



Burnout, work engagement and life satisfaction among Spanish teachers: The unique contribution of core self-evaluations

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ABSTRACT

The aim of this study was to examine burnout and engagement dimensions as predictors of life satisfaction in a sample of 531 Spanish teachers. We also aimed to examine the additional contribution of core self-evaluations on life satisfaction, above and beyond socio-demographic variables and burnout and engagement dimensions. Results of hierarchical regression analyses indicated that core self-evaluations explained a substantial and unique amount of variance in life satisfaction beyond and above that accounted for age, one burnout dimension (i.e., personal accomplishment) and one engagement dimension (i.e., dedication). Additional analysis found that personal accomplishment and dedication mediated the link between core self-evaluations and life satisfaction. Some practical implications of the current findings for educational context are discussed.

1. Introduction

The teaching profession has been recognized as one of the highest risk professions in the world (Dupriez et al., 2016). Teachers often cope with challenging and highly stressful tasks as they have to deal with conflicting staff relationships in school management, large amounts of homework and time pressures, students' misconducts and discipline problems, and pressure and criticism from students' parents. All these aspects affect teachers' capacity to educate effectively and support their students and lead them to experience over time increased symptoms of burnout and reduced levels of engagement and, ultimately, lower reported teachers' well-being (Iancu et al., 2018; Iriarte-Redín & Erro-Garcés, 2020; Taris et al., 2017).

Some theoretical approaches have been developed to understand the factors related to teachers' well-being, which would help for improving the quality of life of the teaching staff and the delivery of high-quality education (Bakker & Demerouti, 2017). The Job Demands–Resources (JD–R) theory encourages the functioning of employee well-being, stating that work stress is the result of an imbalance between job demands and job resources, so that when job demands are high and job resources are low, work stress and strain may arise and the likelihood for burnout symptoms increases (Bakker & Demerouti, 2017). Accordingly, this difference in the experience of teaching may be due to high contextual demands (e.g., work overload, obtrusive administration, lack of professional recognition, student indiscipline and lack of motivation,

staff conflicts) and low job resources and personal resources (e.g., low peer support, low perceived self-efficacy, low self-esteem; Taris et al., 2017). There is a growing body of research on this assumption indicating that when individuals perceive this imbalance (high job demands and low resources) over time, they are at risk of developing burnout (Bakker & de Vries, 2021; Taris et al., 2017). Instead, high job resources and high personal resources lead to higher work engagement and well-being (Granziera et al., 2021).

1.1. Burnout and work engagement as predictors of life satisfaction

Burnout has been defined (Leiter & Maslach, 1998) as a multidimensional stress syndrome comprising emotional exhaustion (mental fatigue, loss of energy, debilitation and feelings of depletion of one's emotional resources), depersonalization (irritability, cynicism, loss of idealism, negative or inappropriate perceptions and feelings towards recipients), and reduced personal accomplishment (a decline in perceived professional competence and achievement at work). Burnout negatively affects mental health, well-being, and life satisfaction (Bakker & de Vries, 2021; Hakanen & Schaufeli, 2012). In the teaching field, burnout may result in exhaustion, depressed mood, poor performance, and attitude changes that may lead to health problems and premature retirement (Iancu et al., 2018; Taris et al., 2017).

Contrarily to burnout, positive organizational variables such as work engagement are positively linked to well-being and life satisfaction

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(Bakker & Demerouti, 2017; Hakanen & Schaufeli, 2012). Work engagement has been described as a positive, rewarding work-connected state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Although work engagement and burnout are associated, they are considered separate, albeit negatively related constructs (Bakker & Demerouti, 2017; Maricuțoiu et al., 2017). Studies carried out in the teaching field have shown that work engagement is a positive predictor of teacher efficacy, well-being, and satisfaction, even after controlling for socio-demographic factors and school context characteristics, such as students' discipline, colleagues' cooperation, or social support (Granziera et al., 2021).

1.2. Core self-evaluations as a predictor of life satisfaction

As stated above, both occupational health indicators such as burnout and work engagement are factors either negatively or positively related to general well-being, respectively (Bakker & Demerouti, 2017; Hakanen & Schaufeli, 2012). In addition to these context-dependent occupational health variables, other individual-level skills and resources also have a relevant influence on subjective well-being and life satisfaction, with the latter understood as a cognitive evaluation of the quality of one's life as a whole (Pavot & Diener, 1993). One of those personal resources is core self-evaluation (CSE), defined as a subjective and fundamental self-evaluation of perceived value, effectiveness, and individual skills (Judge et al., 2003), and characterized with four personality aspects: self-esteem, self-efficacy, locus of control, and emotional stability (Judge et al., 2003). From the JD-R theory, CSE functions as a personal resource allowing workers to control and act on their environment successfully (Bakker & Demerouti, 2017). It has been shown that people high in CSE have the disposition to appraise events in a consistently positive way and to cope proactively in response to stress, which in turn leads to higher satisfaction and greater occupational health (Bipp et al., 2019; Judge & Kammeyer-Mueller, 2010). However, data regarding the effects of CSE on teachers' well-being is limited. Additional evidence in this line may contribute to the design of individual interventions for building and sustaining well-being among educators (Granziera et al., 2021).

Beyond the positive association between individuals' scores in CSE and their levels of work-related health and well-being, prior scholars have reported that CSE is a significant predictor of higher reported well-being and life satisfaction (Jiang & Jiang, 2015). For example, a meta-analytic study found a strong positive relationship between CSE and life satisfaction ($\rho = 0.54$) and medium effect sizes ($\rho_s = 0.57$) (Chang et al., 2012). Because education is a working field full of responsibilities, uncertainties, and emotional challenges, it is expected that teachers high in CSE will report higher personal well-being and life satisfaction. In fact, positive and significant correlations have been found between CSE and life satisfaction among teaching professionals (Nastasa et al., 2020). In this study, CSE was found to modulate the association between positive work-home interactions and life satisfaction. However, there is limited evidence on the predictive role of CSE in life satisfaction considering occupational health dimensions such as burnout and engagement with teacher samples.

1.3. Current study

Although there is sufficient empirical support that burnout, engagement, and CSE individually predict life satisfaction, it has not yet been tested whether CSE is a key predictor of life satisfaction among teachers even after controlling for the effects of socio-demographic characteristics and of burnout and engagement dimensions. Moreover, although previous studies have explored the incremental validity of CSE after controlling for measures of individual differences like personality, self-esteem, subjective well-being and other self-oriented constructs like job satisfaction or job performance (Rode et al., 2012), most of these studies have been carried out in Anglo-Saxon and Eastern countries (Lin

et al., 2021). Due to the cultural differences, further research is needed regarding the generalizability of the construct's incremental predictive validity across cultures as has been previously pointed out (Rode et al., 2012). In fact, and based on the classical cultural framework of Hofstede (1986), there are noticeable cultural differences between Spain and other geographical areas that make the teaching profession in Spain imply a different socio-emotional performance than in other countries. Actually, both the teaching profession itself and the teacher-student interaction differ across cultures (Hofstede, 1986). Particularly, Spanish teachers, compared to teachers from Anglo-Saxon countries, are expected to be less impartial, less contradicted or publicly criticized, more respected outside the class, more allowed to behave emotionally, more likely to consider themselves experts and to interpret intellectual disagreement as personal disloyalty and face consciousness stronger. This comparison is opposite compared to teachers in Eastern countries. In short, since teaching in Spain is framed in different cultural, emotional and institutional coordinates, compared to teaching in other geographical areas like Anglo-Saxon and Eastern countries, the results of studies with English-speaking teachers and Eastern teachers may not be generalizable to Spanish teachers.

Within the framework of Spain, although numerous studies have been published in the field of other personal resources like emotional intelligence (e.g., Luque-Reca et al., 2022; Schoeps et al., 2019), the inclusion of CSE as a personal resource is a relatively novel approach in our country (Beléndez et al., 2018). In fact, to the best of our knowledge, no research has previously explored the relationships among CSE, dimensions of burnout and engagement, and life satisfaction among Spanish teachers. Therefore, the purpose of our research was to fill this gap by exploring the incremental validity of CSE over dimensions of burnout and engagement at the time to explain life satisfaction among Spanish teachers. The answer to this question would provide insight on the mechanisms that influence life satisfaction among Spanish teachers and thus would help administrators to design preventive programs to enhance well-being and life satisfaction among this collective. Such an approach would, in turn, help prevent teachers' sick leave, career changes, and dropouts and economic losses to the educational system (Granziera et al., 2021; Nastasa et al., 2020).

Given the considerations noted above, we had three specific objectives in conducting the present study. First, we sought to examine the relations of burnout and engagement with life satisfaction in a sample of Spanish teachers; second, we sought to determine if, after accounting for burnout and engagement, CSE remains an important predictor of life satisfaction in teachers. Third, we tested a mediator model with burnout and engagement dimensions as potential mediators in the relationship between CSE and life satisfaction. Consistent with the notion that burnout and engagement are robust workplace outcomes associated with subjective well-being in workers (e.g., Hakanen & Schaufeli, 2012; Mazzetti et al., 2021), we expected the burnout and engagement dimensions to be significantly associated with life satisfaction scores. Given that CSE appears to be reliably associated with life satisfaction (Chang et al., 2012; Jiang & Jiang, 2015), we also expected CSE to be a key predictor adding incremental variance in explaining life satisfaction among teachers, even after controlling for socio-demographic variables and levels of burnout and engagement dimensions. In line with previous studies, considering the JD-R theory and relating personal resources with burnout, engagement, and life satisfaction (e.g., Granziera et al., 2021; Mazzetti et al., 2021), it was proposed that burnout and engagement dimensions would mediate the positive relationship between CSE and teachers' life satisfaction. Finally, according to previous studies (e.g. Nastasa et al., 2020), demographic variables have been controlled because there could be differences in teachers' well-being according to age, sex and teaching level.

2. Method

2.1. Participants

Participants were 525 secondary, primary, and childhood teachers (363 female and 162 male) from different educational centres located in Southern Spain. Participants ranged in age from 21 to 68 years old, with a mean of 43.62 years ($SD = 9.54$). Regarding their teaching level, 116 were childhood teachers, 198 primary teachers, 206 secondary teachers, and 5 unreported. The marital status was as follows: 54.5% married, 23% single, 18.7% separated/divorced, 1.3% widow/widower, 2.1% living together, and 0.4% unspecified. Although responses from 531 participants were collected, the responses from six participants were dropped from the study as they were fully incomplete, thereby leading to a final study sample of 525 teachers. As no patterns were noted, missing data were assumed to be random and mean imputation was used for skipped items.

2.2. Measures

2.2.1. Burnout

The Maslach Burnout Inventory Educators Survey (MBI; Maslach et al., 1996; Seisdedos, 1997) contains 22 items that fall on three symptoms subscales: emotional exhaustion, depersonalization, and personal accomplishment (reverse scored). Teachers rate how frequently they experience these feelings on a 7-point scale, ranging from 0, “never” to 6 “every day”. In this study, Cronbach's alpha for emotional exhaustion, was 0.85, for depersonalization was 0.61 and for personal accomplishment was 0.80.

2.2.2. Engagement

We used the well-validated 15-item Spanish version of the Utrecht Work Engagement Scale (UWES; Extremera et al., 2012) originally developed by (Schaufeli et al., 2002). This scale is grouped into three subscales of work engagement: vigor, dedication, and absorption. The instrument uses a Likert-type scale requiring participants to report on a scale from (0) “never” to (6) “always”. In this study, reliability was 0.84 for vigor, for dedication was 0.86, and for absorption was 0.84.

2.2.3. Core Self-Evaluations Scale

The CSES (Judge et al., 2003) is a 12-item scale developed to measure the underlying self-evaluative factor that is present across the four more specific traits of self-esteem, generalized self-efficacy, neuroticism, and locus of control. The CSE comprises 12 items, using a 5-point Likert scale, from “strongly disagree” to “strongly agree”. For this study, the well-validated Spanish version was used (Beléndez et al., 2018). In this study, Cronbach's alpha was 0.78.

2.2.4. Satisfaction with Life Scale

The SWLS (Diener et al., 1985) comprises five self-referencing statements on perceived global life satisfaction. Participants completed the Spanish version of the SWLS (Atienza et al., 2003). In this work, Cronbach's alpha was 0.86.

2.3. Procedure

Participation was voluntary and anonymous. A convenience and non-probability sampling method was used. Teachers were told that they would participate in a study on emotions and well-being in the teaching context. All participants were provided with written informed consent, which indicated that all data would be kept strictly confidential. The study protocol was carried out in accordance with the Declaration of Helsinki and approved by the Research Ethics Committee of the hosting university (66-2018-H).

2.4. Plan of analyses

First, analyses of descriptive statistics, correlations, and reliabilities for all studied variables were conducted. Second, we tested the potential contribution of burnout, engagement, and CSE in the prediction of teachers' satisfaction with life. Accordingly, hierarchical regression analyses were conducted with SPSS 24.0. In the final regression model, variables were added in three steps. In the first step, age (continuous variable), gender (male coded as 0 and female as 1), and teaching level (childhood coded as 1, primary as 2, and secondary as 3) were entered as covariates. In the second step, the scores in burnout and engagement dimensions were entered. Finally, the CSE scores were introduced in the last step. Thus, Cohen's (1977) convention was followed for indicating whether the predictors accounted for a small ($f^2 = 0.02$), medium ($f^2 = 0.15$), or large ($f^2 = 0.35$) amount of variance in teachers' satisfaction with life scores. To test the proposed model with burnout and engagement dimensions as potential mediating factors in the relationship between CSE and life satisfaction, a multiple mediation model was tested with the macro PROCESS v.4.0. In line with standard procedures, 95% confidence intervals and 5000 bootstrapping samples were considered (Hayes, 2022).

3. Results

3.1. Descriptive results

Preliminary analyses were conducted to ensure that regression assumptions were fulfilled. Regarding normality, none of the variables was found to follow a normal distribution. However, the skewness (ranging between -1.32 and 1.29) and kurtosis (ranging between -0.21 and 1.65) values did not exceed the acceptable limits of ± 2 (George & Mallery, 2009). Independence was supported considering the Durbin-Watson value of 1.90. All correlation values were lower than 0.70 and variance inflation factor (VIF) values ranged than 1.02 and 2.72, thereby showing a low likelihood of multicollinearity. Finally, the residual scatterplots supported the assumption of homoscedasticity. The descriptive statistics and Pearson product-moment correlation coefficients are presented in Table 1. As can be seen, significant associations were found among CSE and life satisfaction and burnout and engagement dimensions.

3.2. Regression analyses with teachers' satisfaction with life as outcome

To test for the potential contribution of burnout, engagement, and CSE in the prediction of teachers' satisfaction with life, a set of hierarchical multiple regression analyses were conducted.

Results of multiple regression analysis are shown in Table 2. Together, in the final step, the results showed that age was a significant predictor of life satisfaction, suggesting that younger teachers were more satisfied with life. Also, personal accomplishment and dedication were associated with increased life satisfaction among teachers. Finally, CSE added additional variance on life satisfaction beyond the effects of demographic variables and the burnout and engagement dimensions, suggesting that CSE contributed significantly and uniquely to teachers' satisfaction with life. The full model explained 36.1% of variance in life satisfaction ($R^2 = 0.36$, $F(10, 514) = 28.99$, $p < .001$).

3.3. Supplementary analyses

In line with previous studies testing the relationship between engagement and burnout with life satisfaction (Hakanen & Schaufeli, 2012; Mazzetti et al., 2021), it was examined whether CSE may associate with life satisfaction via two indirect pathways through engagement and burnout dimensions. The results showed that after accounting for the effects of the covariates age, gender, and teaching level, dedication (indirect effect = 0.12, 95% CI [0.052, 0.206]) and personal

Table 1

Descriptive statistics, bivariate correlations and reliabilities among main variables.

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	43.62	9.54											
2. Gender	–	–	–0.07										
3. Teaching level	2.19	0.79	0.11*	–0.20**									
4. Emotional exhaustion	1.94	1.14	0.01	0.02	0.05								
5. Depersonalization	0.82	0.90	–0.04	–0.15**	0.07	0.46**							
6. Personal accomplishment	4.87	0.86	0.04	0.01	–0.14**	–0.39**	–0.37**						
7. Vigor	4.91	0.95	–0.12**	0.10*	–0.16**	–0.40**	–0.25**	0.53**					
8. Dedication	5.07	0.99	–0.14**	0.15**	–0.23**	–0.30**	–0.22**	0.51**	0.74**				
9. Absorption	4.74	1.05	0.01	0.12**	–0.19**	–0.19**	–0.19**	0.38**	0.62**	0.63**			
10. Core self-evaluations	3.64	0.49	–0.17**	–0.10*	–0.04	–0.47**	–0.28**	0.38**	0.32**	0.28**	0.13**		
11. Life satisfaction	5.30	1.00	–0.21**	0.01	–0.07	–0.33**	–0.19**	0.36**	0.32**	0.38**	0.21**	0.53**	

Note: N = 525. M = mean. SD = standard deviation.

* $p < .05$.** $p < .01$.**Table 2**

Multiple regression analysis predicting teachers' satisfaction with life from socio-demographics, burnout, engagement and core self-evaluations.

	Step 1 β	Step 2 β	Step 3 β
Age	–0.02***	–0.02***	–0.01**
Gender	–0.04	–0.06	0.05
Teaching level	–0.07	0.03	0.03
Emotional exhaustion		–0.18***	–0.06
Depersonalization		0.01	0.03
Personal accomplishment		0.23***	0.13*
Vigor		–0.06	–0.08
Dedication		0.25***	0.22***
Absorption		–0.01	0.02
Core self-evaluations			0.41**
R^2	0.045	0.246	0.361
ΔR^2	0.045***	0.201***	0.115***
F	8.16***	18.64***	28.99***

Note: N = 525. The beta reported in the table is the standardized regression coefficient.

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

accomplishment (indirect effect = 0.09, 95% CI [0.016, 0.178]) partially mediated the relationship between CSE and life satisfaction. In sum, personal accomplishment and dedication were the solely burnout and engagement dimensions that persisted as potential mediators in the relation between CSE and life satisfaction.

4. Discussion

The aim of this research was to study the relations of burnout and engagement with life satisfaction among teachers in a Spanish context, and to find out whether CSE remained a relevant predictor of life satisfaction in Spanish teachers after accounting for relevant predictors such as burnout and engagement. Moreover, it was tested the potential mediating role of burnout and engagement dimensions in the relationship between CSE and life satisfaction. As expected, the burnout and engagement dimensions were significantly associated with life satisfaction scores, in line with prior research (Hakanen & Schaufeli, 2012). In short, emotional exhaustion and depersonalization correlated significantly and negatively with life satisfaction, while personal accomplishment was positively linked to life satisfaction scores. Similarly, all engagement dimensions correlated significantly and positively with life satisfaction. In line with recent research, CSE was significantly and positively associated with teachers' life satisfaction (Nastasa et al., 2020).

Regression analyses showed that age was the only socio-demographic variable that negatively explained life satisfaction. This result is consistent with a general decrease in life satisfaction over the

lifespan (Baird et al., 2010). In a second step, it was found that two burnout dimensions (emotional exhaustion and personal accomplishment) significantly predicted life satisfaction. Only one engagement dimension (dedication) was found to explain some additional variance for life satisfaction. These findings are in line with previous research showing that burnout is negatively associated with well-being and life satisfaction among different working samples (Bakker & de Vries, 2021; Hakanen & Schaufeli, 2012), including teachers (Taris et al., 2017). The results also agree with previous studies that have found work engagement to positively predict well-being and life satisfaction among diverse work fields (Bakker & Demerouti, 2017; Hakanen & Schaufeli, 2012), including teaching professionals (Granziera et al., 2021). In a third step, CSE was found to be a key predictor adding incremental variance in explaining levels of life satisfaction. This finding is in line with past research showing that CSE was a positive predictor of life satisfaction (Chang et al., 2012; Jiang & Jiang, 2015). Moreover, mediational analysis revealed the importance of dedication and personal accomplishment as the unique burnout and engagement dimensions that would serve as partial mediators in the CSE-life satisfaction link. Our results extend prior research examining the link between CSE and overall work engagement (e.g., Bipp et al., 2019), suggesting that dedication might act as a key motivational dimension for explained increased well-being. These findings are consistent with CSE theory tenets (Chang et al., 2012), suggesting that teachers' fundamental evaluations of their worth, competence, capabilities and functioning in their environment might be important in developing a higher sense of significance, enthusiasm, inspiration, and personal accomplishment, which, in turn, would be associated to increased life satisfaction.

This research may have relevant practical implications for further training programs combining efforts at the individual and the organizational level aiming at improving subjective well-being among teachers (Fisher, 2010; Randall & Travers, 2017) and, thus, promoting healthy educational environments. On the one hand, results showed dedication and personal accomplishment to emerge as key engagement and burnout dimensions in predicting teachers' life satisfaction. Therefore, it would be worthwhile to design positive organizational psychology interventions focused on fostering work engagement and reducing burnout (Taris et al., 2017). For instance, practitioners might work to provide teachers with opportunities to increase their job resources and to minimize their job demands at work. This could be done through job crafting interventions guiding teachers to redefine their job characteristics (Granziera et al., 2021). On the other hand, our findings support the assumption that subjective well-being is not solely a matter of organizational-level variables leading to occupational health. In line with Fisher's (2010) recommendations, facilitating teachers' skill development with individual-level strategies seems a critical aspect to increase happiness at work. For example, intervention efforts supporting teachers' proactive classroom management strategies may not only contribute to increase their self-efficacy beliefs (a salient component of

CSE) but also may prevent increased levels of stress that may eventually impair their levels of work-related health. Likewise, strengths-based interventions are key to increase teachers' occupational and general well-being (Bakker & Demerouti, 2017; Fisher, 2010).

According to the existing evidence, combining teachers' professional development strategies, including feedback exchange with principals and teams, with stress management tools and additional strategies targeting not only job-related factors but also personal resources including CSE may provide the most promising results in strengthening subjective well-being (Fisher, 2010). One major advantage of incorporating the development of CSE within organizational interventions in teachers' professional development curricula would be the increase in teachers' perceptions of their capability of controlling their work conditions, which may result in increased efficacy and boost their well-being regarding work and life domains. In sum, current results may serve as a starting point for further ensuring the design of individual-organizational interface strategies to tackle teachers' general well-being (Granziera et al., 2021; Randall & Travers, 2017) and therefore, contribute to improve the work environments in the schools.

The present research has several limitations that need to be acknowledged. First, because we used a cross-sectional design, it is not possible to establish cause-effect relationships. Although the proposed relationships were rooted in theory and reported in previous studies (e.g., Bakker & Demerouti, 2017; Bipp et al., 2019; Hakanen & Schaufeli, 2012), future studies using longitudinal designs would help to establish causal inferences among the study variables. Second, considering the convenience nature of the sample, the generalizability of the results is limited. To increase generalizability, recruiting teachers with random selection and from broad geographic areas would be needed. Finally, only self-reported measures were used which are subject to social desirability and common method variance bias. Further studies using peer-report measures would beneficially contribute to the existing knowledge on the role of individual-level resources regarding occupational health and subjective well-being. Moreover, researchers considering future investigations with teacher samples are advised to consider complementary measures of personal resources (e.g., active coping) and well-being (e.g., mental health indicators) to increase the generalizability of the current results (Capone & Petrillo, 2020; Li et al., 2017).

Despite these limitations, these findings provide new insights into the role of CSE as a predictor of life satisfaction among teachers, which may advance a coherent and multifaceted theoretical framework on the explanatory variables through which life satisfaction among teachers may be increased.

Data availability statement

The datasets presented in this article are not readily available. Requests to access the datasets should be directed to NE, nextreme.ra@uma.es.

Ethics statement

The Research Ethics Committee of the University of Malaga approved the study protocol for this research (66-2018-H). The participants provided their written informed consent to participate in this study.

CRedit authorship contribution statement

MAPF and SML: Conceptualization, Methodology, Investigation, Formal analysis, Writing - Original Draft. LRP and NE: Conceptualization, Methodology, Writing - Review & Editing, Supervision, Funding Acquisition.

Declaration of competing interest

The authors declare no conflicts of interest with respect to the research, authorship and/or publication of this article. This research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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