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CAN ENGAGEMENT AND BURNOUT BE DISTINGUISHED? A STUDY IN A REPRESENTATIVE SAMPLE OF TEACHERS

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This study aims to disentangle the factorial structure of burnout (emotional exhaustion, personal efficacy, and cynicism) and work engagement (vigor, dedication, and absorption) — two core concepts in the occupational health psychology arena. A total of 12 theoretical models were tested via confirmatory factor analysis (CFA) in a representative sample of 978 Dominican teachers. Regarding the six dimensions, the best fitting model was the one considering each factor separately. However, some correlations among these factors were extremely high. Regarding the four core dimensions, the best fitting model displayed three factors: engagement, emotional exhaustion, and cynicism. Results suggest that burnout and engagement are not two parts of a bipolar construct, but different entities. However, high correlations may lead to conceive engagement as a general factor that further contemplates the professional efficacy dimension of burnout.

Key words: Factor analysis; Occupational health; Vigor; Dedication; Cynicism.

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Burnout and work engagement are of paramount importance in the occupational health psychology arena. They are at the core of stress research. The term burnout started to attract academic attention in the 1970s when Freudenberger (1974) first described it as a state of gradual emotional depletion, loss of motivation, and reduced commitment toward one's work. At about the same time, Maslach defined burnout as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people (Maslach, Jackson, & Leiter, 1996). The emotional exhaustion dimension refers to feelings of fatigue — both emotional and physical. The second dimension, cynicism or depersonalization, is described as a distant attitude toward work and, usually, toward the recipients of one's service. Finally, reduced professional efficacy is defined as a negative self-evaluation in relation to job performance (Maslach & Leiter, 1997). However, later research recognized that burnout also existed outside jobs in human services. Therefore, the concept was broadened to include other types of work not limited to the demanding requirements of client service. Burnout was conceptualized as a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to do it right (Maslach et

al., 1996). Several instruments measure burnout, but the most commonly used is the Maslach Burnout Inventory-General Survey (MBI-GS; Jordan, Steigen, Terschüren, & Harth, 2018; Schaufeli, Leiter, Maslach, & Jackson, 1996). The MBI-GS is an adaptation of the original scale for use outside the human services and thus includes a more general view about aspects of the job and does not mention the people one works with or for. However, the dimensions are the same as the original: emotional exhaustion, cynicism, and professional efficacy. The MBI-GS could have a psychometric limitation: the way the items are framed because in each subscale all items are worded in the same direction (Demerouti, Mostert, & Bakker, 2010), with all items referring to exhaustion and cynicism being negatively worded and all professional efficacy items being positively worded. Some authors (Demerouti et al., 2010; González-Romá, Schaufeli, Bakker, & Lloret, 2006; Lee & Ashforth, 1990; Schaufeli, Salanova, González-Romá, & Bakker, 2002) indicated the central role of exhaustion and cynicism as the "core" dimensions of burnout, excluding professional efficacy.

A closely related construct, work engagement, embraces a relatively young concept in occupational psychology, where positive psychology is gaining significance. Since the beginning of the 21st century, there has been a shift from ill health and poor life quality, represented by burnout, to the promotion of health and well-being, focusing on the positive aspects of work, specifically, work engagement. Work engagement has been defined as an attitude toward the job characterized by being positive, encouraged, and accomplished, which, in turn, could be determined by three dimensions: vigor, dedication, and absorption (Schaufeli et al., 2002). Firstly, vigor is related to the presence of mental resilience and raised levels of energy at the workplace, also including employees' motivation, which is reflected in the amount of effort placed in one's work despite obstacles. The second dimension — dedication — is defined as "being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge" (Schaufeli & Bakker, 2003, p. 5). Finally, absorption is the sense that time passes quickly while working because of high levels of concentration, a feeling that makes detachment from work difficult. The Utrecht Work Engagement Scale (UWES) is the most widely used instrument to measure engagement within the workplace by assessing an independent construct labeled work engagement composed by the three aforementioned inter-related factors: vigor, dedication, and absorption (Schaufeli et al., 2002). Two versions of this scale exist: the original one, with 17 items (UWES-17; Schaufeli & Bakker, 2003) which we have used, and a shortened one, with 9 items (UWES-9; Schaufeli, Bakker, & Salanova, 2006).

An additional scale used to measure work engagement and burnout is the Oldenburg Burnout Inventory (OLBI; Demerouti & Nachreiner, 1998) which, as its name indicates, was originally developed for measuring burnout. However, later Bakker, Schaufeli, Leiter, and Taris (2008) argued that OLBI could also be used to assess engagement. Several researchers (Maslach & Leiter, 1997; Schaufeli et al., 2002) argued that vigor and dedication (core dimensions of engagement) are conceptual opposites of exhaustion and cynicism (core dimensions of burnout). Schaufeli et al. (2002) labeled as energy the dimension comprising the exhaustion-vigor continuum and as identification the one covering the cynicism-dedication spectrum. Consequently, the OLBI scale allows for a simultaneous measurement of burnout and engagement.

As stated, the two main scales to measure work engagement involve a theoretical debate about the conception of burnout and work engagement as being (a) the same construct (i.e., "general well-being" at the workplace) with bipolar dimensions, which can be measured by the OLBI scale; (b) two negatively-related independent constructs, which can be measured independently by the UWES and the MBI-GS. The former is behind the point of view of Maslach and Leiter (1997) conceiving dedication and vigor as opposite poles of cynicism and emotional exhaustion, respectively. The latter, sustained by Schaufeli and Bakker (2001), considers burnout and work engagement as distinct concepts that should be independently assessed. A large amount of research has tried to disentangle the controversy around burnout and engagement. We can

differentiate between research focusing on the factorial structure of burnout and engagement — *direct* evidence — and studies examining the degree of similarity of the relationships of burnout and engagement with other constructs — *indirect* evidence.

From the direct evidence aimed to study the factor structure of burnout and engagement, Schaufeli et al. (2002) put forward a model composed by two latent factors: (1) core of burnout (exhaustion and cynicism) and (2) all three engagement scales plus professional efficacy. This model was replicated by Römer (2016), Schaufeli and Bakker (2004), Schaufeli and Salanova (2007), and Schaufeli, Taris, and van Rhenen (2008). Additionally, González-Romá et al. (2006) were the first researchers to empirically test the proposition that the core dimensions of burnout and engagement formed two bipolar dimensions of general well-being. Through nonparametric (Mokken analysis) methods using UWES and MBI-GS, they concluded that both energy and identification are bipolar dimensions of the same construct. However, later research (Demerouti et al., 2010) pointed out that whereas the identification dimension seems to be valid given that both cynicism and dedication operate as opposite, the energy dimension (exhaustion-vigor) seems to be composed by two negatively correlated separate constructs. More recently, Taris, Ybema, and Van Beek (2017) studied the dimensionality of burnout and engagement as measured by the four core dimensions (emotional exhaustion, cynicism, vigor, and dedication) through confirmatory factor analysis (CFA) and they found that four correlated latent variables were the best structural solution.

Indirect evidence testing the degree of similarity in the relationships of burnout and engagement with correlates includes a study by Cole, Walter, Bedeian, and O'Boyle (2012). In a meta-analysis involving 50 samples from 37 studies, these authors found that dimension-level correlations of burnout and engagement were high, both constructs correlated similarly with covariates, and the effect size of engagement on correlates was reduced when controlling for burnout. In contrast, Goering, Shimazu, Zhou, Wada, and Sakai (2017) performed a meta-analytic structural equation model (MASEM) to study the relationships of burnout and work engagement with theoretical antecedents and outcomes framed within the job demands-resources model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). They encountered evidence that burnout and engagement displayed distinct relationships within the model, thereby suggesting that these constructs possess distinct nomological networks. Additionally, research by Taris et al. (2017) also tested the role of several job demands and resources as predictors of the four core dimensions of burnout and engagement. They found that job demands primarily predicted emotional exhaustion and cynicism but neither vigor nor dedication, while different job resources did not predict vigor and dedication to the same degree and contributed to explain variance from emotional exhaustion and cynicism.

Burnout has a prevalence rate of 30% among teachers, the group with the highest prevalence rate according to Weber and Jaeke-Reinhard (2000). For example, in Finland, teachers have higher levels of burnout than all other human services and white-collar jobs (Kalimo & Hakanen, 2000). Therefore, teachers' stress and burnout have become serious and growing problems (Guglielmi & Tatrow, 1998; Kyriacou, 2001; Van Wingerden, Derks, & Bakker, 2017). However, there is also evidence that the majority of teachers are not stressed and burned out (Farber, 1984). They are indeed mainly content and enthusiastic (Kinnunen, Parkatti, & Rasku, 1994; Rudow, 1999) and they find their work rewarding and satisfying (Borg & Riding, 1991; Boyle, Borg, Falzon, & Baglioni, 1995). Therefore, teachers are also highly engaged with their work. Accordingly, work engagement in the teaching professions has also received substantial research attention (Hakkanen, Bakker, & Schaufeli, 2006; Moreno-Jiménez, Corso de Zúñiga, Sanz-Vergel, Rodriguez-Muñoz, & Boada Pérez, 2010). All these facts make work-engagement and burnout differences extremely important to disentangle in this occupation.

In sum, research points to the need for clarification about the discriminant validity of the various theoretical dimensions proposed to measure work engagement and burnout, and even casts doubt on the independence of some of these factors. This is worth studying in an occupation, teachers, that has a high prevalence of both burnout and work engagement. As Shadish, Cook, and Campbell (2002) observed, "constructs are the central means we have for connecting the operations used in a [research] to pertinent theory . . . [and] mislabeling often have serious implications for either theory or practice" (p. 65). In this vein, this paper aims to: (a) recover all the competitive structures that may underlie two broadly used instruments to measure burnout (MBI-GS) and work engagement (UWES), based on either theoretical or empirical grounds; (b) test for the fit of these models to the data in a large and representative sample of Dominican teachers to gain insights about the structure and discriminant validity of these two constructs and their dimensions.

This work contributes to the existing literature in three ways: (1) through its very uncommon evidence from representative (probabilistic) samples of workers; (2) by testing for all the potential different structures in a systematic way (for the first time, to our knowledge); (3) by not focusing on some (partial) factor a priori structures like previous works.

METHOD

Sample

Data employed in this research comes from a cross-sectional survey financed by the Ministry of Education of the Dominican Republic and was gathered during the first semester of 2015. The questionnaires were administered by trained employees of the Ministry of Education and no reward was offered to the participants for completion. The sample consists of 978 currently-employed teachers in the Dominican Republic, who were selected by applying stratified sampling with proportional allocation and simple random sampling within each stratum, consisting in the educational districts of the country with a sample size proportional to the dimensions of the total population. The sample size required with a 3% margin of error and a 95% confidence level was a total of 931 teachers, which was later increased to 978 (931×1.05) because 5% of the sample was estimated not to comply with the data-gathering process. The average age of the sample was 42.9 years, (SD = 8.7). Respondents were mostly women (73.65%); 54.4% of the teachers were involved in primary school teaching and a smaller proportion (18.1%) came from junior high school teaching. Regarding marital status, 63.3% of the teachers were married, 24.8% were single, 5.5% were divorced, 2.6% were widows/widowers, and 3.8% were separated.

Instruments

This research included different job-related questionnaires, as well as socio-demographic information. Two scales were used:

Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli et al., 1996) — a questionnaire with 16 items involving three theoretical dimensions: cynicism, emotional exhaustion, and professional efficacy. The scale uses a Likert-type response format ranging from 1 (*totally disagree*) to 5 (*totally agree*). Theoretically, exhaustion is measured with five items (Items 1, 4, 7, 10, and 13) an example item being: "I feel burned out from my work." Cynicism is also measured with five items (Items 2, 5, 8, 11, and 14), tapped

by items such as: "I have become more cynical about whether my work contributes anything." Finally, professional efficacy is measured with six items (Items 3, 6, 9, 12, 15, and 16), including items such as: "In my opinion, I am good at my job." Internal consistency was estimated using the composite reliability index (CRI; Raykov, 2004) and Cronbach's α coefficient for the original three-factor structure of the MBI-GS. Estimates were .78 (CRI) and .70 (α) for emotional exhaustion, .86 (CRI) and .77 (α) for professional efficacy, and .74 (CRI) and .55 (α) for cynicism.

The Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003) — originally a 17-item instrument using a Likert-type scaling ranging from 1 (*completely disagree*) to 5 (*completely agree*). As evidenced in the literature, this questionnaire covers three theoretical dimensions: vigor (Items 1, 4, 8, 12, 15, and 17), dedication (Items 2, 5, 7, 10, and 13), and absorption (Items 3, 6, 9, 11, 14, and 16). Vigor includes items such as: "At my work, I feel bursting with energy." An example item of the dimension of dedication is "I am proud of the work that I do." Finally, absorption is tapped by items such as "It is difficult to detach myself from my job." Internal consistencies were estimated with the CRI and Cronbach's α for the three-factor model of the UWES and the estimates were: .85 (CRI) and .73 (α) for vigor, .85 (CRI) and .64 (α) for dedication, and .74 (CRI) and .60 (α) for absorption.

Statistical Analyses

Several a priori CFAs were specified, based on the theoretical dimensions included in the scale, theoretical considerations on the way they may structure, and/or empirical results on their factor structures. All latent variables in these models were free to covary. Specifically, the tested models were:

Model 1, one factor of general well-being (Maslach & Leiter, 1997).

Model 2, two factors: positive (vigor, dedication, absorption, and professional efficacy) and negative (emotional exhaustion and cynicism) (Schaufeli et al., 2002).

Model 3, two factors: engagement (vigor, dedication, and absorption) and burnout (professional efficacy, emotional exhaustion, and cynicism) based on the structure by Schaufeli and Bakker (2001).

Model 4, four factors: energy (emotional exhaustion and vigor), identification (dedication and cynicism), absorption, and professional efficacy as tested by González-Romá et al. (2006).

To investigate all potential structures, three additional models were also included:

Model 5, six factors: vigor, dedication, absorption, emotional exhaustion, cynicism, and personal efficacy, based on the theoretical first-order dimensions of both scales.

Model 6, with four factors: engagement, emotional exhaustion, cynicism, and personal efficacy. This model collapses all dimensions of engagement into a single factor.

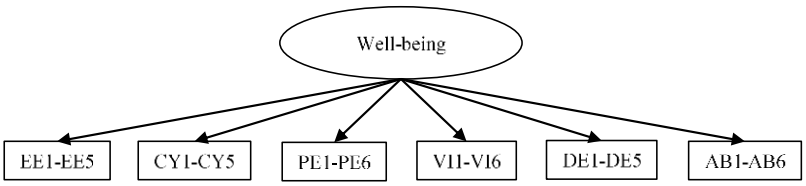
Model 7, with three factors: all positive dimensions (vigor, dedication, absorption, and professional efficacy) loaded onto a single factor, plus emotional exhaustion and cynicism.

For the sake of clarity, a graphic representation of Models 1 to 7 is presented in Figure 1. Given the claim made by some authors (González-Romá et al., 2006; Lee & Ashforth, 1990) that emotional exhaustion and cynicism constitute the core dimensions of burnout, and vigor and dedication the core dimensions of engagement, other CFA models were also estimated taking these four dimensions exclusively into account. These models were:

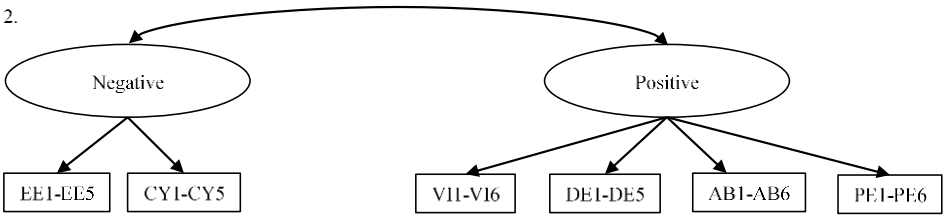
Model 8, with one factor of general well-being (Maslach & Leiter, 1997).

Model 9, two factors: engagement (vigor and dedication) and burnout (emotional exhaustion and cynicism) (Schaufeli & Bakker, 2001).

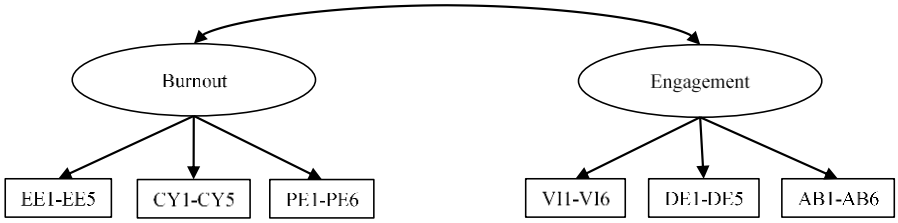
Model 1.



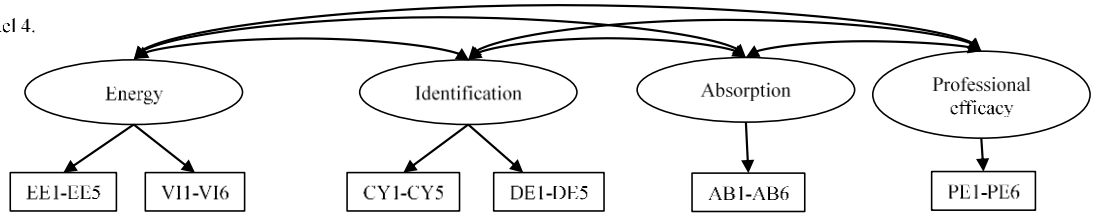
Model 2.



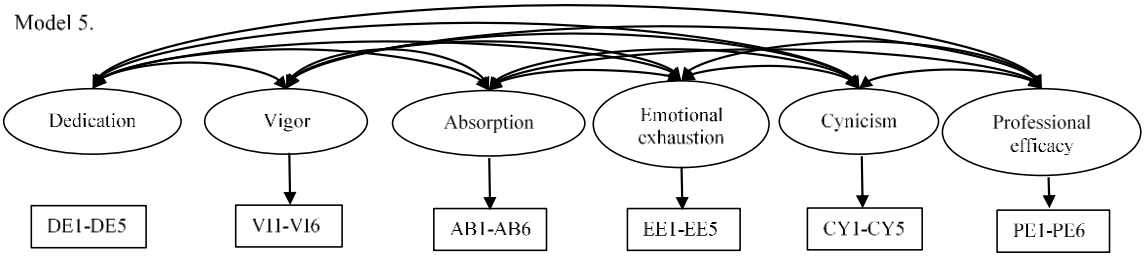
Model 3.



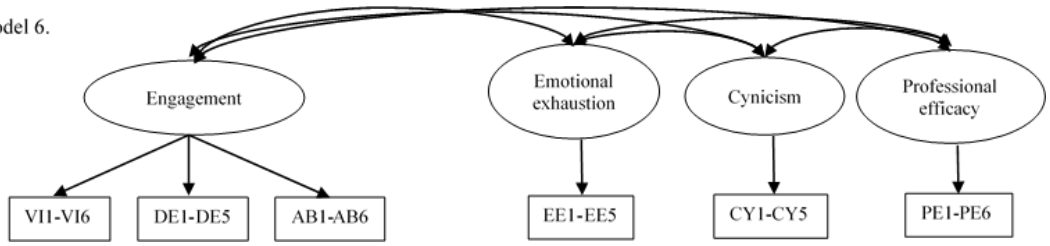
Model 4.



Model 5.



Model 6.



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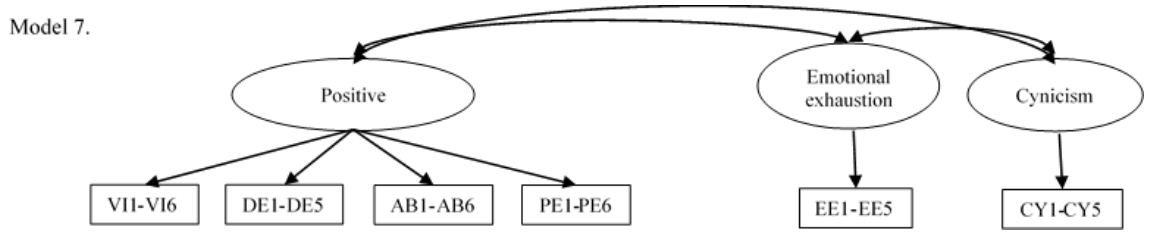

FIGURE 1
Tested models taking into account all six dimensions of burnout and engagement.
VI = vigor; DE = dedication; AB = absorption; CY = cynicism; EE = emotional exhaustion;
PE = professional efficacy.

Model 10, two factors: energy (emotional exhaustion and vigor), identification (dedication and cynicism) (González-Romá et al., 2006).

Model 11, four factors: vigor, dedication, emotional exhaustion, and cynicism (Taris et al., 2017).

Model 12, three factors: engagement (vigor and dedication), emotional exhaustion, and cynicism.

Models 8 to 12 are also presented graphically in Figure 2. All CFAs were estimated with weighted least square mean and variance corrected (WLSMV) given the ordinal and non-normal nature of the data. Several fit indices were used, as recommended in the literature (Kline, 2015): the chi-square statistic (χ^2), the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean squared error of approximation (RMSEA). It is generally assumed that a measure of the amount of error such as RMSEA lower than .08, and a CFI or TLI higher than or equal to .90 are adequate, with RMSEA < .05 and CFI or TLI > .95 signaling excellent fit (Caycho-Rodríguez et al., 2018; Hu & Bentler, 1999). Analyses were conducted with Mplus 7 (Muthén & Muthén, 1998-2015).

RESULTS

Fit indices for all the models tested are shown in Table 1. When items of the six dimensions were analyzed, Model 2, Model 5, Model 6, and Model 7 all showed relatively good CFI, TLI, and RMSEA indices. Out of these, the model presenting the lowest RMSEA was Model 5, in which six correlated factors were posited. Nevertheless, fit differences were minimal. However, some correlations among Model 5 dimensions were extremely high, in particular, the ones between vigor and dedication, and between vigor and professional efficacy (> .90). All factor correlations (Model 5) are presented in Table 2.

Focusing on the four core dimensions, the fit of Models 9, 10, 11, and 12 was adequate and almost identical (see Table 1). Nevertheless, the best fitting model was Model 12. Model 11 (four factors) also adequately fitted the data, and fit differences with Model 12 were extremely small. Given that Model 11 (four factors) made theoretical sense, a careful look at parameter estimates was made, and a very large correlation (approaching 1) was found among the two dimensions of engagement, vigor and dedication. Correlations among Model 11 dimensions are shown in Table 3.

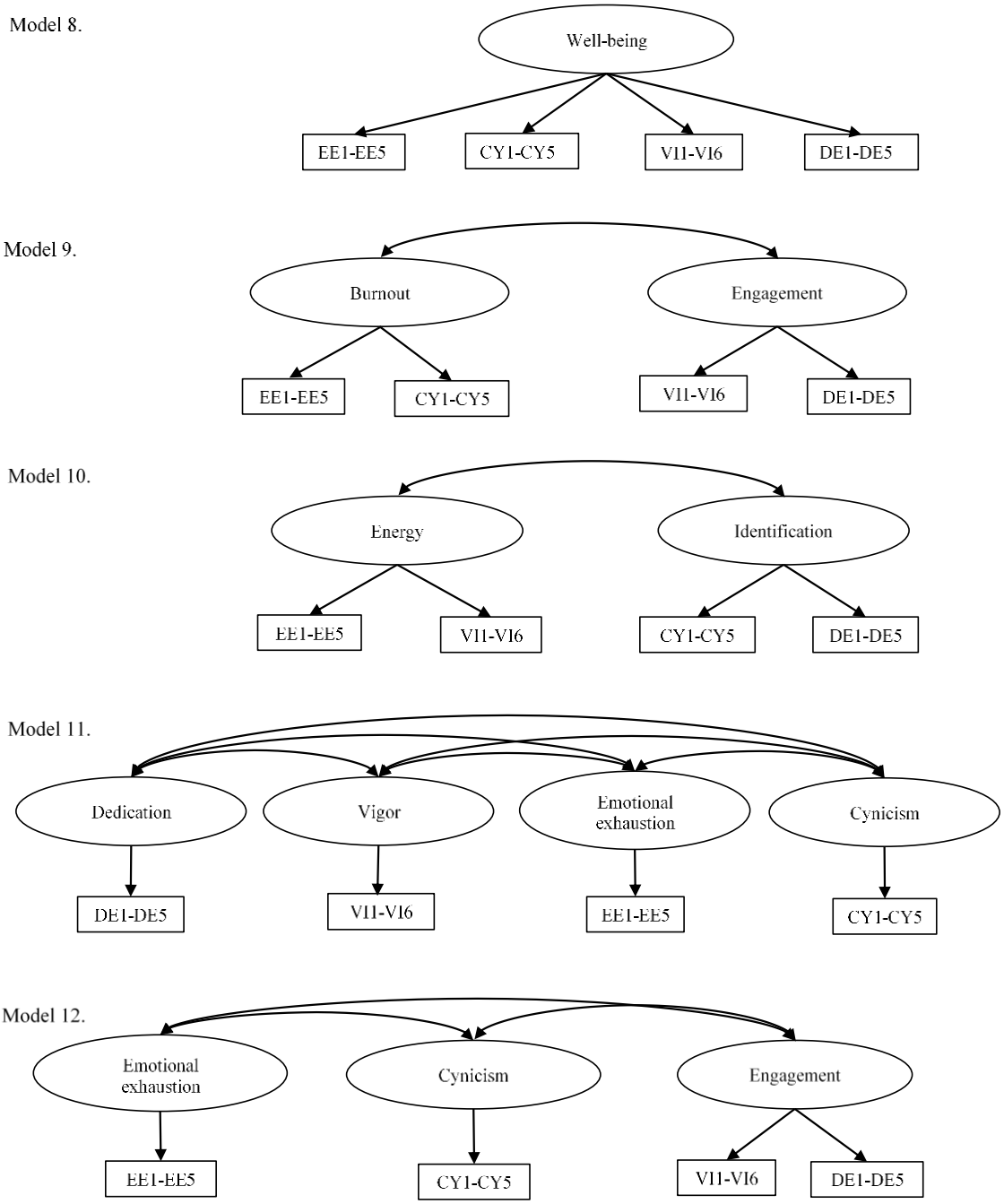

FIGURE 2

Tested models taking into account only the four so-called "core" dimensions of burnout and engagement. VI = vigor; DE = dedication; CY = cynicism; EE = emotional exhaustion.

TABLE 1
Model fit with the WLSMV method of estimation

Models WLSMV	χ^2	*df*	*p*	RMSEA	90% CI	CFI	TLI
Six dimensions of burnout and engagement							
1. One factor	4898.589	495	< .001	.095	[.093, .098]	.849	.839
2. Two factors: positive (VI+DE+AB+PE) and negative (CY+EE)	2821.126	494	< .001	.069	[.067, .072]	.920	.915
3. Two factors: engagement (VI+DE+AB) and burnout (EE+CY+PE)	4742.418	494	< .001	.094	[.091, .096]	.854	.844
4. Four factors: energy (EE-VI), identification (CY-DE), AB, and PE	4717.227	489	< .001	.094	[.092, .096]	.855	.843
5. Six factors: EE, CY, PE, VI, DE, AB	2533.741	480	< .001	.066	[.064, .069]	.930	.922
6. Four factors: engagement (VI+DE+AB), EE, CY, and PE	2688.070	489	< .001	.068	[.065, .070]	.925	.919
7. Three factors: positive (VI+DE+AB+PE), CY, and EE	2783.184	492	< .001	.069	[.067, .072]	.921	.916
Four core dimensions of burnout and engagement							
8. One factor	2686.427	189	< .001	.116	[.112, .120]	.826	.807
9. Two factors: engagement (VI+DE) and burnout (EE+CY)	1192.140	189	< .001	.074	[.070, .078]	.930	.922
10. Two factors: energy (EE-VI) and identification (CY-DE)	1181.322	186	< .001	.074	[.070, .078]	.931	.922
11. Four factors: EE, CY, VI, DE	1174.911	183	< .001	.074	[.070, .079]	.931	.921
12. Three factors: engagement (VI+DE), EE, and CY	1181.332	186	< .001	.074	[.070, .078]	.931	.922

Note. VI = vigor; DE = dedication; AB = absorption; CY = cynicism; EE = emotional exhaustion; PE = professional efficacy; RMSEA = root-mean-square error of approximation; CI = confidence interval; CFI = comparative fit index; TLI = Tucker-Lewis index.

TABLE 2
Correlations among the six dimensions of engagement and burnout in Model 5

	EE	CY	PE	VI	DE	AB
EE	1					
CY	.850	1				
PE	–.293	–.455	1			
VI	–.542	–.565	.962	1		
DE	–.467	–.577	.899	.997	1	
AB	–.289	–.386	.837	.914	.859	1

Note. All correlations are statistically significant at $p < .001$; EE = emotional exhaustion; CY = cynicism; PE = professional efficacy; VI = vigor; DE = dedication; AB = absorption.

TABLE 3
Correlations among the best fitting model dimensions in Model 11

	VI	DE	EE	CY
VI	1			
DE	.987	1		
EE	–.548	–.472	1	
CY	–.545	–.560	.859	1

Note. All correlations are statistically significant at $p < .001$; VI = vigor; DE = dedication; EE = emotional exhaustion; CY = cynicism.

DISCUSSION

This study has presented an analysis of the different models that could help understand the complex theoretical and empirical relations between burnout and work engagement (and their dimensions). The conceptualization of both constructs has been highly problematic as indicated by the number of works that dispute their independence.

Our results showed some discrepancies depending on the number of dimensions studied. On the one hand, when the original six dimensions of burnout and engagement were considered, the models estimated to have good fit were: Model 2, two factors: positive (vigor, dedication, absorption, and professional efficacy) and negative (emotional exhaustion and cynicism); Model 5, six factors: vigor, dedication, absorption, emotional exhaustion, cynicism, and personal efficacy, based on the theoretical dimensions of both scales altogether; Model 6, with four factors: engagement, emotional exhaustion, cynicism, and personal efficacy; and Model 7, three factors: all positive dimensions (vigor, dedication, absorption, and professional efficacy) loaded onto a single factor, emotional exhaustion, and cynicism. Nevertheless, the best fitting model was Model 5, which assumes six different dimensions (vigor, dedication, absorption, professional efficacy, exhaustion, and cynicism). It is the one that best fitted the observed data when the six original dimensions were considered.

This model does not fully correspond with any of the models of burnout and engagement in the literature, though following the theoretical distinction of six different factors within the engagement/burnout

literature (Maslach & Leiter, 1997; Schaufeli et al., 2002). However, a closer examination of the correlations between the factors is of interest. The four positive dimensions showed very high correlations, with some being especially remarkable: for instance, the .99 correlation between vigor and dedication, which seems to indicate that they are not two separate factors. This is very much in line with Taris et al. (2017) results. Also, high factor correlations were found between vigor and absorption (.91), and between vigor and professional efficacy (.96), questioning their independence.

On the other hand, when considering the four so-called core dimensions that the literature has repeatedly established as the strongest indicators for burnout and work engagement (González-Romá et al., 2006), all models, except Model 8 (one general factor of well-being), showed a good fit. Nevertheless, a close examination of Model 11 found very large correlations between vigor and dedication, the two engagement dimensions. This is analogous to Taris et al. (2017) results, in which also vigor and dedication appeared highly and positively correlated (r = .87). Because of this positive correlation between vigor and dedication, Model 11 is very similar to Model 12, which is more parsimonious.

This could lead us to think that, considering the six dimensions, Models 6 and 7, which also had a good fit, retain important information because they are more parsimonious and may be used to test for the discriminant validity of the dimensions. Model 6 integrated the three dimensions of engagement as one global factor and considered the burnout dimensions separately, while Model 7 grouped the four positive scales (vigor, dedication, absorption, and professional efficacy) and considered exhaustion and cynicism as other independent factors. One consequence of the good fit of both models is that none of them represents the concept of burnout itself. These two models were specified and tested to solve the problem of the large correlations among some factors found in Model 5. Nevertheless, Model 6 still presents a .93 correlation between engagement and professional efficacy, which is the only positively-phrased dimension of the MBI-GS. This dimension tends to correlate highly with the three dimensions of work engagement, which are also positively-phrased. This may be indicating the presence of wording effect interfering with the factorial structure of the scales. Further research suggests that an inefficacy scale should be used to measure burnout instead of the positively-framed scale traditionally used (Bresó, Salanova, & Schaufeli, 2007). Other authors (Leiter & Maslach, 2017; Sonnentag, 2017) suggested that work engagement is influenced by the task and fluctuates in different periods while burnout results from accumulated experiences of overload and can become a chronic state. Sonnentag (2017) suggested that the high correlation between professional efficacy and the engagement dimensions may be because professional efficacy is the burnout dimension most closely related to the task.

Taken together, these results do not fully support the theoretical view of burnout and work engagement as one broad concept of well-being at work. Both Model 1 and Model 8, which consider burnout and engagement as two poles of a general factor of well-being at work, showed the worst fit. Examining the model of González-Romá et al. (2006), which further develops this view of one concept of well-being, but adding a division between energy and identification, a similar poor fit was found when the six dimensions were taken into account (Model 4), although it seems to fit better when only using the four core dimensions (Model 10). However, Model 10 was still not satisfactory when compared to the other models tested. It does not seem to be a good explicative model. In addition, as mentioned in the introduction, González-Romá et al. (2006) used Mokken analysis and as Demerouti et al. (2010) noted, for this type of analysis "the sequential item selection and scale construction procedure may not find the dominant underlying dimensionality of the responses to a set of items" (p. 209). Also, Mokken analysis is used for hierarchically structured items and none of the instruments employed in the research of González-Romá et al. (2006) had items of this nature. Demerouti et al. (2010) pointed out that, because vigor includes motivational aspects in its definition — apart from the

central meaning of high energy levels — and, considering that the definition of exhaustion does not include this motivational element, vigor and exhaustion cannot be conceptualized as the two ends of the same continuum.

Regarding the original model of two general factors of engagement and burnout proposed by Schaufeli et al. (2002), Model 3 (two factors: burnout and engagement), when taking into account the six dimensions, and Model 9 (two factors: burnout and engagement), when only the four core dimensions were considered, did not have a good fit either. In contrast, Model 2, the model with two factors divided between positively phrased items — vigor, dedication, absorption, and professional efficacy dimensions — and negatively phrased items — cynicism and exhaustion dimensions — proposed by Schaufeli et al. (2002), showed a much better fit, in consonance with the original findings. This result casts doubts on the theoretical idea of two separate constructs of burnout and work engagement in which the two scales, MBI-GS (Maslach et al., 1996) and UWES (Schaufeli et al., 2002), are based, as its conceptualization shows high dependencies among scales which may be related to item wording effects (Dalal & Carter, 2015; Tomás, Oliver, Galiana, Sancho, & Lila, 2013).

Results derived from the present study appear to suggest that burnout and engagement are not two parts of the same construct, but two separate constructs. When taking into account the six hypothesized dimensions, these appear to be distinct factors. However, the high correlations among some of them, especially problematic for engagement dimensions, have to be carefully considered. Present results seem to indicate that engagement did not display the three theoretical dimensions established by the literature — vigor, dedication, and absorption —, but is, instead, a general factor. Moreover, this general factor further contemplated the items of the professional efficacy dimension of burnout, even in light of the evidence signaling that burnout and engagement are different constructs. The fact that items of professional efficacy collapsed into the engagement factor suggests that these scales could be affected by wording effects, given that all positively worded items grouped in this factor of engagement. In the case of the four core factors, conceptualizing dedication and vigor not as two different factors, but as a wider factor of engagement, seems to be better than considering these two theoretical dimensions as measuring different psychological components of engagement. Once again, the extremely high correlation between vigor and dedication supports the alternative of grouping them as measuring general engagement. In sum, results only partially support the engagement/burnout differentiation and the six dimensions underlying these constructs, with lack of discrimination among dimensions being more problematic for engagement than for burnout.

This study constitutes an exhaustive revision of the factorial structure of burnout and engagement, as measured by the MBI-GS (Maslach et al., 1996) and the UWES (Schaufeli et al., 2002), respectively. This study has both strengths and limitations. Given that both burnout and engagement have a high prevalence rate among teachers, a strength of this research is that it analyzes this population in a representative sample selected among Dominican teachers. Another strength is the number of competitive models tested. The single occupation studied, though being of interest, can also be seen as a limitation because it may restrict the generalization to the Dominican population at large or to other occupations. Future research should shed light on the possibility of wording effects interfering with the factorial structure of the scales. In a nutshell, much more research on the dimensionality, discriminant nature, and theoretical differentiation of engagement and burnout is greatly needed.

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