

# **Organizational Environment, Personal Resources and Work Engagement as Predictors of Coaching Performance**

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*We developed and tested a model examining the influence of organizational environment, job demands, personal resources, burnout and work engagement on the coaching performance of coaching professionals. The study proposed that there is a relationship between organizational environment and coaching performance and that personal resources and work engagement mediate the effects of this relationship. The study implies that both the health impairment and motivational processes as described by the JDR-model can be applied to the context of coaching professionals. Because of the strategic importance of human capital in coaching enterprises, it is important for the continuity of the organization that they will provide their practitioners with tangible suggestions to improve coaching performance.*

*Keywords: Organizational environment; job demands; personal resources; J-DR theory; burnout, work engagement; coaching performance.*

## **INTRODUCTION**

Competition is strong in the coaching market (Schats, 2011). The title of coach is not protected in many western countries, which allows anyone to compete on the market. This creates the urgency for coaching businesses to adopt new strategies to retain market share. The challenge for managers of coaching businesses is to remain competitive to overcome market pressures. It is important for coaching businesses to employ effective coaches that deliver qualitative coaching to customers as this is the primary way in which coaching businesses create value for their customers. When the demands on employees are too high for a sustained period, employees can become exhausted and develop a cynical attitude towards work if the employees do not have access to sufficient resources to recuperate from the sustained demand (Schaufeli & Bakker, 2004). Prolonged exhaustion can eventually lead to the development of burnout (Maslach, Schaufeli & Leiter, 2001). In contrast, when employees work in an organizational environment that is rich in job resources like autonomy, a healthy work-life balance and receiving sufficient feedback that nourishes the reciprocal employer-employee relationship, an employee can become engaged at work (Schaufeli & Bakker, 2004). What enables coaches to utilize their skills and talent to their fullest potential to enable coaching business to provide competitive coaching services? To answer this question, this study investigates different determinants of coaching performance. The

objectives of this study are to identify the extent to which organizational and personal resources play a role in coaching performance outcomes, to identify the extent to which mental well-being, in the form of burnout and engagement, plays a role in the organization-performance and the person-performance relationship and to present coaching businesses with empirical findings that provide tangible input for organizational practice.

## **THEORY AND HYPOTHESES**

### **Coaching Performance**

This study focuses on the role of the coaching professional as the primary value driver for the coaching business. The coaching professional creates this value by helping coachees and their employers, to achieve goals specific to the wishes of either the coachee or the employer (Theeboom et al., 2014; Jones et al., 2015; Grover & Furnham, 2016). To provide an overview of all the qualities that illustrate the performance of coaching professions, Lai and McDowall (2014) conducted a systematic review of studies focused on wide range of attributes of coaching psychologists to summarize the available evidence base. They conclude that coaching competency is built up of a wide array of factors like required knowledge, personality, attitudes, skills and behaviors which are summarized in the study in a coaching competency framework (Lai & McDowall, 2014). The five factors that are consistent predictors of coaching performance are (1) building trust, (2) handling the coachee's emotional challenges, (3) maintaining a two-way conversation with the coachee, (4) facilitating the coachee's development and learning process and (5) maintaining transparency throughout the entire coaching trajectory (Lai & McDowall, 2014). These performance indicators follow what Goodman and Syvanteck (1999) define as task performance, or what is commonly known as in-role performance. Any activities that are performed on the job that are not within the given tasks of the function are defined as extra-role behaviors. Previous investigations into role-performance point to a diverse relationship between mental well-being and role-performance. A meta-analysis by Taris (2006) shows a high correlation between exhaustion and in-role performance. The relationship between engagement and role- performance has been replicated in several studies (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a; Demerouti, & Cropanzano, 2010; Gruman & Saks, 2011). Halbesleben and Wheeler (2008) show that both self-reported as supervisor-rated in-role performance were predicted by engagement in a longitudinal study. To re-test these findings for coaching, in line with Lai and McDowall's framework (2014), in-role performance will provide the measurement for coaching performance in this study.

### **Burnout, Job Demands and Coaching Performance**

To understand what makes coaches perform, it is important to look at how coaches manage their energy, because when the demands on the coaches are too high for a sustained period, they can become exhausted and develop a cynical attitude towards work if they do not have access to sufficient resources to recuperate from the sustained demand (Schaufeli & Bakker, 2004). This prolonged demand can eventually lead to the coaches burning out (Maslach, Schaufeli & Leiter, 2001). Where does burnout come from? Studies into the determinants and correlates of burnout point to several factors. Neuroticism, anxiety and lack of hardiness are found to be important personality characteristics to indicate an increased risk of burnout (Schaufeli & Buunk, 2003). In the work environment, workload, time pressure and role conflict have been pointed out as strong predictors where quantitative demands like workload have a stronger relationship with burnout than qualitative demands like emotional labor or dealing with emotionally demanding situations on the job like death and suffering (Schaufeli & Buunk, 2003). A consistent outcome of individual approaches to burnout is that strong motivation and dedication, underlined by high personal goals, expectations and aspirations are a consistent factor that can lead to the emergence of burnout. In essence, there is a strong motivational and attitudinal component to the onset of burnout. A misperception of reality and consequent expectations can be an important factor driving job stress which over time may lead to burnout; especially combined with a lack of proper coping strategies or other lacking personal and job resources (Schaufeli & Buunk, 2003). Effect studies that investigate the

outcomes of burnout interventions generally vary a lot in sample selection, time frame, measurement methodology, and intervention type. This complicates the possibility to draw strong generalized conclusions out of this research body. One general insight that does arise from effect studies is that teaching professionals specific coping skills like relaxation techniques can reduce emotional exhaustion (Schaufeli & Bakker, 2004). Actively stimulating social support at work does not seem to have a positive effect on burnout, even though it does positively affect work satisfaction (Schaufeli & Bakker, 2004). The focus of this study is to investigate the role of burnout in the relationship between the organizational environment in the form of job demands and coaching performance. Through investigation previous findings into the health impairment process it is expected that job demands will negatively influence coaching performance and that when burnout is introduced as a mediator, most of this effect will be mediated by burnout. Therefore, the following hypotheses are suggested:

***Hypothesis 1:*** *Job demands will be negatively related to coaching performance.*

***Hypothesis 2:*** *The negative relationship between job demands and coaching performance will be fully mediated by burnout*

To contrast this negative effect of burnout we used the empowering effect of engagement.

### **Engagement and Job Resources as Determinants of Coaching Performance**

In understanding what makes professional coaches perform successfully it is important to investigate what drives coaches to do so; how important is motivation and the level of engagement for professional coaches? From a linguistic perspective, engagement can be viewed as a simply transactional interaction where one is instructed or engaged to perform an activity, or engagement can be perceived as a way to motivate and inspire (Kodden & Van Ingen, 2019). These two extremes map the spectrum of engagement that one can experience at work. Demerouti et al. (2001) stimulated a paradigm shift on engagement with their research into the potential for stimulation of engagement. As one of the early investigators, Kahn (1990) views engagement as the extent to which employees physically, cognitively and emotionally couple themselves to their job. This coupling refers to being actively present and in the moment when one is engaged, or being passive and withdrawn when disengaged (Kodden & Van Ingen, 2019). Rothbard (2001) adds to Kahn's (1990) definition of engagement by specifying attention, cognitive availability, and absorption, intensity of focus, as main components to the concept (Blomme & Kodden, 2014). Rothbard's (2001) definition provided the basis for the current most dominantly used definition of engagement "as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002). Examples of vigor are (1) having a lot of energy, (2) having mental resilience at work (3) being willing to invest effort in work, (3) having persistence and resilience when working on difficult tasks at work and (4) having an active, ambitious and driven attitude at work. Absorption refers to (1) a highly concentrated mental state, in which (2) time seems to pass quickly, (3) where it becomes difficult to stop working and (4) the employee feels good about being absorbed at work. Dedication is characterized by (1) a strong sense of meaning making at work, a sense of significance, (2) feeling prideful and enthused about work, (3) cherishing a strong sense of commitment and inspiration from work. Bakker (2009) indicates four factors that explain a performance difference between high- and low-engaged employees. High-engaged employees (1) tend to experience more positive emotions, (2) be more healthy, (3) share their engagement with peers and (4) actively seek out sufficient support of work and personal resources more than low- engaged employees. Kodden (2011) postulates from all dimensions of engagement that dedication is the primary driver of organizational performance. This postulation has been supported by earlier findings (Halbesleben & Wheeler, 2008). As with burnout; engagement develops though a reciprocal relationship between employer and employee (Kodden & Roelofs, 2019). When both parties invest time and energy into the relationship; employee engagement can flourish. The Job Demands-Resources (JD-R) model neatly ties together job demands, resources, burnout and engagement and the way in which these factors affect job performance. The JD-R model has gained a lot of traction

since its introduction in 2001 as a popular approach for both researchers and practitioners (Schaufeli & Taris, 2014). A major underpinning of the JD-R model is the generalizability of job demands and resources across any occupation, which allows it to function as an overarching model that can be applied to various occupational settings, independent of specific types of job demands, and resources (Bakker, Demerouti, & Euwema, 2005; Schaufeli & Bakker, 2004; Demerouti et al., 2001). The original JD-R model was inspired by the demand-control model (Karasek, 1979) and defines factors in the organizational environment that lead to exhaustion and disengagement as either job demands or job resources. Job demands can be defined as “the degree to which the environment contains stimuli that peremptorily require attention and response” (Jones & Fletcher, 1996), or simply put: work that has to be done. Bakker et al. (2005) elaborate on this definition by additional classification. In their definition, job demands are “*negatively valued* physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs” (Schaufeli & Taris, 2014; Bakker et al., 2005). Job demands don’t have a negative influence on psychological well-being by default. They could turn into stressors when high effort is required in meeting the required demands (Schaufeli & Bakker, 2004). In such a case high effort can lead to high costs in psychological health that can lead to negative outcomes like anxiety, depression or burnout (Schaufeli & Bakker, 2004). Both quantitative (workload, mental demands) as qualitative (emotional demands) job demands are included in this study. Job resources are positive factors in the work environment that can be defined as “*positively valued* physical, psychological, social, or organizational aspects of the job that (1) are functional in achieving work goals, (2) reduce job demands and the associated physiological and psychological costs, and (3) stimulate personal growth and development” (Schaufeli & Taris, 2014; Bakker et al., 2005). In addition, Hobfoll (2002) concludes that higher resource levels tend to be favorable, especially in situations of high-stress, and that higher resource levels are connected with higher performance and goal-oriented behavior. In a 2004 study Schaufeli & Bakker elaborate on the original JD-R by expanding the definitions of positive and negative psychological health factors burnout and engagement into the model (see figure 2). This framework provides the basis for this study. It does so by providing a theoretical structure for the organizational environment in the form of job demands and resources, a theoretical structure for psychological well-being in the form of burnout and engagement and finally the relationship with coaching performance as an outcome. Two theoretical assumptions underlying the JD-R model are (1) that job demands play an important role in predicting burnout and (2) that job resources can provide a buffer for the negative effects of job demands. In their extension, Schaufeli and Bakker (2004) describe the JD-R model as a “dual process model”. This entails both the health impairment process (energy driven) in which job demands can lead to burnout and consequently health impairment, and the motivational process (motivation driven) in which job resources stimulate employee engagement, which drives positive organizational outcomes like coaching performance.

***Hypothesis 3: Job resources will be positively related to coaching performance***

***Hypothesis 4: The positive relationship between job resources and coaching performance will be fully mediated by engagement.***

### **Personal Resources**

The motivational process in which job resources lead to engagement and increased job performance and the health impairment process in which job demands lead to burnout and decreased job performance are influenced by personal resources (Xanthopoulou et al., 2007). It is therefore important to investigate what insights into personal resources can contribute to the understanding of the relationship between the organizational environment and coaching performance. The initial JD-R model provides a framework to structure the relationship between the organizational environment, the states of burnout and engagement and organizational outcomes. An important addition to this model is the inclusion of personal resources as most psychological approaches tend to factor in an interaction between the person and the environment to

predict behavior (Schaufeli & Taris, 2014); before the inclusion of personal resources, the JD-R model did not investigate the effect of a person-environment interaction to predict well-being and organizational outcomes. The addition of personal resources provides insight into individual differences that affect the way that the health impairment and motivational processes have an effect on organizational outcomes. Personal resources are operationalized as positive self-evaluations that are related to resiliency and a sense of ability to successfully influence the organizational environment (Hobfoll et al., 2003). These self-evaluations are indicators for life satisfaction, motivation, performance and related desirable outcomes (Judge, Vianen & Pater, 2004). An increase in personal resources positively affects goal self-concordance, e.g. the pursuit of goals that fit with personal interests, which in turn helps individuals achieve more and make individuals more satisfied about their outcomes at work (Luthans & Youssef, 2007; Schaufeli & Taris, 2014). Personal resources, in combination with job resources, can safeguard employees from persistent job strain, which can lead to burnout (Blomme & Kodden, 2015). Employees who are more effective in exercising their personal resources tend to have more control over their job, which enables them to be more resilient in demanding situations (Hannah, Avolio, Luthans & Harm, 2008; in Blomme & Kodden, 2014).

***Hypothesis 5: Personal resources will be positively related to coaching performance***

***Hypothesis 6: The negative relationship between job demands and coaching performance will be fully mediated by personal resources***

***Hypothesis 7: The positive relationship between job resources and coaching performance will be fully mediated by personal resources***

## **METHOD**

### **Sample and Procedure**

Our sample consisted of 389 professional career and life coaches. From the coaching population, only people who identify as a professional coach and who work in this profession more than 20 hours per week were included in the study to make sure that the participants in the sample have sufficient experience as a coach and that the work as a professional coach plays a dominant role in the working life of the participant. The population of the 389 respondents represented 187 women (48%) and 202 men (52%).

### **Measures**

#### *Coaching Performance*

Coaching performance was measured based on in-role performance (5 items,  $\alpha = .84$ ) using the scale adapted from Goodman and Svyantek (1999). In-role performance was measured with a five-point scale ranging from “completely disagree” to “completely agree.” Example items are “You manage all facets of your job” and “You adequately complete all of your assigned duties”.

#### *Job Demands*

Three different job resources have been investigated in this study; workload (3 items,  $\alpha = .81$ ), emotional demands (5 items,  $\alpha = .68$ ) and mental demands (5 items,  $\alpha = .74$ ). The scales for these constructs originate from the Questionnaire on the Experience and Evaluation of Work (QEEW), a commonly used questionnaire by researchers in the Netherlands (Van Veldhoven, De Jonge, Broersen, Kompier, & Meijman, 2002) and include questions like “do you have to work very fast? (workload), “do (internal) customers sometimes harass you?” (emotional demands) and “do you have to process big amounts of data?” (mental demands). Each of these constructs were measured on a five-point scale ranging from “never” to “always”.

### *Burnout*

Burnout was measured using the Maslach Burnout Inventory- General Survey (MBI-GS; Schaufeli et al., 1996), which measures exhaustion (5 items,  $\alpha = .90$ ) and cynicism (4 items,  $\alpha = .84$ ). The sub-scale professional efficacy was omitted from the study as “accumulating evidence indicates that lack of professional efficacy plays a divergent role” (Schaufeli, Bakker and Rhenen, 2009) in comparison to exhaustion and cynicism which are viewed as the “core” of burnout. Therefore, professional efficacy was not measured in this study. Both exhaustion and cynicism use a seven-point frequency scoring range ranging from “never” to “always”.

### *Engagement*

To measure engagement the Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006b) was used. This scale is comprised of three underlying dimensions, being vigor (3 items,  $\alpha = .89$ ), dedication (3 items,  $\alpha = .95$ ) and absorption (3 items,  $\alpha = .88$ ). Typical examples of this scale are “I feel fit and strong when I work” (vigor), “I’m proud of my work” (dedication) and “I get carried away when I am working” (absorption). All items on the UWES-9 are measured with seven-point scale ranging from “never” to “always”.

### *Job Resources*

Three different job resources were measured in this study; communication (7 items,  $\alpha = .70$ ), work-life balance (3 items,  $\alpha = .73$ ) and feedback (3 items,  $\alpha = .86$ ). Communication at work was measured with a scale from the VBBA (Veldhoven & Meijman, 1994). Work-life balance was measured with the work-home interference (WHI) scale (Demerouti, Bakker & Bulters, 2003). Feedback was measured by a three-item scale, which was developed by Bakker et al. (2003). Both feedback and communication were scored on a scale ranging from five-point scale ranging from “never” to “always”. Work- life balance was measured with a five-point scale ranging from “completely disagree” to “completely agree”.

### *Personal Resources*

To measure personal resources, three concepts were measured: self-efficacy (3 items,  $\alpha = .77$ ), optimism (6 items,  $\alpha = .63$ ) and stress-resilience (25 items,  $\alpha = .90$ ). Self-efficacy was measured with a scale adapted from Schwarzer and Jerusalem (1995). A scale constructed by Scheier, Carver and Bridges (1994) was translated to Dutch to measure optimism in this study. It has to be noted that optimism’s reliability alpha is somewhat low (.63). This could be the result of some error in the translation process. This alpha value is still sufficient for use in this study. The third personal resource, stress-resilience, was measured with a 25-item scale from Wagnild (1993). All personal resources were measured with scales ranging from “completely disagree” to “completely agree”. Self- efficacy was a six-point scale, optimism a five-point scale and stress resilience a seven- point scale.

### *Data Analysis*

To test the hypotheses, reliability and factor analyses were performed. To test internal scale consistency Cronbach’s alphas were calculated for each of the measured constructs. Two constructs had Cronbach’s alphas under 0.70; emotional demands and optimism. Because removing items from these constructs would not improve the Cronbach’s alpha, no changes to the scales were made to improve reliability. To evaluate the measurement model, a Conformity Factor Analysis (CFA) was performed. The construct reliability (CR) of all latent variables exceeded the .70 threshold. To ensure minimal effects of common method bias, several steps were taken. First, participants were affirmed of total confidentiality and anonymity and stimulated to respond to the questions as frankly and intuitively as possible. This was done to help lessen any evaluation comprehension and make them less likely to give socially desirable answers and secondly, different types of Likert scales were to help reduce the effects of one type responses.

## RESULTS

Table 1 displays descriptive statistics, correlations, and coefficient alphas for all factors extracted from the survey data. To provide a general overview of the relationships between the constructs their correlations have been calculated and presented in table 1. Because only job demands is normally distributed, Spearman correlations have been calculated between each of the factors in the conceptual model (Bowerman et al., 2011).

**TABLE 1**  
**MEANS, STANDARD DEVIATIONS AND CORRELATIONS (SPEARMAN), n = 389**

	Mean	SD	1.	2.	3.	4.	5.	6.
1. Job Demands	2.94	0.51	1					
2. Job Resources	4.11	0.56	-.44**	1				
3. Personal Resources	0.83	0.08	.03	.20**	1			
4. Burnout	2.17	0.74	.33**	-.44**	-.49**	1		
5. Engagement	5.30	0.99	-.02	.18**	.61**	-.59**	1	
6. Coaching Perf.	4.15	0.47	.01*	.12*	.52**	-.37**	.50**	1

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

Table 1 shows that the found correlations are generally in line with the relations expected in the job demands-resources theory. The expected relationships in both the health impairment and motivational are replicated. Job resources correlate positively with engagement ( $r = .18, p < .01$ ) and likewise job demands correlate positively with burnout ( $r = .33, p < .01$ ). Cross correlations between the dual processes are found as job demands and job resources correlate negatively ( $r = -.44, p < .01$ ), as do burnout and engagement ( $r = -.59, p < .01$ ). None of the correlations exceed the .70 threshold. This indicates that there is no imminent risk of multicollinearity effects when performing regression analyses between the constructs.

The next step is to look with more detail into inter-dependence of the studied concepts by investigating the Spearman correlations on a factor-item level as presented in table 2.

**TABLE 2**  
**MEANS, STANDARD DEVIATIONS AND CORRELATIONS AMONG STUDY VARIABLES**

	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Workload	2.84	.88	1												
2. E. Demands	2.25	.57	.34*	1											
2. M. Demands	3.68	.62	.36**	.39**	1										
4. WL Balance	1.88	.56	-.39**	-.37**	-.28**	1									
5. Self E.	4.88	.54	.06	-.01	.12*	.16**	1								
6. Stress R.	5.75	.56	.04	-.03	.11*	.18**	.45**	1							
7. Optimism	4.03	.46	.02	-.10	.06	.18**	.39**	.47**	1						
8. Exhaustion	2.37	.88	.24**	.35**	.21**	-.44**	-.25**	-.39**	-.27**	1					
9. Cynism	1.90	.79	.12*	.28**	.03	-.32**	-.35**	-.39**	-.37**	.51**	1				
10. Vigor	5.15	1.04	-.03	-.13**	.04	.21**	.40**	.55**	.42**	-.59**	-.54**	1			
11. Dedication	1.90	1.08	-.01	-.11	.05	.20**	.42**	.52**	.40**	-.44**	-.60**	.73**	1		
12. Absorption	4.97	1.22	.05	-.09	.06	.10	.36**	.40**	.26**	-.31**	-.41**	.62**	.67**	1	
13. Coaching Perf.	4.15	.47	.09	-.05	.19**	.12*	.44**	.49**	.34**	-.29**	-.40**	.43**	.51**	.40**	1

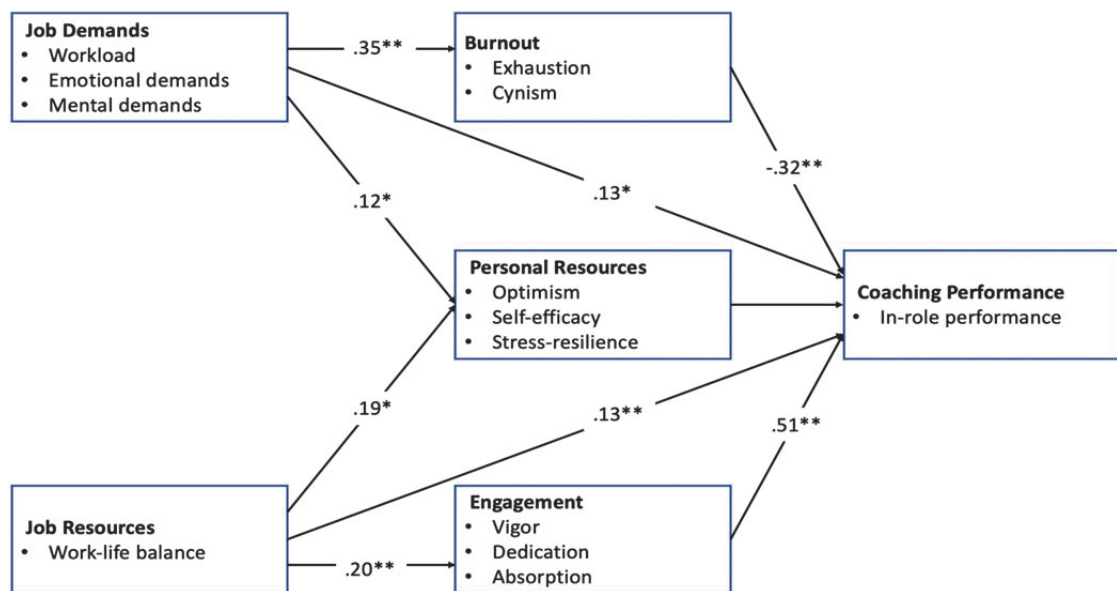
\* $p < .05$ , \*\* $p < .01$



As with the correlations on the conceptual level, the correlation table on the factor-item level shows inter-item dependencies that are generally in line with expectations that stem from the JD-R theory. For example, correlations between the factors that make up job demands are all moderate and significant ( $r = .34, p < .01$ ;  $r = .36, p < .01$ ;  $r = .39, p < .01$ ). Exhaustion and cynicism, that make up the concept burnout are strongly correlated with each other ( $r = .51, p < .01$ ). The strongest inter- concept correlations can be found within the dimensions of engagement, where vigor, dedication and absorption correlate highly with each other ( $r = .73, p < .01$ ;  $r = .62, p < .01$ ;  $r = .67, p < .01$ ). Most importantly, some important expected correlations between in-role performance and the rest of the model can be found in this correlations table. For example, the three dimensions of engagement all positively relate to in-role performance ( $r = .43, p < .01$ ;  $r = .51, p < .01$ ;  $r = .40, p < .01$ ). As the counterpart to engagement, burnout in the form of exhaustion and cynicism correlate negatively with in-role performance ( $r = -.29, p < .01$ ;  $r = -.40, p < .01$ ). Surprisingly, the job resource work-life balance related negatively with performance ( $r = -.12, p < .05$ ) the job demand mental demands related positively with in-role performance ( $r = .19, p < .01$ ). The other job demands, workload and emotional demands, did not correlate significantly with in-role performance.

To test the hypotheses, direct effects between the concepts in the conceptual model have been tested and are presented in figure 1.

**FIGURE 1**  
**DIRECT EFFECTS BETWEEN THE CONCEPTS IN THE CONCEPTUAL MODEL**



In addition, the regression results for the direct effects are presented in tables 3 and 4. Tolerance and variance inflation factors (VIF) are all within desired parameters for each of the direct-effect regression analyses.

**TABLE 3**  
**BETA, ADJUSTED R SQUARED AND F-STATIC VALUES FOR ALL DIRECT**  
**REGRESSIONS BETWEEN CONCEPTS**

	Personal	Dependent Resources	Variables			Burnout	
	Beta	Adj.R <sup>2</sup>	F		Beta	Adj.R <sup>2</sup>	F
1. Job Demands	.12*	.01	5.62		.35**	.12	54.78
2. Job Resources	.19**	.03	13.72		-.45**	.20	99.51
3. Personal Resources	--	--	--		-.39**	.15	71.25
4. Burnout	-.39**	.15	71.25		--	--	--
5. Engagement	.63*	.39	252.43		-.56**	.31	176.10

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

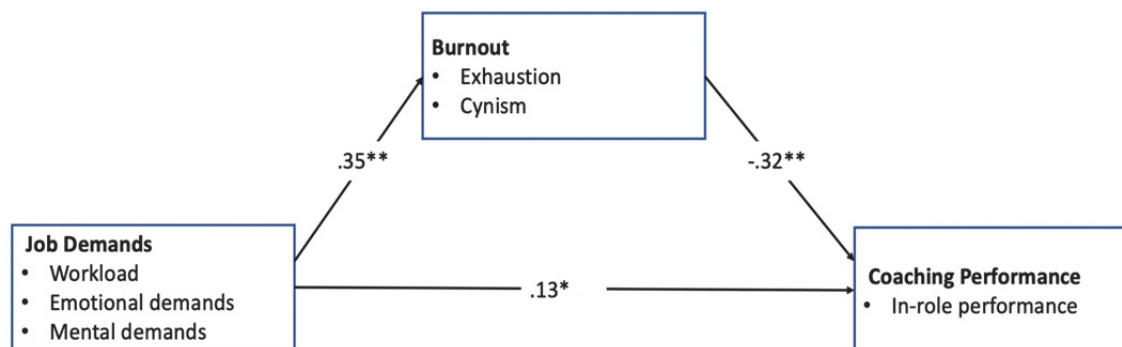
**TABLE 4**  
**BETA, ADJUSTED R SQUARED AND F-STATIC VALUES FOR ALL**  
**DIRECT REGRESSIONS BETWEEN CONCEPTS**

		Dependent Engagement	variables			Coaching Performance	
	Beta	Adj.R <sup>2</sup>	F		Beta	Adj.R <sup>2</sup>	F
1. Job Demands	.01	-.00	.01		.13*	.01	6.10
2. Job Resources	.20**	.04	15.49		.13**	.02	6.91
3. Personal Resources	.63**	.39	252.43		.59**	.34	201.53
4. Burnout	-.56**	.31	176.10		-.32**	.10	45.28
5. Engagement	--	--	--		.51**	.26	139.05

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

The first mediation hypothesis tests the effects of the health impairment process in the JD-R model where the direct effect of job demands is mediated by burnout. First, all direct effects (regression beta's) between the concepts have been calculated and depicted in figure 2.

**FIGURE 2**  
**OVERVIEW OF THE FOUND DIRECT EFFECTS (BETAS), BETWEEN THE CONCEPTS OF**  
**THE BURNOUT MEDIATION HYPOTHESIS**



Looking at the direct effects between the concepts, it is clear that burnout plays an important role in the relationship between job demands and coaching performance as the direct effect between the two is weaker ( $Beta = .13$ ) than the relationship between job demands and burnout ( $Beta = .35$ ), and the relationship between burnout and coaching performance ( $Beta = -.32$ ). All the direct effects are significant. The next step is to test whether the effect from the mediator variable, in this case burnout, is significantly different from zero. This test is referred to as the Aroian test (Aroian, 1947) and provides a way to validate mediating effects in data analysis. The outcomes of the Aroian test indicate that burnout is a significant mediator on the effect of job demands on coaching performance ( $z = -2.23$ ,  $SD = 0.01$ ,  $p < .05$ ). Next, hierarchical regression analyses were performed to test the extent of the mediating effect of burnout on the relationship between job demands and coaching performance, the results of which are presented in table 5.

**TABLE 5**  
**RESULTS OF THE HIERARCHICAL REGRESSION ANALYSIS TO TEST THE POTENTIAL**  
**MEDIATING EFFECT OF BURNOUT ON THE RELATIONSHIP BETWEEN JOB**  
**DEMANDS AND COACHING PERFORMANCE**

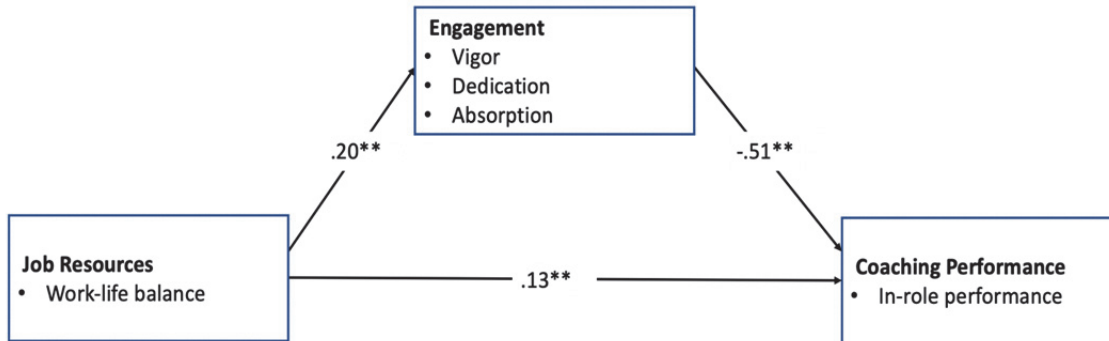
Model	Unstandardized		coefficients		Standardized		F
	B	Std. Error	Adj. $R^2$	Beta	Sign.		
1 Constant	3.81	.14					
Job Demands	.12	.05		.13	.01		
			.01				6.10
2 Constant	3.99	.13					
Job Demands	.25	.05		.27	.00		
Burnout	-.27	.03	.17	-.42	.00		39.45

*Dependent variable: Coaching Performance*

When looking at model one, the direct effect of job demands on coaching performance is positive ( $Beta = .13$ ) and significant ( $p < .05$ ). Unexpectedly, the direct effect of job demands on coaching performance increases ( $Beta = .27$ ) and stays significant ( $p < .01$ ) when burnout is added to the regression model. This is an indication for an interaction effect between job demands and burnout. Since the direct effect of job demands on coaching performance remains significant when burnout is added to the regression model, burnout acts as a partial mediator to the effect of job demands on resources, rejecting hypothesis 2.

The second mediation hypothesis investigates the mediating role of engagement on the direct effect of job resources on coaching performance. The direct effects have been tested and presented in figure 3. All the direct effects are significant ( $p < .01$ ).

**FIGURE 3**  
**OVERVIEW OF THE FOUND DIRECT EFFECTS (BETAS), BETWEEN THE CONCEPTS OF**  
**THE ENGAGEMENT MEDIATION HYPOTHESIS**



Because all direct effects are found to be significant and positive in the expected direction, the next step is to test the mediation model in hierarchical regression analysis, the results of which are presented in table 6.

**TABLE 6**  
**RESULTS OF THE HIERARCHICAL REGRESSION ANALYSIS TO TEST THE POTENTIAL**  
**MEDIATING EFFECT OF ENGAGEMENT ON THE RELATIONSHIP BETWEEN**  
**JOB RESOURCES AND COACHING PERFORMANCE**

Model	Unstandardized coefficients			Standardized coefficients			F
	B	Std. Error	Adj. R <sup>2</sup>	Beta	Sign.		
1 Constant	3.69	.18					
Job Resources	.11	.04		.13	.01		
			.02				6.91
2 Constant	2.76	.17					
Job Resources	.03	.04		.03	.46		
Engagement	.24	.02		.51	.00		
			.26				69.72

*Dependent variable: Coaching Performance*

Model one shows that the direct effect of job resources on coaching performance is positive ( $Beta = .13$ ) and significant ( $p < .01$ ). When testing the addition of engagement in model two, the direct effect of job resources on coaching performance decreases ( $Beta = .03$ ) and is no longer significant ( $p > .05$ ). The direct effect of engagement is quite strong ( $Beta = .51$ ). The outcomes of the Aroian test indicate that engagement is a significant mediator on the effect of job resources on coaching performance ( $z = 2.67$ ,  $SD = 0.01$ ,  $p < .01$ ). In conclusion, engagement fully mediates the direct effect of job resources on coaching performance, accepting hypothesis 4.

## DISCUSSION

This study adds to the JD-R research body (Demerouti et al. 2001; Schaufeli & Bakker, 2004) by investigating the relationship between role performance, burnout, engagement, personal resources and the organizational environment and testing these concepts in the context of coaching professionals. Seven hypotheses were formed, each to investigate specific effects within the model to answer the central research question: “To what extent does the organizational environment influence the performance of coaching professionals and to what extent do burnout, engagement and personal resources influence this relationship?” The results indicate that the organizational environment has a direct effect on coaching performance. Burnout, engagement and job resources are indicated as mediators this effect, which is in line with established findings (Bakker et al., 2004; Schaufeli & Bakker, 2004). The results of the study further indicate that personal resources best predict coaching performance, which is also in line with expectations from earlier research (Bakker et al., 2004; Xanthopoulou et al., 2007). In contrast with earlier research (Xanthopoulou et al., 2007) the results of this study indicate that both job demands and resources have a direct, albeit weak, positive effect on personal resources. This could be explained by the positive effect that was found between mental demands and coaching performance. Job demands were expected to be negatively valued aspects of the job that require energy (Schaufeli & Bakker, 2004). Mental demands, however, acted differently and showed a positive relationship with both personal resources and coaching performance. One plausible explanation for this can be found in the way the coaches perceive mental demands. It is likely that the coaches feel positively challenged, engaged by mental demands, which makes them perform better. The finding that mental demands seem to act more like a job resource than a job demand is an argument against the categorization of the organizational environment into job demands and resources. Schaufeli and Bakker (2004) confirmed that the antecedents of both burnout and engagement tend to overlap, suggesting using strongly different job demands and resources to be used in studies to benefit the discriminant validity between job demands and resources.

Self-efficacy, stress resilience, dedication, mental demands and emotional demands together explain the most variance in coaching performance. Of the three dimensions of engagement, dedication is indicated to be the best predictor of coaching performance, which is in line with earlier findings (Halbesleben & Wheeler, 2008; Kodden & Roelofs, 2019). The results of this study indicate that job resources, personal resources, engagement and coaching performance are highly interrelated. These results confirm the hypothesis set forth by Xanthopoulou et al. (2009b) that through reciprocal interaction, job resources, personal resources and engagement have a positive effect on organizational outcomes, and in this study, coaching performance. The results of this study indicate that the JD-R model can be used to structure and predict the performance of professional coaches. This is important because it allows coaching businesses to optimize the organizational environment to benefit their key value drivers, the professional coaches. This will allow coaching businesses to optimize the return on their investment in their own human capital. This study shows that taking a positive psychology approach to management is likely to encourage coaches to become less burned out and be more engaged to perform.

## CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Both burnout and engagement are indicated to have significant direct effects on coaching performance. Burnout in turn is indicated to negatively affect coaching performance and engagement to positively affect coaching performance. Engagement does explain somewhat more variance in coaching performance than burnout. The next logical step when following the JD-R model from right to left is to investigate the organizational environment, which leads to the sub-question: “To what extent do job demands and resources influence burnout and engagement?” Both job demands and job resources have indicated direct effects on burnout and engagement respectively when tested with regression analyses. This underlines the expected effects of the dual process model where job demands lead to burnout and job resources to engagement (Schaufeli & Bakker, 2004). The results of this study indicate that personal resources stimulate engagement and reduce burnout. Personal resources also indicate to be a valid

predictor of coaching performance. The insights into the sub-questions can be synthesized to answer the central research question: “To what extent does the organizational environment influence the performance of coaching professionals and to what extent do burnout, engagement and personal resources influence this relationship?” The results indicate that the organizational environment has a direct effect on coaching performance and that burnout, engagement and job resources mediate this effect. Personal resources are the strongest predictor of coaching performance in this study. This leads to the central conclusions that the organizational environment in terms of job demands and resources can directly stimulate and hinder the performance of coaches, depending on how each of the factors in the organizational environment is viewed by the coach. The second and final conclusion is that burnout, engagement and personal resources mediate the direct effects of job demands and resources on coaching performance. The focus therefore lies on optimizing the organizational environment to benefit coaching performance. Several biases that come with self-reported data are known to lead to measurement errors (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Common biases that potentially play a role in this study are the desire for respondents to answer consistently; the respondents can feel that they are expected to provide certain answers instead of their true answers. Respondents can hold implicit theories towards the measured concepts that can affect the way respondents complete the questionnaire. Social desirability bias can play a role; respondents might skew their answers towards what would in their eyes to be culturally acceptable and appropriate. The conditions under which the respondents complete the questionnaire is not controlled for, therefore the level of concentration or the amount of distractions while completing the questionnaire could vary per respondent. Selection bias might play a role. The respondents work or have worked for a company that is or has been certified by the certification institute that provided the contact details. This means that this study involved respondents that are associated with companies that care or have cared about being certified on the quality of their services. This type of company might attract specific type of coaching professional. Another factor is the truthfulness of the respondents. The assumption is made that all respondents have completed this questionnaire truthfully as there are no way to truly control this with an online questionnaire. One important observation in the data is that response numbers dropped somewhat when items with “coach” in it, referring to the respondent, were shown. This implies that even though respondents feel they fit the questionnaire criteria of helping others to become employed or helping others with their position in the labor market, they do not call themselves coaches. Another potential bias lies in the fact that the majority of the respondents had received higher education (HBO: 67%, WO: 27%, combined: 94%), which may have resulted in range restrictions when measuring each of the concepts. In addition, because two of the three measured job resources had to be removed from the study because of missing values, job resources was only measured with one concept. Three or more job resources will better represent job resources in the JD-R model. The cross-sectional nature of this study prevents any causal relations to be indicated. Longitudinal studies can provide insights into the causal nature of relationships between factors. Finally, several limitations around the conceptualization and measurement of job burnout have been recently highlighted (Maslach, 2017; Bianchi et al, 2014; 2019) as well as missing the social support construct in the job-demands resource model that might have a greater contribution to health and well-being outcomes in those involved in helping occupations (cf., Holt-Lunstad et al, 2015). This study has investigated the JD-R model specifically aimed at performance of professionals in the coaching industry. Future research can improve the JD-R model by investigating the valuation of job demands and resources to gain more specific insights in the effects job demands can have on engagement and the effects job resources may have on burnout. Investigating how job demands and resources are valued will provide better insight into the discriminant validity of both job demands and resources (Schaufeli & Taris, 2014). In addition, using a longitudinal approach, more specific insights into the potential reverse causation between personal resources, engagement and job resources can be investigated to better identify the interaction between these concepts.

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