands on wellbeing (Bakker et al., 2007; Xanthopoulou et al., 2013). This latter result can be explained by the perception of emotional demands as challenging and motivating demands. Our study takes a step forward by showing a motivational mechanism that can explain the relationship between emotional demands and work engagement, i.e., positive leadership. Nevertheless, when we consider high/low levels of emotional demands, the relationship with work engagement changes. High levels of emotional demands (i.e., emotional overload) showed a negative relationship with work engagement, and low emotional demands showed a positive relationship with work engagement. Our findings suggest that leadership moderates the effect of emotional demands on work engagement. Leadership has an interaction effect between emotional demands and engagement. In the case of low emotional demands, the level of engagement is similar for workers who perceive high and low leadership. But when there is an emotional overload, only workers who perceive strong transformational leadership achieve high levels of engagement. The perception of shared leadership by team members directly affects their levels of work engagement, and indirectly through the interaction effect on the relationship between emotional demands and work engagement. When employees feel emotionally overloaded, their leaders can mitigate this negative effect on their work engagement levels. Our study tries to address Tuckey et al.'s (2012) challenge to discover the psychological mechanisms that explain why leaders can foster positive health and wellbeing outcomes in their followers, in our case, work engagement.

### *Practical Contributions*

This study expands the knowledge through a multilevel model highlighting the effectiveness of transformational leadership and its effects on service work engagement. The results suggest that shared perceptions of work teams about their leader can facilitate workers' engagement when they face high emotional demands due to their work. In these situations, the role of the leader is an important social resource for employees. A practical proposal would be to provide training in practical skills to cultivate transformational leadership dimensions in supervisors. This would help employees to deal with the demanding aspects of an effective customer-service relationship, and would contribute to empowering workers' engagement by providing them with social job resources. The idea of enriching work environments in order to effectively perform jobs involving emotional demands is consistent with previous research (Bakker & Demerouti, 2013, 2017; De Jonge et al., 2008). It is necessary for organizations to create environments that promote work engagement by fostering transformational leaders in a way that leads to a steady growth and better performance.



### *Limitations and Future Research*

One potential limitation of this study is that the data at both individual and work team levels were obtained through self-report measures. However, in terms of the data obtained at individual level, we understand that it is not a relevant problem because findings are consistent with the theory, and common method variance is likely to attenuate rather than increase the effects of the interaction (Evans, 1985). Regarding group level, we considered aggregated perceptions of transformational leadership among team members. Therefore, when using these data added to work teams, we were able to increase validity of scores, considering that they were “intersubjective” perceptions shared among team members, and not individual subjective scores.

We used a convenience sample consisting of employees and work teams belonging to the same sector (four town councils). Although they all belonged to the Spanish Public Administration, their work environments could be different, which would indicate a tendency toward a heterogeneous sample. In future studies, the sample should be more heterogeneous and belong to different economic sectors. Moreover, it should be noted that, although transformational leadership was assessed only at work team level, a future challenge would be to investigate whether individual perceptions of leadership have the same influence on positive results as aggregated perceptions at work-team level.

Another limitation of the present study is its cross-sectional design. Our relational model implies causal mechanisms, but relationships in this study cannot be interpreted in a causal direction. Future research should carry out longitudinal studies. In terms of a process described by Schaufeli et al. (2009) as a “positive gain spiral”, it is also possible that employees’ work engagement increases or facilitates transformational leadership behavior in a reciprocal way over time.

The last limitation is related to the effect size obtained in our study whose values are low-moderate. However, despite this limitation, we can consider the results are significant and support an interesting multilevel line of study.

### **References**

- Arnold, K. A. (2017). Transformational leadership and employee psychological well-being: A review and directions for future research. *Journal of Occupational Health Psychology*, 22(3). 381-393. <https://doi.org/10.1037/ocp0000062>
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18, 88-115. <https://doi.org/10.5465/amr.1993.3997508>
- Bakker, A. B., & Demerouti, E. (2013). La teoría de las demandas y los recursos laborales. *Revista de Psicología del Trabajo y de las Organizaciones*, 29, 107-115. <https://doi.org/10.5093/tr2013a16>

- 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>
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99, 274-284. <https://doi.org/10.1037/0022-0663.99.2.274>
- Bakker, A. B., & Sanz-Vergel, A. J. (2013). Weekly work engagement and flourishing: The role of hindrance and challenge job demands. *Journal of Vocational Behavior*, 83, 397-409. <https://doi.org/10.1016/j.jvb.2013.06.008>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. The Free Press.
- Bass, B. M., & Avolio, B. J. (1990). *Transformational leadership development: Manual for the multifactor leadership questionnaire*. Consulting Psychologists Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2) 207-217. <https://doi.org/10.1037/0021-9010.88.2.207>
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability. Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and, methods in organization* (pp. 349-381). Jossey-Bass.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, 53, 279-307. <https://doi.org/10.1146/annurev.psych.53.100901.135156>
- Bryk, A. S., & Raudenbush, S. W. (2002). *Hierarchical linear models: Applications and data analysis methods* (2/e). Sage.
- Burke, R. J., & Page, K. M. (2017). *Research handbook on work and well-being*. Edward Elgar Publishing.
- Castillo-Gualda, R., Herrero, M., Rodríguez-Carvajal, R., Brackett, M. A., & Fernández-Berrocal, P. (2019). The role of emotional regulation ability, personality, and burnout among Spanish teachers. *International Journal of Stress Management*, 26(2), 146-158. <https://doi.org/10.1037/str0000098>
- Chen, H., Cohen, P., & Chen, S. (2010). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communications in Statistics -Simulation and Computation*, 39, 860-864. <https://doi.org/10.1080/03610911003650383>
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89-136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioural* (2nd ed.). Lawrence Erlbaum Associates Inc.

- Coté S., & Morgan, L. M. (2002). A longitudinal analysis of the association between emotion regulation, job satisfaction, and intention to quit. *Journal of Organizational Behavior*, 23, 947-962. <https://doi.org/10.1002/job.174>
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25, 357-384. <https://doi.org/10.1177/014920639902500305>
- De Jonge, J., Le Blanc, P. M., Peeters, M. C. W., & Noordam, H. (2008). Emotional job demands and the role of matching job resources: A cross-sectional survey among health care workers. *International Journal of Nursing Studies*, 45, 1460-1469. <https://doi.org/10.1016/j.ijnurstu.2007.11.002>
- Diefendorff, J. M., & Richard, E. M. (2003). Antecedents and consequences of emotional display rule perceptions. *Journal of Applied Psychology*, 88, 284-294. <https://doi.org/10.1037/0021-9010.88.2.284>
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36, 305-323.
- Ferreira, A. I., da Costa Ferreira, P., Cooper, C. L., & Oliveira, D. (2019). How daily negative affect and emotional exhaustion correlates with work engagement and presenteeism-constrained productivity. *International Journal of Stress Management*, 26(3), 261-271. <https://doi.org/10.1037/str0000114>
- Glick, W. (1985). Conceptualizing and measuring dimensions of organizational and psychological climate: Pitfalls in multi-level research. *Academy of Management Review*, 10, 601-616. <https://doi.org/10.5465/amr.1985.4279045>
- Hackman, J. R. (2002). *Leading teams: Setting the stage for great performance*. Harvard Business School Press.
- Hakanen, J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43, 495-513. <https://doi.org/10.1016/j.jsp.2005.11.001>
- Heuven, E., Bakker, A. B., Schaufeli, W. B., & Huisman, N. (2006). The role of self-efficacy in performing emotion work. *Journal of Vocational Behavior*, 69, 222-235. <https://doi.org/10.1016/j.jvb.2006.03.002>
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. University of California Press.
- Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24, 623-641. <https://doi.org/10.1177/014920639802400504>
- Hox, J. (1995). *Applied multilevel analysis*. TT-Publikaties.
- Jaccard, J., Turrissi, R., & Wan, C.K. (1990). *Interaction effects in multiple regression*. Sage.
- James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology*, 67, 219-229. <https://doi.org/10.1037//0021-9010.67.2.219>

- James, L. R., Demaree, R. G., & Wolf, G. (1993). r-g: An assessment of within-group interrater agreement. *Journal of Applied Psychology*, 78, 306-309. <https://doi.org/10.1037/0021-9010.78.2.306>
- Johannessen, H. A., Tynes, T., & Sterud, T. (2013). Effects of occupational role conflict and emotional demands on subsequent psychological distress. *Journal of Occupational and Environmental Medicine*, 55, 605-13. <https://doi.org/10.1097/jom.0b013e3182917899>
- Kovjanic, S., Schuh, S. C., & Jonas, K. (2013). Transformational leadership and performance: An experimental investigation of the mediating effects of basic needs satisfaction and work engagement. *Journal of Occupational and Organizational Psychology*, 86, 543-555. <https://doi.org/10.1111/joop.12022>
- Kovjanic, S., Schuh, S. C., Jonas, K., Van Quaquebeke, N., & Van Dick, R. (2012). How do transformational leaders foster positive employee outcomes? A self-determination-based analysis of employees, needs as mediating links. *Journal of Organizational Behavior*, 33, 1031-1052. <https://doi.org/10.1002/job.1771>
- Kozlowski, S. W. J., & Bell, B. S. (2003). Work groups and teams in organizations. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Comprehensive handbook of psychology* (pp. 333-375). Wiley.
- Kranabetter, C., & Niessen, C. (2017). Managers as role models for health: Moderators of the relationship of transformational leadership with employee exhaustion and cynicism. *Journal of Occupational Health Psychology*, 22(4), 492-502. <https://doi.org/10.1037/ocp0000044>
- Lanaj, K., Johnson, R. E., & Lee, S. M. (2016). Benefits of transformational behaviors for leaders: A daily investigation of leader behaviors and need fulfillment. *Journal of Applied Psychology*, 101(2), 237-251. <https://doi.org/10.1037/apl0000052>
- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11, 815-852. <https://doi.org/10.1177/1094428106296642>
- Llorens, S., Bakker, A., Schaufeli, W. B., & Salanova, M. (2006). Testing the robustness of job demands-resources model. *International Journal of Stress Management*, 13, 378-391. <https://doi.org/10.1037/1072-5245.14.2.224>
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 49, 554-564. <https://doi.org/10.1016/j.paid.2010.05.029>
- Mehmood, Q., Nawab, S., & Hamstra, M. R. W. (2016). Does authentic leadership predict employee work engagement and in-role performance? *Journal of Personnel Psychology*, 15(3), 139-142. <https://doi.org/10.1027/1866-5888/a000164>
- Miner, A., Glomb, T. M., & Hulin, C. (2005). Experience sampling mood and its correlates at work. *Journal of Occupational and Organizational Psychology*, 78, 171-193. <https://doi.org/10.1348/096317905x40105>
- Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21, 986-1010. <https://doi.org/10.5465/amr.1996.9704071861>

- Nielsen, K., & Daniels, K. (2012). Does shared and differentiated transformational leadership predict followers' working conditions and well-being? *The Leadership Quarterly*, 23(3), 383-39. <http://doi.org/10.1037/ocp0000062>
- Nielsen, K., Randall, R., Yarker, J., & Brenner, S. (2008). The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress*, 22, 16-32. <https://doi.org/10.1080/02678370801979430>
- Nozaki, Y. (2015). Emotional competence and extrinsic emotion regulation directed toward an ostracized person. *Emotion*, 15, 763-774. <https://doi.org/10.1037/emo0000081>
- O'Boyle, E. H., Jr., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32, 788-818. <https://doi.org/10.1002/job.714>
- Podsakoff, P. M., MacKenzie, S. M., Lee, J., & Podsakoff, N. P. (2003). Common method variance in behavioral research: A critical review of the literature and recommended remedies. *Journal Applied of Psychology*, 88, 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Salanova, M., Cifre, E., Martínez, I. M., & Llorens, S. (2007). *Caso a caso en la prevención de riesgos psicosociales. Metodología WONT para una organización saludable*. [Case to case in the prevention of psychosocial risks. WoNT Methodology for a healthy organization]. Lettera Publicaciones.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-437. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A.B. Bakker & M. P. Leiter (Eds), *Work engagement: A handbook of essential theory and research* (pp. 10-24). Psychology Press.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66, 701-716. <https://doi.org/10.1177/0013164405282471>
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30, 893-917. <https://doi.org/10.1002/job.595>
- Schaufeli, W. B., Salanova, M., González- Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92. <https://doi.org/10.1023/a:1015630930326>
- Sherdell, L., Waugh, C. E., & Gotlib, I. H. (2012). Anticipatory pleasure predicts motivation for reward in major depression. *Journal of Abnormal Psychology*, 121, 51-60. <https://doi.org/10.1037/a0024945>
- Snijders, T., & Bosker, R. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Sage.



- Syrek, C. J., Apostel, E., & Antoni, C. H. (2013). Stress in highly demanding IT jobs: transformational leadership moderates the impact of time pressure on exhaustion and work-life balance. *Journal of Occupational Health Psychology, 18*(3), 252-61. <https://doi.org/10.1037/a0033085>
- Tuckey, M. R., Bakker, A., & Dollard, M. F. (2012). Empowering leaders optimize working conditions for engagement: A multilevel study. *Journal of Occupational Health Psychology, 17*, 15-27. <https://doi.org/10.1037/a0025942>
- Upadaya, K., Vartiainen, M., & Salmela-Aro, K. (2016). From job demands and resources to work engagement, burnout, life satisfaction, depressive symptoms, and occupational health. *Burnout Research, 3*(4), 101-108. <https://doi.org/10.1016/j.burn.2016.10.001>
- Van den Tooren, M., & Rutte, C. (2016). Explaining emotional exhaustion and work engagement: The role of job demands-resources and type D personality. *International Journal of Stress Management, 23*(2), 147-166. <https://doi.org/10.1037/a0039754>
- Van Woerkom, M., Bakker, A. B., & Nishii, L. H. (2016). Accumulative job demands and support for strength use: Fine-tuning the job demands-resources model using conservation of resources theory. *Journal of Applied Psychology, 101*, 141-150. <https://doi.org/10.1037/apl0000033>
- Vecina, M. L., Chacón, F., Sueiro, M., & Barrón, A. (2012). Volunteer engagement: Does engagement predict the degree of satisfaction among new volunteers and the commitment of those who have been active longer? *Applied Psychology, 61*, 130-148. <https://doi.org/10.1111/j.1464-0597.2011.00460.x>
- Wang, M., Liu, S., Liao, H., Gong, Y., Kammeyer-Mueller, J., & Shi, J. (2013). Can't get it out of my mind: Employee rumination after customer mistreatment and negative mood in the next morning. *Journal of Applied Psychology, 98*, 989-1004. <https://doi.org/10.1037/a0033656>
- Wu, C., & Wang, Z. (2015). How transformational leadership shapes team proactivity: The mediating role of positive affective tone and the moderating role of team task variety. *Group Dynamics: Theory, Research, and Practice, 19*(3), 137-151. <https://doi.org/10.1037/gdn0000027>
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employee facing emotional demands. The role of personal resources. *Journal of Personnel Psychology, 12*, 74-84. <https://doi.org/10.1027/1866-5888/a000085>
- Yukl, G. (2002). *Leadership in organizations*. Prentice-Hall.

## Notes

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## **Author notes**

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## **Conflict of interest declaration**

Conflict of Interest

The authors of this article declare no conflict of interest.