

## Empirical Assessment of the Constructs: Workplace Engagement, Job Burnout and Turnover Intention

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**Abstract:** *There is a growing interest found in the study of workplace engagement and it has become a buzzword in the recent years. It is considered HRM's new best friend which is characterized by vigor, dedication, and absorption. However, its paucity results in job burnout which is characterized by exhaustion, depersonalization and a diminished sense of professional accomplishment. Job burnout usually takes place due to erosion of engagement. Moreover, if the burnout issue remains unaddressed, it will ultimately lead the employees to quit and will make creating a congenial working environment an even bigger a challenge for today's managers. The objectives of this study are manifold: to find factorial validity of the original 17-item Utrecht Work Engagement Scale (UWES), 22-item Maslach Burnout Inventory (MBI), and 3-item Turnover Intention Scale by using Confirmatory Factor Analysis (CFA), to check the scores of respective sub-scales for good internal consistency, to test the proposed model through Path Analysis, and finally to establish validity and reliability of the constructs: workplace engagement, job burnout, and turnover intention in the context of Pakistan. For this study, cross-sectional data have been collected through convenience sampling from employees working in Karachi-based service oriented organizations. A Survey with 150 respondents was conducted and after data screening, 138 responses were found usable for analysis. The novel finding of this study was that more absorbed employees in their jobs do not face any kind of burnout syndrome in Pakistani context.*

**Keywords:** Workplace engagement, factorial validity, UWES, MBI, burnout, turnover intention.

## Introduction

In the 21st century, organizational settings are changing across the world and similarly, the workforce is transforming rapidly due to demographic shifts. The employees are demanding a congenial working environment wherein they can engage themselves physically, emotionally, and cognitively. Organizations that view employees as the most valuable asset, allocate a fixed amount in Training & Development to prepare their workforce for future challenges and increased productivity. This further shed the responsibility on employers to cultivate an inclusive and supportive work environment which could help employees to remain motivated with their jobs and the organization (Storm & Rothmann, 2003). Later on, this argument was supported by Carasco-Saul, Kim, and Kim (2014) and Lu, Lu, Gursoy, and Neale (2016) who explicitly mentioned that organizations invest significant resources to retain, develop, and engage their employees. Thus, the wide acceptance of the topic led us to explore the phenomenon in depth and we have taken it as the first construct of our study.

Workplace engagement can be succinctly defined as “a positive, fulfilling work-related state of mind characterized by absorption, vigor, and dedication.” Engaged workforce performs assigned duties on time and deals diligently with the job demands (W. B. Schaufeli, Salanova, González-Romá, & Bakker, 2002). In addition, it reaps a myriad of benefits such as good financial performance, positive employee outcomes, and organizational success (Bakker & Schaufeli, 2008; Perko, Kinnunen,

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Tolvanen, & Feldt, 2016). Prior studies by Harter, Schmidt, and Hayes (2002) also drew connection between business outcomes and work engagement.

The phenomenon of work engagement is widely practiced in organizations, but the academic literature on the topic is not very rich and little is known about its antecedents and consequences. To fill this void, academicians are striving to legitimize the construct of engagement (Macey & Schneider, 2008; Haynie, Mossholder, & Harris, 2016) and Utrecht Work Engagement Scale (UWES) has been developed to measure vigor, dedication, and absorption as the three dimensions of engagement (W. B. Schaufeli et al., 2002).

The above discussion reflects that work engagement is essential for organizational success, but its paucity may lead to job burnout. Job burnout is a rising issue and a matter of concern for both employers and employees. This notion is congruent with the study of Brewer and Clippard (2002) who said that burnout has a detrimental impact on employees and organizations at large. Therefore, there is a dire need to probe the matter further to identify factors causing burnout. Identification of factors will help HRD practitioners to develop sound policies, programs, and best practices. Besides such practical implications, handful of studies is available on the topic and scholarly work by Maslach, Schaufeli, and Leiter (2001) identified it as the antipode of workplace engagement characterized by emotional exhaustion, depersonalization, and lack of professional accomplishment. As mentioned earlier, burnout is a pressing problem and managers should adopt a holistic approach to deal with it. Keeping in view this perspective, J. S. Lee and Akhtar (2007) examined the influence of several factors such as coping resources, perceived sources of job stress, individual background factors, and organizational characteristics on job burnout. Thus, job burnout is the second construct of our study measured by 22-item Maslach Burnout Inventory (MBI) scale.

In addition, job burnout is viewed as a debilitating syndrome because it creates a negative impact on organizations in terms of low job involvement, organizational commitment, absenteeism, and turnover intentions among the employees. Moreover, if good employees find turnover as the last resort, it reflects a loss of knowledge and fresh insights. This notion is cognizant with the findings of Eckardt, Skaggs, and Youndt (2014) who provided a great deal of knowledge regarding dire consequences of employee turnover which ultimately lead to loss of production-oriented knowledge. Hence, it is incumbent on managers to rectify, measure, and propose doable solutions to address turnover intentions among employees. Keeping this view in consideration, we have taken turnover intentions as the third construct of our study measured by 3-item Turnover intention scale (Cammann, Fichman, Jenkins, & Klesh, 1979).

## Motivation of study

In light of the above discussion, we can deduce that the scope of HRM is widening in the 21st century. HR academicians and practitioners are leaving no stone unturned to make their organizations a better place to work. They are making efforts to provide an enabling environment conducive to operational and strategic excellence. It is noteworthy to mention that a myriad of ideals and practices have entered the field. For instance, Truss, Shantz, Soane, Alfes, and Delbridge (2013) called workplace engagement as an HRM's new best friend, Whicker and Andrews (2004) said reducing the impact of professional burnout is a worthwhile area of focus for HRM, whereas Gollan (2012) found that role of HR has been instrumental to keep employees committed and more engaged to the firm. Therefore, there is a dire need to identify adverse consequences of engagement, such as burnout and turnover intentions, in order to get the employees fully engaged at the workplace. The dilemma is that employee engagement is declining due to lack of distributive justice, leadership style, rewards and recognition, performance expectations, employee responsibilities, etc. Critics argue that deficit of all such factors results in financial losses, and if such problems remain unaddressed for long, it may subsequently lead to job burnout and turnover intentions.

Hence, our study aims to address these problems with the empirical testing of the three

constructs which will help organizational leaders to adopt best HR practices in the context of Pakistan.

In addition, the objectives of this study are manifold i.e. to find factorial validity of the original 17-item Utrecht Work Engagement Scale (UWES), 22-item Maslach Burnout Inventory (MBI) and 3-item Turnover Intention Scale by using Confirmatory Factor Analysis (CFA), to check the scores of respective sub-scales for good internal consistency, to test the proposed model through Path Analysis, and finally to establish validity and reliability of the three constructs together: workplace engagement, job burnout, and turnover intention within the context of Pakistan.

## Literature Review

Work engagement is a subject of inquiry and to date lucid interpretations have been drawn to explore this underlying phenomenon in depth. It has been discussed broadly in studies related to (a) model building and (b) behavioral manifestations.

The category of model building covers those studies that identified the antecedents and consequences of work engagement.

The model identified by Kahn (1990) is based on personal engagement and this study postulated it as “the harnessing of organization members’ selves to their work roles so they can express themselves emotionally, cognitively and physically.” Engaged employees exert effort into their work because they identify with it. The study further stated that engagement is affected by three psychological conditions: meaningfulness, safety, and availability. This study was empirically tested by May, Gilson, and Harter (2004) and they reported a significant relationship between engagement and three psychological conditions. Moreover, scholarly work presented by Rothbard (2001) is inspired by Kahn (1990), but he conceptualized engagement in his own way. According to him, engagement is a two-dimensional motivational construct based on attention and absorption. Attention concerns the cognitive ability to perform a role and absorption is the intensity of focus on a role. His approach is cognizant with the studies of W. B. Schaufeli et al. (2002).

As mentioned earlier, three psychological conditions are necessary for engagement as proposed by Kahn (1990), but this does not completely define the reason behind varying levels of employee engagement. However, Saks (2006) found the answer in the Social Exchange Theory (SET). SET states that if parties abide by the “rules of exchange”, it leads to trust, loyalty, and mutual commitments. Rules of exchange basically refer to reciprocity which means actions or behaviors of one party influence others (Cropanzano & Mitchell, 2005; Huang et al., 2016). Thus, SET describes why individuals get more or less engaged in their work. The study by Saks (2006) is the first to draw a distinction between organization engagement and job engagement.

In the light of above discussion, the question arises whether it is enough to identify various levels of employee engagement, and the answer is in the negative. Nonetheless, there are some other factors like job demands and resources that have a direct link with work engagement. Bakker and Demerouti (2008) worked on the same idea and proposed Job Demands and Resources (JD-R) Model. This model identifies the antecedents and consequences of work engagement. Job demands, job resources, and personal resources have been identified as antecedents, whereas performance has been considered as the outcome of work engagement. In light of above discussion, we can infer that studies of model building have laid the foundation of dynamics of engagement with a focus on its antecedents and consequences.

The second category, behavioral manifestations, has examined the work proposed by W. B. Schaufeli (2004) and W. B. Schaufeli and Bakker (2004). The group of scholars conducted a qualitative study with the heterogeneous group of Dutch employees to figure out the attributes of engaged employees. The findings revealed that they are high in energy and self-efficacy, possess positive attitude, take part in activities outside work, are not overly obsessed with work, and finally work is fun for

them. This piece of work was further extended by [W. B. Schaufeli et al. \(2002\)](#) who identified three dimensions of work engagement: vigor (V), dedication (D), and absorption (AB).

In addition, employees' psychological, physical health issues, and personality traits are also areas of concern for behavioral manifestations. [Sonnentag, Kuttler, and Fritz \(2010\)](#) emphasized on ensuring optimal workplace psychological health of employees, whereas [W. B. Schaufeli and Bakker \(2004\)](#) identified that engaged employees suffer less from stomach aches, cardiovascular disease, and headaches. The classification of employee engagement by [Anitha \(2014\)](#) into engaged, not engaged and actively disengaged employees is a further extension of the category of behavioral manifestations. According to the author, engaged employees are always in the pursuit of excellence, while not engaged employees are only concerned about their job responsibilities, and they are less loyal to their organizations. On the flip side, actively disengaged employees is the worst-case scenario; they neither work diligently nor show any loyalty to their organization.

## Relationship between work engagement and job burnout

As work engagement is a multidimensional concept to ensure employee wellbeing, [Kumar and Weil \(1998\)](#) gave an entirely new dimension to the concept. The scholars reiterated that engagement is the direct antipode of burnout. Moreover, burnout takes place due to erosion of engagement. On the contrary, [W. B. Schaufeli et al. \(2002\)](#) took a different perspective by arguing that work engagement and burnout do not enjoy a perfect inverse relationship. That is, when an employee is high on engagement, this does not mean one is not burned-out and vice versa. In the view-point of [Bakker and Demerouti \(2007\)](#), work engagement and job burnout have similar determinants with opposing effects. In light of such discussion, we deduce that job burnout has received much academic scrutiny. [Maslach and Jackson \(1981\)](#) figured out job burnout as a stress syndrome having three factors: emotional exhaustion (EE), depersonalization (DP) and lack of personal accomplishment (PA). Later on, literary work by [Maslach et al. \(2001\)](#) revealed that studies of caregivers have given rise to the concept of job burnout. The idea was further advanced by [W. B. Schaufeli \(2004\)](#) and [W. B. Schaufeli and Bakker \(2004\)](#) who firmly believed that patients demand emotional, physical, and intellectual support that make the caregivers susceptible to burnout. This premise builds the need to study the implications of job burnout and its connection with work engagement in other sectors as well apart from health care only. Keeping this view in perspective, our study has taken into account a wide range of organizations including construction and material, higher education, beverages, personal goods, banking, tobacco, automobile, industrial engineering, power and energy, oil and gas, household goods, etc.

In addition, [Leiter, Day, Oore, and Spence Laschinger \(2012\)](#) have examined a relationship between engagement and burnout with a different lens. They reiterated that employees even with high workplace attachment may experience burnout due to strained social relationships with the co-workers. Hence, the discussion has led us to study the association between the dimensions of work engagement and job burnout.

Research by [Leiter, Day, and Price \(2015\)](#) has shown an inverse relationship between vigor and all the three dimensions of burnout. This is consistent with the study of [González-Romá, Schaufeli, Bakker, and Lloret \(2006\)](#) who argued that MBI and UWES are negatively correlated and a continuum is constituted between vigor and emotional exhaustion, and also between dedication and depersonalization. [W. B. Schaufeli and Bakker \(2004\)](#) concluded that all three engagement scales including vigor (VI) are moderately negatively related with the positively worded burnout scale that assesses Personal Accomplishment, further identifying vigor as the direct positive opposite of exhaustion. Therefore, on the basis of the discussed literature, the following hypotheses are derived to be tested within Pakistani context:

*H1: Vigor has a significant impact on Emotional Exhaustion.*

*H2: Vigor has a significant impact on Depersonalization.*

*H3: Vigor has a significant impact on Personal Accomplishment.*

Since engagement and burnout lie at two opposite poles, therefore, it is expected that burnout and engagement are negatively related (Gumbau, Soria, Schaufeli, Silla, & Gumbau, 2000). The empirical study by Bakker, Demerouti, and Sanz-Vergel (2014) confirmed this inference i.e. in presence of burnout, vigor turns into emotional exhaustion, dedication into depersonalization, and absorption into non personal accomplishment. Through 30 in-depth interviews, the research conducted by Gumbau et al. (2000) found absorption to be a founding element of engagement. W. B. Schaufeli and Bakker (2004) identified reduced professional accomplishment and absorption as opposites. The above literature paves way for us to test the following hypotheses:

*H4: Absorption has a significant impact on Emotional Exhaustion.*

*H5: Absorption has a significant impact on Depersonalization.*

*H6: Absorption has a significant impact on Personal Accomplishment.*

Kumar and Weil (1998) believed that burnout is assessed by the opposite pattern of scores on UWES. The high score on personal accomplishment, and low scores on exhaustion and depersonalization are indicative of engagement. However, personal accomplishment plays an independent role as compared to the other two dimensions of burnout stated by R. T. Lee and Ashforth (1996) and Bakker and Schaufeli (2008). Shuck and Reio (2014) revealed that highly dedicated employees exhibited higher personal accomplishment, whereas low dedicated employees demonstrated higher depersonalization and exhaustion. Emotional exhaustion and depersonalization, the core dimensions of burnout, have been suggested as the conceptual opposites of vigor and dedication (the core dimensions of engagement), respectively by González-Romá et al. (2006) as results obtained by non-parametric Mokken scaling method. W. B. Schaufeli and Bakker (2004) further identified dedication as the direct positive opposite of depersonalization. Hence, the following hypotheses are posited:

*H7: Dedication has a significant impact on Emotional Exhaustion.*

*H8: Dedication has a significant impact on Depersonalization.*

*H9: Dedication has a significant impact on Personal Accomplishment.*

## Relationship between job burnout and turnover intention

Job burnout is detrimental to organizations and may lead to turnover intentions. The literary piece of work by Chong and Monroe (2015) confirmed this notion. This study conducted for junior accountants provided a great deal of knowledge about the antecedents and consequences of job burnout with role conflict, role ambiguity, and job-related tension as the determinants, and low level of organizational commitment and job satisfaction as the consequences of job burnout (Pu, Hou, Ma, & Sang, 2016; Belias, Koustelios, Sdrolas, & Aspridis, 2015). As the model was specifically designed to study public accounting firms, we felt the need to study its practical implications on various sectors of Pakistan to examine the similarities and differences.

Research by H. K. Laschinger Spence, Leiter, Day, and Gilin (2009) figured out that presence of two burnout factors (exhaustion and depersonalization) can strongly predict turnover intentions. Kim and Stoner (2008) proved that turnover intention is positively associated with burnout. Therefore, we hypothesize as:

*H10: Emotional Exhaustion has a significant impact on Turnover Intentions.*

*H11: Depersonalization has a significant impact on Turnover Intentions.*

*H12: Personal Accomplishment has a significant impact on Turnover Intentions.*

As a matter of fact, high turnover is one of the biggest challenges for today's managers and it is associated with expenditures for training, replacement, and separation (McEvoy & Cascio, 1985). The reader might face ambiguity at one point in time, as we have selected turnover intentions over actual turnover in our study, but research by Mobley (1977); Bluedorn (1982); Ajzen (1985) shows

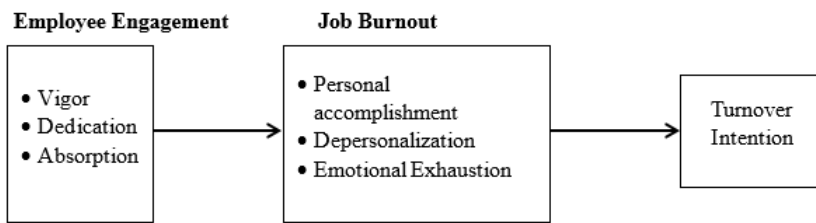
high correlation between actual turnover and turnover intentions. Hence, it justifies the selection of appropriate construct for our study.

## Conceptual Model

We contribute to the literature by testing a model that examines the influence of work engagement, job burnout, and turnover intentions on groups of employees associated with various sectors of Pakistan. Our study is meaningful because these three factors are of significant concern for managers.

The proposed model is as follows:

Figure 1: Conceptual Model



## Methodology

### Sample and Data collection

A sample of 150 respondents was collected from employees of different sectors of Karachi-based service organizations only. Convenience sampling was adopted by using a self-administered questionnaire. The method and sample used are consistent with the methodology used in many previous studies of engagement and burnout, e.g. (Brewer & Clippard, 2002; W. B. Schaufeli, 2004; W. B. Schaufeli & Bakker, 2004; Storm & Rothmann, 2003; Leiter et al., 2015). Multivariate outliers were removed from the data set using Mahalanobis distance (D2) with critical Chi-square function at  $p < .001$ , as a result 12 multivariate outliers were detected and removed from the data set. After data scrutiny, only 138 responses were found usable for analysis. In terms of bias reduction, it is accepted that in case of having “three or more indicators per factor, a sample size of 100 will usually be sufficient for convergence” (Anderson & Gerbing, 1984). As for measurement models, it is said that models can perform well, even with smaller samples of 50-100 responses (Iacobucci & Churchill, 2010).

### Measurement

Work Engagement was measured with the original 17 item version of the Utrecht Work Engagement Scale (UWES) (W. B. Schaufeli et al., 2002). An example item is “It is difficult to detach myself from my job”. Respondents answered on a 7 point Likert scale from 0= “never” and 6= “always”. High scores indicate higher level of work engagement.

Burnout was measured with the 22 item version of the Maslach Burnout Inventory (Maslach & Jackson, 1981) to measure the three dimensions of job burnout: lack of personal accomplishment, emotional exhaustion, and depersonalization which consist of 8, 9 and 5 items respectively.



We adapted 8 items and the word “patient” from the original scale was changed to “co-workers/subordinates” to create relevance with our study. An example item is “Deal effectively with the co-workers/subordinates’ problems”. Respondents answered on a 5 point Likert scale (1= “strongly disagree” and 5= “strongly agree”). High scores on emotional exhaustion and depersonalization, and low scores on personal accomplishment reflect a high degree of burnout.

Turnover Intention was measured with the 3 item version developed by (Cammann et al., 1979). An example item is “I often think about quitting”. Respondents answered on a 5 point Likert scale from 1= “strongly disagree” to 5= “strongly agree”. High scores indicate higher level of turnover intentions.

## Data Analysis

The data analysis was carried out through SPSS 21 and AMOS 21 software with the sample size of  $N = 138$ . Table no.1 shows the means, standard deviations, Cronbach Alpha  $\alpha$ , and inter-correlation values of the variables used in present research.

### Reliability and validity of Scales

The overall Cronbach Alpha value of 42 items is 0.866 (  $>0.60$ ; (Nunnally, 1978)) which is above the proposed threshold. An iterative process was carried out to remove the items which do not increase the level of reliability and vice versa. Internal consistency of the variables is checked through Cronbach Alpha. Results of our study suggested that Cronbach Alpha reliability of the variables is above the threshold i.e. 0.60 as explained by (Nunnally, 1978) (See: Table1). Nunnally (1978) further shed light on the topic and suggested that reliability at 0.70 or higher is very good, value from 0.5 to 0.6 is sufficient for exploratory studies, however, alpha below 0.5 is insufficient (Ali & Raza, 2015; Raza & Hanif, 2013).

Convergent validity makes sure that an instrument correlates highly with other variables with which it should theoretically correlate, and it was assessed with significant high factor loadings (Hair Jr, Black, Babin, Anderson, & Tatham, 2006). Table 2 presents the number of final items extracted, results of construct and convergent validity including composite reliability (CR) and average variance explained (AVE). Furthermore the recommended criteria for CR and AVE state that a scale is considered reliable if it has AVE above 0.5 and CR above 0.7 (Bagozzi & Yi, 1988); however, in our model CR is less than 0.7 for vigor and depersonalization.

A CR value between 0.6 to 0.7 may also be acceptable if other indicator (i.e factor loadings  $>0.5$ ) of a model’s construct validity are good (Hair Jr et al., 2006). Past studies on the factorial validity (Corcoran, 1986; Qiao & Schaufeli, 2011; Justice, Gold, & Klein, 1981) of UWES and MBI scale still raises the questions about the multi-dimensionality and validity of the UWES and MBI-burnout scales. Similarly; (W. B. Schaufeli & Van Dierendonck, 1993) revealed that over 50 percent of the variance of Burnout variable is only due to emotional exhaustion, (Halbesleben & Demerouti, 2005) wrote that researchers have been concerned by some of the psychometric limitations of MBI-scale. The above arguments could be the reason for low CR value for only two factors in the study. The results supported that all other factors have met the suggested criteria and had established well in terms of convergent validity, which paves the path for further analysis of the conceptual model (Bouwman, Carlsson, Molina-Castillo, & Walden, 2007).

**Table 1**  
Descriptive Statistics and correlations

	Vigor		Dedication		Absorption		Emotional Exhaustion		Personal Accomplishment		Depersonalization		Turnover Intentions	
Mean	3.8868		4.1155		3.6447		2.6934		3.5991		2.6334		2.9462	
Std. Deviation	1.07191		1.22258		1.01024		0.73174		0.64043		0.718		1.00847	
Skewness	-0.307		-0.467		-0.178		-0.026		-0.168		0.159		0.145	
	Emotional Exhaustion		Personal Accomplishment		Depersonalization		Turnover Intentions		Vigor		Dedication		Absorption	
Emotional Exhaustion	-0.817													
Personal Accomplishment	-0.095	-0.736												
Depersonalization	.592**	-0.101	-0.62											
Turnover Intentions	.463**	0.138	.204*	-0.733										
Vigor	-0.012	.631**	0.03	0.031	-0.693									
Dedication	-0.12	.620**	0.032	-0.08	.724**	-0.767								
Absorption	0.002	.570**	0.084	-0.1	.746**	.732**	-0.738							

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

Cronbach alpha value in Parenthesis



**Table 2**  
Reliability and validity of Scales

Variables	Original No. of scale items	Composite Reliability Value (CR)	Final No. of extracted items in CFA	Average Variance extracted (AVE)
Vigor	6	0.647	4	0.528
Dedication	5	0.782	5	0.522
Absorption	6	0.717	2	0.55
Personal accomplishment	8	0.763	4	0.53
Depersonalization	5	0.662	3	0.602
Emotional exhaustion	9	0.749	6	0.534
Turnover intentions	3	0.74	3	0.588

\*Threshold value for CR>0.7 and AVE>0.5 (Bagozzi & Yi, 1988)

The sample data was also checked for discriminant validity, and instead of using the rule of thumb correlation among constructs “shall not exceed 0.85”, the average variance extracted versus shared variance method (Fornell & Larcker, 1981) was used to check discriminant validity. The AVE of each construct was compared with the squared correlation i.e shared variance with all other constructs, as all AVE values were greater than the shared variance with other constructs (See Table no.3), thus no issue of discriminant validity existed in our study (Voorhees, Brady, Calantone, & Ramirez, 2016; Raza, Qazi, & Umer, 2016).

**Table 3**  
AVE Vs Shared Value (Discriminant Validity)

Construct	AVE-value	Correlation Estimate with other constructs (in Measurement model)	Shared variance (Squared correlation)
Depersonalization	0.602	Personal Accomplishment	0.047
		Emotional Exhaustion	0.760
		Turnover Intentions	0.297
		Dedication	0.162
		Vigor	0.101
Personal Accomplishment	0.53	Absorption	0.090
		Emotional Exhaustion	-0.19
		Turnover Intentions	0.174
		Dedication	0.730
		Vigor	0.620
Emotional Exhaustion	0.534	Absorption	0.704
		Turnover Intentions	0.664
		Dedication	-0.221
		Vigor	-0.154
		Absorption	-0.108
Dedication	0.522	Turnover Intentions	-0.105
		Absorption	0.680
		Vigor	0.720
Vigor	0.528	Turnover Intentions	0.015
		Absorption	0.710
Turnover Intentions	0.588	Absorption	-0.048

## Common Method Variance

Harmans’ single-factor test is used by researchers to address the issue of common method variance (Waseem, Frooghi, & Afshan, 2013). The analysis was performed (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), after collecting data, and the statistical approach of Harman’s test single factor was applied first, and the exploratory factor analysis was conducted by fixing all variables to one factor using un-rotated factor solution (Reio, 2010), in order to detect the presence of CMV. Applying principal axis factoring framework, promax rotation and fixing the number of factors to 1, the results indicated that total number of variance explained is 19.265%.

Another technique similar to Harman’s single factor where all variables are restrained to single factor; Common Latent factor (CLF) was used. The common variance was estimated as the square of the common factor of each path before standardization which came out to be 37.4%. Since the

value is less than threshold of 50% for both of the above techniques (Eichhorn, 2014), it is concluded that the present study has no issue of common method variance.

## Confirmatory Factor Analysis - Measurement Model

Initially the measurement model comprised 42 items that helped to explain seven variables namely: vigor, dedication, absorption, emotional exhaustion, depersonalization, personal accomplishment and turnover intentions. CFA model shows a linkage between observed and unobserved variable (Byrne, 2013), and the model is tested for consistency with observed data. The efficiency of CFA measurement model relies on the assessment of its model fitness. The literature has shown a consensus on reporting combination of indices instead of relying on any single index for measuring model fit. In this regard, an assortment of indices is important since all represent different aspects of model fitness (Crowley & Fan, 1997). However, in reporting which index to include, one should not emphasize on common practices since some of the indices (for instance GFI) repeatedly are considered for historical reasons instead of their sophistication (Hooper, Coughlan, & Mullen, 2008). Table 4 presents the goodness of fit indices for our final hypothesized model based on (Kline, 2005) recommendations.

**Table 4**  
CFA model fit indices

Indices	Final measurement model	Source	Threshold value
X <sup>2</sup> (df)	469.26(296)		
CMIN/df	1.585	Byrne (2010)	<5
CFI	0.903	Bagozzi and Yi (1988)	>0.95
TLI	0.835	Bentler (1990)	close to 1
RMSEA(P-close)	0.065(.15)	Steiger (2007)	<0.07; p-value >0.05
SRMR	0.078	Hu and Bentler (1999)	less than 0.08

Source: Authors' estimation.

For goodness of fit of the measurement model, four common measures have been used; CMIN/DF <5 as proposed by (Bentler, 1990), TLI shall be close to 1, CFI shall be >0.95 as proposed by (Bagozzi & Yi, 1988) and RMSEA shall be <0.07; p-value >0.05 as proposed by (Steiger, 2007) and Standardized Root Mean Square Residual shall be less than 0.08 value (Hu & Bentler, 1999). In our study, for the final model, only 27 items were extracted after removing the items with factor loadings less than 0.5 (Afthanorhan, Wan, & Ahmad, 2013). Hair Jr et al. (2006) suggested standard-loading estimates should be 0.5 or higher. Although the results reflect the fitness of our final model, prior studies asserted that good fitness models can also have misspecification (Holt, Armenakis, Feild, & Harris, 2007). In order to deal with it, alternate models' fitness should be considered to compare with the hypothesized model (Mulaik et al., 1989; Holt et al., 2007). We, therefore, compared our final measurement model with three competing models. As shown in Table 5, the CMIN/DF value of our final hypothesized first order measurement model is found to be 1.585, TLI value is 0.835, CFI value is calculated as 0.903, RMSEA value is 0.065, and SRMR value is also less than the recommended value 0.08, i.e. 0.078, which are all satisfying cut-off level values described by different authors. Similarly, Standardized residual covariance (SRC) in the model is like modification indices which show significant discrepancies between proposed model and observed model covariance, thus it affects the overall goodness of fit. After taking care of modification indices those items with significant SRC value > 2.0 were deleted (Bagozzi & Yi, 1988).

Thus with each fit indices, the hypothesized model of the research exceeds or equals the threshold values demonstrated in (Kline, 2005). Thus based on empirical interpretation of given thresholds, we recognized that our final measurement model not only fits the data well but also fits the data better than other possible alternate models.

**Table 5**  
Summary of Measurement Model comparisons

Goodness of Fit Measures	CMIN/DF	CFI	TLI	RMSEA	SRMR
Null Model**	9.522	0.000	0.000	0.187	
One Factor Model	3.093	0.408	0.454	0.104	0.154
Two Factor Model***	3.305	0.438	0.52	0.097	0.146
Three Factor Model	2.005	0.597	0.57	0.086	0.1381
Hypothesized Model**** (CFA Model)	1.585a	0.903b	0.830c	0.065d	0.078e

\* a = Byrne (2010); b = Bagozzi and Yi (1988); c = Bentler (1990); d = Steiger (2007); e = Hu and Bentler (1999)

\*\*A Null model composed of all 42 items

\*\*\* A two factor model: 20 items of Employee engagement and Turnover Intentions (factor 1), 22 items of Burnout (Factor 2)

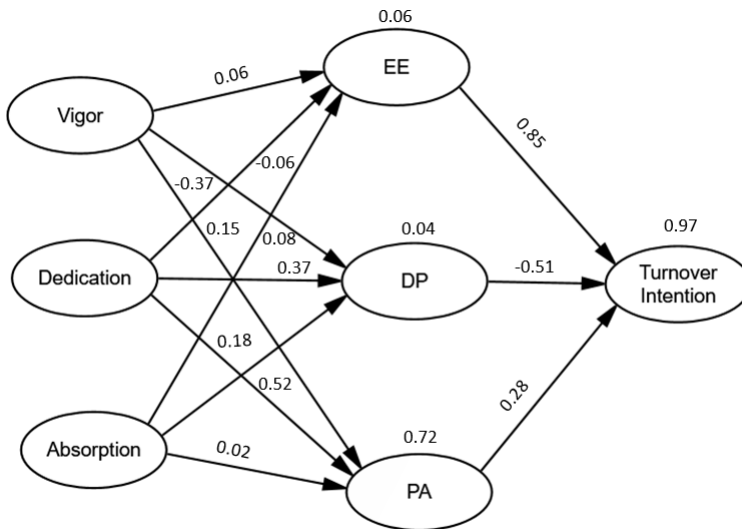
\*\*\*\* Final model comprises of 27 items with factor loadings greater than 0.5

Based on the above results of Goodness of Fit Indices after Confirmatory Factor Analysis, it validates the fitness of our final measurement model based on three constructs of employee engagement, job burnout, and turnover Intentions. Thus we can say that we have met our objectives of study, i.e. factorial validity of the original 17-item Utrecht Work Engagement Scale (UWES), 22-item Maslach Burnout Inventory (MBI), and 3-item Turnover Intention Scale by using Confirmatory Factor Analysis (CFA) has been calculated and the scores of respective sub-scales has been checked for good internal consistency and validity. This paves the way for further analysis.

## Path Analysis and Hypothesis Testing

Since the CFA model presented a good model fit, therefore, further study can be conducted to know the findings of the hypothesized model using Path Analysis and Structural Equation Modeling (Byrne, 2013). The statistical significance of all determinants was projected to establish the validity of the hypothesized regression paths. Path analysis has been carried out to test the hypotheses of the study. The standardized estimates of the paths are shown in Figure 2, whereas; Table 6 shows the results and summary of the hypotheses.

Figure 2: Path Analysis with standardized loadings



**Table 6**  
Path Analysis and Hypotheses Testing

Hypotheses	Hypothesized Path	USE	SE	S.E.	C.R.	P-value	Remarks
H1	Emotional Exhaustion <— Vigor	0.028	0.06	0.06	0.463	0.643	Not supported
H2	Depersonalization <— Vigor	-0.045	0.08	0.095	-0.475	0.635	Not supported
H3	Personal Accomplishment <— Vigor	0.214	0.15	0.043	5.023	***	Supported
H4	Emotional Exhaustion <— Absorption	0.072	-0.06	0.065	1.119	0.263	Not supported
H5	Depersonalization <— Absorption	0.131	0.18	0.102	1.287	0.198	Not supported
H6	Personal Accomplishment <— Absorption	0.012	0.02	0.046	0.259	0.796	Not supported
H7	Emotional Exhaustion <— Dedication	-0.145	-0.37	0.052	-2.813	0.005*	Supported
H8	Depersonalization <— Dedication	0.051	0.37	0.081	0.624	0.533	Not supported
H9	Personal Accomplishment <— Dedication	0.265	0.52	0.037	7.252	***	Supported
H10	Turnover intentions <— Emotional Exhaustion	2.7	0.85	0.043	62.228	***	Supported
H11	Turnover intentions <— Depersonalization	-1.038	-0.51	0.028	-37.166	***	Supported
H12	Turnover intentions <— Personal Accomplishment	0.687	0.28	0.034	20.284	***	Supported

Note: \*\*\* (p<0.001), \* (p<0.05) USE= Unstandardized Estimates, SE= Standardized Estimates, S.E.= Standard Error

## Discussion

From managerial perspective it is important to identify various ways to increase employees' engagement and reduce burnout and turnover intentions at large. Our findings reveal that vigor does have a significant impact on personal accomplishment which is in line with the findings of [Gumbau et al. \(2000\)](#) which state that high score of efficacy is indicative of high employee engagement. Furthermore, according to our findings, highly dedicated employees were found with more personal accomplishment (0.265, \*\*\*) but a significant inverse impact on emotional exhaustion (-0.145, \*\*) of the individuals were also detected. Similar findings were reported by [Shuck, Reio Jr, and Rocco \(2011\)](#) revealing the fact that the more an employee is enthusiastic and inspired, the less emotional exertion he or she will have towards the work organization, because of the sense of inspiration and pride the employee feels towards the work itself. The other two dimensions of engagement i.e. Absorption and Vigor were found as insignificant predictors of emotional exhaustion, the subscale of burnout in this study.

The results of this study showed all insignificant results of the third dimension of engagement i.e. Absorption on the three dimensions of burnout, although absorption has been found with a significant role in previous engagement-burnout studies ([Gumbau et al., 2000](#); [W. B. Schaufeli, 2004](#); [W. B. Schaufeli et al., 2002](#)). Similarly, Dedication and Vigor both were found insignificant predictors of depersonalization. These findings have significant implications for organizational behavior and human resource development within Pakistani context. It implies that in Pakistan, more engrossed employees who are completely focused on their work, do not face any kind of job related burnout, on the contrary, they enjoy their job roles. This paves the way for future research into psychological dynamics of burnout and employees having optimal experiences.

The results show a positive significant relationship between Vigor and Personal Accomplishment ( $\beta=0.2147^{***}$ ), positive and significant but inverse impact of Dedication on Emotional Exhaustion ( $\beta=-0.145, 0.005$ ), as when the critical ratio (CR) is  $> 1.96$  for a regression weight, that path is significant at the .05 level. When the three dimensions of Burnout were studied to find out its impact on employees turnover intentions, it was found out that all three dimensions of Burnout items adapted

from Maslach Burnout Inventory (MBI-1981) do have a significant impact on Turnover Intentions of employees. The results show a positive and significant impact of Emotional Exhaustion on Turnover Intention ( $\beta=2.705^{***}$ ), Personal Accomplishment on Turnover intention ( $\beta=0.687^{***}$ ), but a negative and significant impact of Depersonalization on Turnover Intention ( $\beta=-1.038^{***}$ ) was found. The results also indicate that all other hypotheses were not found insignificant. Furthermore, squared multiple correlations are independent of units of measurement displayed for each endogenous variable. In this study the variables depersonalization, emotional exhaustion, personal accomplishment, and turnover intentions account for 4%, 6.3%, 72% and 97.5% of the total variance respectively. In our study only six hypotheses were found significant which is not a problem as [Lam and Maguire \(2012\)](#) argued that the confirmatory facet of the model will be weak if the significance of individual parameter is considered instead of the theory behind the model. The relevance with the theory of our individual hypothesis results will be discussed in the following section.

In our study, the correlation between Emotional exhaustion and Depersonalization was found to be positive 0.76 (See Table 3 & Figure 2), which was in line with the meta-analyses conducted for the assessment of Job burnout MBI scale by [Lourel and Gueguen \(2007\)](#) that there was a homogenous consistent finding across the studies that the two subscales are always correlated positively, whereas different studies found personal accomplishment, a subscale of MBI, negatively correlated with other dimensions of burnout, also observed by our study (See: Table 1) and very non-significant correlation in final measurement model (See: Table 3). However the correlation between the latent engagement factors, particularly Vigor (VI) and Absorption (AB), was found high i.e. 0.70 (See Table 3) which is similar to the findings of [W. B. Schaufeli et al. \(2002\)](#), thus further studies are recommended to find out the validity of these two components with respect to finding the antecedents and consequences of Absorption and Vigor ([De Bruin, Hill, Henn, & Muller, 2013](#)).

All subscales of burnout were significant predictors of employees' intentions to leave the workplace.  $R^2$  of the variable Turnover intentions in the model was 0.97, thus 97% of the variance in this variable is explained by its predictors i.e. burnout dimensions (DP, EE and PA). The results are in line with various previous studies ([Bakker et al., 2014](#); [W. Schaufeli & Enzmann, 1998](#)).

## Conclusion

The study attempted to address the impact of three dimensions of workplace engagement i.e. vigor, dedication and absorption. The scales were adapted from original 17-item Utrecht Work Engagement Scale (UWES) on Job Burnout, adapted from 22-item Maslach Burnout Inventory (MBI) and the impact of burnout on Turnover Intentions of heterogeneous group of employees working in Karachi-based organizations. We performed Confirmatory Factor Analysis of the sample which confirmed the original three-factor dimensions of MBI scale of burnout i.e. (emotional exhaustion, depersonalization and lack of professional accomplishment) as well as the hypothesized three-factor structure of employee engagement model i.e. (vigor, dedication, and absorption). It was also observed, contrary to the expectations, the second order model of 'burnout' and 'engagement' did not reveal superior goodness of fit measures, and these findings were in line with [Gumbau et al. \(2000\)](#) results. Therefore, only first order was run for empirical testing.

Our review of the existing literature confirms to the theory that all three dimensions of engagement represent opposite poles of two dimensions of the burnout i.e. emotional exhaustion and depersonalization ([Gumbau et al., 2000](#)). Previous studies revealed and agreed to the independence and lack of the role of professional accomplishment as compared to exhaustion and depersonalization, which constitute the core of the burnout syndrome ([Maslach et al., 2001](#); [Leiter, 1993](#)). In our study the impact of dedication and vigor on professional accomplishment was also found significant, and the variable personal accomplishment explained 72% of the total variance in the model confirming the existing literature. It is concluded that the hypothesized three-factor structure of

the engagement model fits quite well in this study. [Nerstad, Richardsen, and Martinussen \(2010\)](#) in their study supported a two-factor model of work engagement i.e. vigor or dedication and absorption, which paves the way for further research on the dimensionality of the engagement construct, especially within Pakistani social context. Also as per various other studies ([De Bruin et al., 2013](#); [W. B. Schaufeli & Bakker, 2004](#)), the core composition of work engagement is an amalgamation of vigor and dedication only, whereas absorption is the result of previous two subscales ([Beer, Pienaar, & Rothmann, 2014](#)). Hence, we conclude that work engagement is essential for organizational prosperity and success, and its adequacy may lessen the chances of occurrence of job burnout and turnover intentions ([Bakker, Albrecht, & Leiter, 2011](#)). The novel finding of this study was that absorbed employees do not face any kind of burnout syndrome, which has a weak correlation with two subscales of burnout Emotional exhaustion and depersonalization.

## Managerial Implications

In the 21st century, managers are faced with formidable challenges of globalization. At the same time, cut-throat competition, advanced technology, and dynamic environment have become the norms of business fraternity. To cope up with this situation, management demands high work engagement from its employees. Therefore, sound employment strategies are the need of the hour that will ultimately attract qualified workforce, and reduce burnout and turnover intentions in the long run. This is consistent with the study of ([H. K. S. Laschinger & Finegan, 2005](#)).

However, the dilemma is that strategists sometimes do not address the employees' work issues, which gives birth to burnout and employees decide to quit at last. The irony of the matter is that they exploit their organizational resources to search new employment opportunities. While formulating HR policies, the managers should put great emphasis on reducing attachment avoidance which has a negative relationship with efficacy dimension of burnout ([Leiter et al., 2015](#)), as well as enhancing psychological safety and trust level among employees. Hence, timely measures should be taken to reduce employees' burnout in order to decrease the chances of employees seeking alternative employment ([W. B. Schaufeli & Bakker, 2004](#)) and to enhance the economic and commercial impact of an organizations by retaining experienced employees.

In addition, literature recommends that managers bear the responsibility of not only satisfying customers, but also ensuring optimal functioning and psychological health of employees, therefore, it is essential that managers should understand beneficial implications of using burnout as health outcome measure ([Sonnentag et al., 2010](#)), as personal accomplishment was found by [Mäkikangas, Hätinen, Kinnunen, and Pekkonen \(2011\)](#) as the central symptom of burnout syndrome among the employees having job-related psychological health problems. The above discussion places responsibility on HR practitioners to formulate organizational policies in order to reduce likelihood of burnout, turnover intentions and to increase work engagement.

## Future Research & Limitations

Our survey findings are based on cross-sectional data, i.e. the study is conducted at a single point in time, due to which we are unable to identify causal relationship between predictor and outcome variables. Therefore, we recommend a longitudinal study to examine the time effect of implemented HR policies designed to affect Burnout and Engagement dimensions, factorial invariance and causal link among all three constructs. We also recommend future studies on the dimensionality of the engagement construct within different contexts for its further validation. Additionally, we have taken only Karachi-based organizations into consideration, and there is a need to corroborate the results of our findings in other geographical regions of Pakistan. The study may not only open

avenues for future research, but may also identify macro-level systemic issues related to workplace engagement, job burnout, and turnover intentions.



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