



Assessing the effect of personal and job resources on work engagement of university teachers



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ABSTRACT

This study was conducted to analyze the impact of personal resources and job resources on job engagement of university teachers. Due to fierce competition, work engagement is vital subject for organizations. Research indicated that personal and job resources play substantial role in predicting work engagement. Several studies conducted in Pakistan have proved that employee's work engagement can be enhanced by better job and personal resources. But these studies have limited generalizability due to contextual specificity. Therefore, to achieve intended objective of this study, the questionnaire was administrated among 200 university teachers of three types of universities, 160 questionnaires were returned and 112 respondents' data were used for final analysis. The data was analyzed by using the SPSS and Smart PLS 3.0 software. The result indicated that out of four hypotheses, three hypothesis supported the relationship while one hypothesis did not support the relationship. This study possesses few limitations and also offers recommendations for future research.

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1. Introduction

Every organization strives to achieve competitive advantages over other organization; in this competitive era employee engagement is best tool (Rashid et al., 2011). Many organizations want to obtain and develop engaged employees. Because engaged workers are prone to exercise improved performance, are more initiative and innovative (Asadullah, 2017). In order to acquire and develop engaged employees; the organization should examine work place requirements and should also provide sufficient motivating and energizing resources at work place (Rashid et al., 2011). The conservation of Resource Theory postulates that individuals attempt to acquire and defend several resources. Increase in such obtained resources may help in growing positive outcomes of individuals. Grounded on COR theory, the researchers (Karatepe and Olugbade, 2009; Xanthopoulou et al., 2007) posited that availability of various personal and job resources at work place increase the work engagement. Consequently, today, many

organizations in Pakistan are also continuously struggling for development of engaged employees through resource maximization and mobilization (Asadullah, 2017). Considerable amount of research have been done on workplace and individuals resources in relation with engagement within context of Pakistan (Asadullah, 2017; Rashid et al., 2011; Javed and Cheema, 2015; Akhtar et al., 2012; Shaukat and Iqbal, 2012; Ghafoor et al., 2011).

The above stated studies conducted in Pakistan empirically examined the relationship and effect job and personal resources on work engagement in different work settings such as Oil Companies, Shopping Malls, Banks and etc. However, to date there is a lack of empirical evidence in the educational literature of Pakistan particularly in higher education sector of Pakistan. Further, a little attention has been paid on boosting of workplace resources and examining its effect on various aspects of work related attitude of university teachers. Therefore, this study was designed to capture a deep understanding of the personal resources, job resources and employee work engagement. Specifically, the current study intended to analyze the role and effect of resources: personal resources (self- efficacy and trait competitiveness) and job resources (supervisory support and opportunities for professional and career development) on work engagement of university teachers in Pakistan.

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2. Literature review

This section of the study provides the prevalent literature on: resources of work place: personal resources and job resources, job engagement and association of personal and job related resources with job engagement.

2.1. Resources of workplace

According to COR theory, resources are “things that people value and strive to obtain, retain and protect”. Richter and Hacker (1998) mentioned that resources are categorized in two types: internal resources and external resources. The internal resources involve cognitive and action pattern, whereas the external resources involve organizational and social, environmental. Different authors undertake these two terms differently; some authors describe internal resources as personal resources whereas others simply define them as internal resources. On the other hand; the external resources are termed as job resources or organizational resources by some researchers. The conservation theory claims that these resources are very important in obtaining other new resources and help in increasing wellbeing (Westman et al., 2004; Hobfoll, 1998; 2001). The explanation of two type of resources is as follows.

2.1.1. Personal resources

Personal resources are the aspects of one's self that are connected with resiliency; one's sense of ability to regulate and effect upon the environment effectively (Hobfoll, 2002). Personal resources are helpful in accomplishing goals and objectives provide safety from fears and threats, connected with psychological and physiological cost, and also encourage in personal growth (Xanthopoulou et al., 2009). Xanthopoulou et al. (2007) identified three typical types of personal resources: self- efficacy, organizational based self- esteem and Optimism. Brown et al. (1998) examined trait competitiveness as another important personal resource. In the current study, the researchers focused on two sets of personal resources: self- efficacy and trait competitiveness.

Self- efficacy is defined as “people's beliefs in their capabilities to mobilize the motivation, cognitive resources and courses of action needed to exercise control over events in their lives” (Wood and Bandura, 1989). Self - efficacy was also defined by Chen et al. (2001) “Self- efficacy is individual's perception of their ability to meet demands in broad array of context” (Xanthopoulou et al., 2007). Bandura (1989) emphasized that in human being self - efficacious element develops motivation by effecting the goals and challenges they follow, the strength and efforts they adopt, their will power and persistency while facing challenges and hurdles. Salanova et al. (2006) examined that self - efficacious

workers capable of experiencing high level of efforts. In this study, another important dimension of personal resources is trait competitiveness. Trait competitiveness refers to “enjoyment of interpersonal competition and desire to win and be better than others” (Brown et al., 1998). Such type of personal resource has positive relation with stress resilience and also influence on emotional and physical well-being of people (Chen et al., 2001).

2.1.2. Job resources

Job resources are categorized as physical, social and organizational aspects of one's jobs, supportive in accomplishing job related objectives, reduce the effect of the job demand and contribute in one's personal growth and development (Conchie et al., 2013; Demerouti et al., 2001). Job resources may be available at organizational level such as (pay, career opportunities, job security), with social relation (supervisor support, co-workers support, team climate), organizational work (role, clarity, participation in decision making), with organizational task (skill variety, task identity, task significance, autonomy and performance feedback) stated by (Bakker and Demerouti, 2007; Hobfoll, 2001). According to Demerouti et al. (2001) organizational resources can be defined as control over job, qualification, participation in decision making, task variety. Judge et al. (2004) indicated that these job resources are useful and functional in accomplishing organizational goals, provide shelter from threats and associated with physiological and physiological cost, also motivate personal growth and development. Certain resources are associated with sense of independence at the time of performing job and those resources promote work engagement (Deci and Ryan, 1985).

Our interest regarding the job resources for this study is supervisor support and opportunities for professional and career development. Supervisor support may be part of organization, that shows supervisor is impotent and play a role in promoting employee engagement. As supervisor may prolong a project deadline (Greenhaus and Parasuraman, 1994). Opportunities for professional and career growth means that employee encounters an uphill task that requires him or her to acquire multi-dimensional skills and novel ideas to perform the duty. In this he or she also receives continuous guidelines for personal growth from the supervisor with work environment offering various avenues for future career development.

2.2. Work engagement

Rothbard (2001) stated that two fundamental aspects of engagement are attention and absorption. Rashid et al. (2011) defined engagement as a perception that leads continuous improvement, flexibility and change at the empathy of what it means. Job engagement refers to affirmative and fulfilling work related mental state, expressed by

vigor, dedication and absorption (Schaufeli et al., 2002). Vigor is the key trait that describes the pinnacle of energy level and mental resilience while working and grit to invest the efforts in one's work and exercise persistence in the face of difficulties. Dedication denotes as the sense of substance, zeal, inspiration, dignity and challenges. "Absorption is characterized by fully and happily engrossed in one's work so that the time at work place passes swiftly hence detaching oneself from work may seem difficult" (Hakanen et al., 2008). Research shows that engagement has significant influence and effect on workplace outcomes, as it was examined that engagement has positive relationship with customer satisfaction, in role- performance, profit and other financial results (Xanthopoulou et al., 2009; Salanova et al., 2005).

2.3. Association of personal resources, job resources, and work engagement

Several studies have proved that different resources at work place are essential and crucial in promoting work engagement. Such as Asadullah (2017) who found that job resources and individual resources leads work engagement and work engagement increases job performance. Rashid et al. (2011) examined the key drivers (decision making, coordination, employee performance appraisal, performance rewards, employee involvement, training and career development) of employee engagement and confirmed relationship of employee engagement with personal and organizational performance in banking sector of Pakistan. Javed and Cheema (2015) conducted study in shopping malls of Pakistan and found that organizational resources: such as marketing capability, technology and financial resources increases work engagement. In addition, they also determined that organizational resources and work engagement increases service climate and service climate increases employee performance, and employee performance leads to customer loyalty, reciprocally customer loyalty leads to service climate. Conchie et al. (2013) conducted qualitative study in construction company of UK and examined that certain dimensions of job demand and job resources such as: role overload, production pressure and workforce characteristics hinder the leader's engagement, social support and autonomy dimensions of job – Demand and Job resources model promoted leaders' engagement in safety leadership. Karatepe and Olugbade (2009) developed model comprising of job resources (supervisor support,) and personal resources (trait competitiveness and self - efficacy) and they also tested model with work engagement of hotel employees located in Abuja. Relationship of Big five personality traits such as extraversion, agreeableness, neuroticism, conscientiousness and openness to experience was found with work engagement (Kim et al., 2009). Xanthopoulou et al. (2009) found the reciprocal relationship among job resources (autonomy, job content, supervisory

coaching and opportunities for professional career development) whereas, personal resources (self-efficacy, organizational based self - esteem, optimism) leads to work engagement. Hakanen et al. (2008) examined the power of job resources and resources spiral gains among Finnish Dentist. This study tested that job resources (craftsmanship, pride in profession and direct and long term results) leads to work engagement and work engagement leads to personal initiatives, in turn personal initiative significantly effect on work- unit innovativeness. In reciprocal relationship the work unit innovativeness positively leads to personal initiative, personal initiative leads to work engagement, in last work engagement predicts future job resources. Mauno et al. (2007) proved that resources (job control and organizational based self-esteem) predicted the work engagement among Finnish health care personnel. Study conducted by Llorens et al. (2007) showed that resources (time and control) best predicted work engagement with efficacy. Xanthopoulou et al. (2007) conducted study to examine role of personal resources) in job demand – resources model. They examined in three steps: first personal (self- efficacy, organizational based self - esteem and optimism has moderating effect on job demand and exhaustion. second, determined mediating effect between job resources and work engagement. Third, job demand will mediate the relationship between personal resources and exhaustion and job resources will mediate the relationship between personal resources and work engagement. Bakker et al. (2004) examined that availability of job demand variable (work load, emotional demands and work home conflict) leads to exhaustion and exhaustion may effect in role performance, authors also determined that job resources (autonomy, possibilities for development and social support) increases job engagement and job engagement leads to extra role performance.

2.4. Conceptual framework and research hypothesis

After analyzing the literature review, this study established the key research objective: to examine the relationship and effect of personal and job resources on work engagement. To achieve the proposed research objective, research framework was constructed. The research framework was based on two independent variables: 1) The personal resource variable was measured with two factors (self-efficacy and trait competitiveness), 2). The job resource was also examined with two factors: supervisors support and opportunities for professional and career development. This study also carried one dependent variable which is work engagement. Work engagement was examined with three dimensions: vigor, dedication and absorption. This research framework was built on the basis of past studies (Fig. 1) (Asadullah, 2017; Karatepe and Olugbade, 2009; Xanthopoulou et al., 2009; Bakker and Demerouti, 2007; Demerouti et al., 2001).

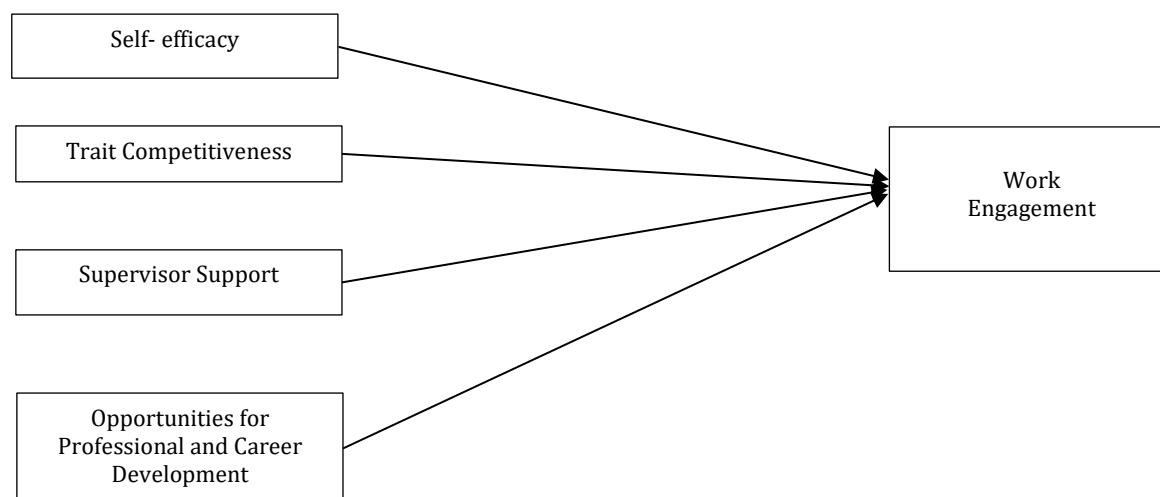


Fig. 1: Conceptual framework

Considering the variables of research framework and research objective, this study developed the hypothesis to test. The hypotheses are given as follows

H1: Self – Efficacy will significantly effect on work engagement of university teachers.

H2: Trait Competitiveness will significantly effect on work engagement of university teacher.

H3: Job opportunities for professional and career development will increase engagement of university teachers.

H4: Supervisor Support will increase engagement of university teachers.

3. Methodology

3.1. Sampling method and sample size

The researchers conducted the present study in three public universities (engineering, medical and general university) of Pakistan. The target population of this study was permanent faculty members (university teachers) working in above mentioned universities. All university teachers were working on different ranks (lecturer, assistant professor, associate professor and professor). To identify the sample size of the study, the researcher adopted random sampling method. Finally, this study developed the sample of 200 respondents. Consequently, 200 questionnaires (including male and female) were distributed and 160 respondents returned the survey. Out of 160 responses 48 responses were deleted due to missing values and systematic patterns.

3.2. Measurement

In this study the survey instrument was administrated as the survey questionnaire was divided in to 3 sections. First section was designed to collect general information about respondents such as name, age, gender, university name, position, education, organizational tenure. Second part pertained questions on work engagement. Third

section carried questions on personal resources (trait Competitiveness and Self-Efficacy) and job resources (supervisors support and opportunities for professional and career development).

Work engagement was dependent variable; it was conceptualized and measured by using the 5- item Work Engagement Scale, developed by Saks (2006). All independent variables such as: Self efficacy was operationalized with scale of Jones (1986), Trait competitiveness was measured using the scale of Brown et al. (1998), Supervisor support was measured with scale established by Beehr et al. (1990) and Job opportunities for professional and career development was measured with scale of Bakker et al. (2003). All item of work engagement was scored on 7-points likert scale and items of all independent variables (self-efficacy, trait competitiveness, supervisor support and opportunities for career and professional development) were scored on 5- point likert scale.

3.3. Data collection method

The data was collected through paying personal visits at all three universities; personal meeting with respondents and the survey questionnaire was also emailed to targeted respondents. The confidentiality of the answers given by respondents was fully maintained and assured.

3.4. Statistical analysis and study findings

This study analyzed the collected data by using the SPSS 0.23 version and Smart PLS 3.0 software. The current section of the study provides the adopted statistical analysis and findings of the study.

3.4.1. Data cleaning and CMV

The data was cleaned for missing values; the extent of missing values was less than five percent and the data was randomly missing from the overall data set. Hence, we used mean-replacement for dealing with missing values (Hair et al., 2010). Next,

we treated the outliers' issues with the data (Barnett and Lewis, 1994); we used uni-variate outliers and multivariate outliers and deleted 50 cases by evaluating through Mahalanobis distance (D2) (Tabachnick and Fidell, 2007). Lastly, we evaluated common method variance, which is considered a major problem in survey research (Podsakoff et al., 2003). In order to deal with CMV, we first used procedural remedies (MacKenzie and Podsakoff, 2012). Secondly, we used Harman's single factor test following guidelines forwarded by Podsakoff and Organ (1986); accordingly, all the study items were subjected to a principal component analysis factor. Our results produced four factors, explaining a cumulative of 45.037% variance. With the first largest factor explaining 45.037% of the total variance, which is less than 50% (Kumar, 2012). Additionally, no single factor accounted for the majority of the results (Podsakoff et al., 2012). Therefore, common method variance is not a problem in this data.

3.4.2. Descriptive statistics

The results given in Table 1 on descriptive analysis shows that total number of population for this study was; comprised of 112 respondents, the highest average of Work engagement is 5.93 and the lowest average of Supervisor support which is 3.73 (For further explanation see Table 1).

3.4.3. Rationale for using PLS-SEM

The partial least square structural equation modeling has experienced widespread recognition in the recent times (Hair et al., 2016). Since the study hypotheses were directional hence, we used Smart PLS 3.0 software (Hair et al., 2012; Henseler et al., 2009) for the data analysis.

3.4.4. Reliability and validity

We used two step approaches for the data analysis, after the cleaning of data using SPSS, accordingly first, we established and ascertained measurement model and then we established and ascertained structural model using Smart PLS software. The two step approach is recommended by (Hair et al., 2012).

3.4.5. Assessment of inter-item reliability

The inter item reliability is established in order to assure that the items that measure constructs of the interest are reliable in the given research context. According to Hulland (1999), the factor loadings should be used in SEM for this purpose. Hulland (1999) has further recommended that items with a minimum of 0.5 loadings or above should be retained.

The details of the factor loadings are provided in Table 2. The results of confirmatory factory analysis

revealed that all the items of study are within the range 0.585 to 909. Hence, it is concluded that this study's, items are reliable as per recommendations of Hulland (1999) and Hair et al. (2016).

3.4.6. Assessment of internal consistency reliability

Researchers have recently given more importance to the alternate approaches of measuring internal consistency reliability of the measures. More importantly, methodologists have recommended assessment of composite reliability with 0.70 or above score for each latent variable as sufficient evidence for counting on internal consistency reliability (Bagozzi and Yi, 1988). The results of the study indicate that all five latent variables of our study have score composite reliability scores above its minimum threshold of 0.70; the composite reliability (CR) scores for each latent variable are provided in Table 2. We have additionally provided Cronbach Alpha scores for each latent variable in Table 2 which are also as per the recommended thresholds. We therefore, conclude that our study demonstrates internal consistency reliability.

3.4.7. Assessment of convergent validity

In addition to performing the above tests, we obtained average variance extracted (AVE) scores using PLS Algorithm in Smart PLS for obtaining CFA results for each latent variable. According to Hair et al. (2016) a minimum score of 0.50 or above has to be explained by each construct of the study in order to demonstrate convergent validity. The results of our study indicate that all the latent variables have met the minimum threshold of 0.50 AVE score. Hence, the study demonstrates convergent validity. Table 2 provides detailed scores of AVE.

3.4.8. Assessment of discriminant validity

In the more recent literature, scholars have heavily relied upon Fornell and Larcker (1981) criterion for reporting discriminant validity. According to the criterion forwarded by Fornell and Larcker (1981), the squared root of average variance extracted has to be greater than its correlation with other variables.

Table 1: Descriptive statistics

Variables	Mean	Std. Deviation	N
Work Engagement	5.93	.660	112
Supervisor Support	3.73	1.092	112
Job Opportunities For Professional Development	4.14	.842	112
Trait competitiveness	4.37	.601	112
Self-efficacy	4.33	.503	112

Table 2: Measurement model

Construct	Items	Loadings	Alpha	CR	AVE
Self-Efficacy	SE2	0.585	0.677	0.803	0.509
	SE4	0.860			
	SE5	0.694			
	SE6	0.688			
Trait Competitiveness	TC1	0.682	0.712	0.823	0.541
	TC2	0.772			
	TC3	0.854			
	TC4	0.613			
Supervisor Support	SS1	0.923	0.931	0.950	0.827
	SS2	0.938			
	SS3	0.866			
	SS4	0.909			
Job Opportunity	JOFPD1	0.832	0.765	0.887	0.798
	JOFPD2	0.951			
Work Engagement Construct	WE1	0.885	0.852	0.895	0.632
	Items	Loadings			
	WE2	0.764			
	WE3	0.817			
	WE4	0.812			
	WE5	0.681			

Table 3 indicates that all scores on the diagonal for latent variables are greater than correlations. Hence, our study demonstrates robust discriminant validity.

Table 3: Discriminant validity

Variables	1	2	3	4	5
Job Opportunity	0.893				
Self-Efficacy	0.089	0.714			
Supervisor Support	0.143	0.121	0.909		
Trait Competitiveness	0.403	0.364	0.298	0.736	
Work Engagement	0.221	0.517	0.375	0.480	0.795

3.4.9. Structural model assessment

After ascertaining reliability and validity of our study, our second challenge was to assess structural paths of the study. This assessment is in-line with two step approach. Hence, during the assessment of structural model we first looked into collinearity scores of our study. Our results indicated that the VIF scores for all the latent variables of the study were below 5 as suggested by Hair et al. (2016).

We next, assessed hypotheses of our study using Bootstrapping procedure (Hair et al., 2016). The benefit of bootstrapping procedure is that it eliminates normality issues, if there are any within the data set. (The path co-efficient are provided in Table 4).

The result obtained through bootstrapping show that self-efficacy positively influences work engagement ($t=5.025$, $p=0.000$). Thus H1 was supported. Our second hypothesis was regarding the positive relationship between Trait competitiveness and work engagement and our results indicate ($t=3.462$, $p=0.00$). Hence, H2 was also supported. In our third hypotheses, we stated that there will be a positive relationship between Job opportunities for professional and career development and work engagement. However, our empirical results indicate otherwise ($t=1.074$, $p=0.142$). Hence, H3 was rejected. Lastly, we hypothesized a positive relationship between supervisor support and work engagement (H4). Our results indicate an empirical support for this relationship ($t=2.607$, $p=0.005$).

Table 4: Path- coefficient

Hyp.	Relationship	beta	SE	T-Value	P Values	Decision
H1	Self-Efficacy -> Work Engagement	0.394	0.078	5.025	0.000	Supported
H2	Trait competitiveness -> Work Engagement	0.241	0.070	3.462	0.000	Supported
H3	Job Opportunity -> Work Engagement	0.054	0.050	1.074	0.142	Not Supported
H4	Supervisor Support -> Work Engagement	0.248	0.095	2.607	0.005	Supported

3.4.10. Predictive power of the model

Drawing upon Hair et al. (2016), we determined predictive power of our research model by examining r-squared and f-squared scores.

The results indicate r-squared score of 0.42; suggesting 42% variance explained in the endogenous variable. Although r-square assessment has been seen contextual by the academic researchers (Hair et al., 2016). However, according to Falk and Miller (1992) if a model explains 0.10 percent variance; it could be accepted. Hence, we conclude that the acquired r-squared value of 42

percent is acceptable and it also makes the variables of the interest more important in studying and developing work engagement. Refer Table 5 for explained variance.

Table 5: R-Squared assessment

Endogenous Latent Variable	R Square
Work Engagement	0.424

Secondly, we examined f-squared values in order to determine the relative importance of every exogenous variable of our study (Hair et al., 2016).

Our results indicate f-squared value of 0.004 for job opportunities for professional and career development; 0.233 for self-efficacy; 0.097 for supervisor support and 0.069 for trait

competitiveness overwork engagement. Whereas, according to Cohen (1988) the f-squared values are small, medium and large when the value is up to 0.02, 0.15, and 0.35 respectively (Table 6).

Table 6: f-Squared assessment

Exogenous Latent Variables	Work Engagement	Cohen (1988) Assessment
Job Opportunity	0.004	Small
Self-Efficacy	0.233	Medium
Supervisor Support	0.097	Small
Trait competitiveness	0.069	Small

Therefore, as per Cohen (1988) criterion, our results indicate that the relative effect of job opportunities for professional and career development, supervisor support and trait competitiveness over work engagement is small. However, the relative effect of self-efficacy over work engagement is medium (Table 6).

Lastly, PLS-SEM recommends Blindfolding procedure as a substitute for goodness of fit assessment (Hair et al., 2016). We used Blindfolding procedure to obtain Q-squared scores through Smart PLS software. According to Chin (1998) the Q^2 value should be greater than zero in order to demonstrate a model's predictive relevance. The results of study presented in Table 7 indicate that our study meets the predictive relevance requirements.

Table 7: Test of predictive relevance

Endogenous Latent Variable	SSO	SSE	$Q^2 = 1 - SSE/SSO$
Work Engagement	560.00 0	424.48 9	0.242

4. Discussion

This study was extended on current issue of work engagement in developing country of Pakistan. The current study was conducted into three major universities of Sindh province of Pakistan. The prime objective of the current study was to assess the influence of resources: personal and job resources over work engagement of university teachers. The noteworthy results of this empirical investigation showed that self-efficacy and trait competitiveness aspect of personal resources has positive significant relationship with work engagement and these two personal resources produce significant change in work engagement of university teachers. This result is coherent with previous studies such as Asadullah (2017), Karatepe and Olugbade (2009), and Xanthopoulou et al. (2009). These "So called soft human - oriented characteristics and measure: such as attitude, traits and perception are believed as main antecedents of employee attitude and performance at work place (Pfeffer and Jeffrey, 1998). Hobfoll (1998) claimed that personal resources can facilitate in handling stress and help to increase the resistance. These personal resources may also be helpful in having greater well-being since the enhanced personal resources lead to higher level of self-regard in the individuals. In turn, such individuals are highly likely to experience increased

levels of agreement between their own set goals and their competencies (Judge et al., 2005). Job resources (supervisors support) also predict relationship and statistically significant change in work engagement of university teachers. This result of the study is coherent with previously conducted studies (Karatepe and Olugbade, 2009; Xanthopoulou et al., 2009; Bakker and Demerouti, 2007; Demerouti et al., 2001). The job resources entail motivational potential and lead to high work engagement with lesser negative energy and excellent performance. Further; the job resources may either play an intrinsic motivational role because they foster employees' growth and learning or could act as an extrinsic motivational role because these are instrumental in achieving key work goals (Bakker and Demerouti, 2007).

According to Deci and Ryan (2000), there are numerous types of resources that contribute towards persons' basic needs of personal growth and psychological well-being and their attitudes are strongly influenced as this has catalyst effect on their sense of fulfillment. And the social support is the most consistent resource that positively affects engagement in safety across a range of various industries (Nahrgang et al., 2011). Opportunities for professional and career development) did not show positive relationship and also did not predict significant change in work engagement of university teachers. This study examined the inconsistent results with previous studies such as Xanthopoulou et al. (2009).

The result found insignificant relationship of opportunities for professional and career development with work engagement, may be because of homogenous nature of sample. When the researcher concentrates on the group of highly educated employees; it could result in facing certain restrictions regarding the research variable as these restrictions may cause type II errors (Xanthopoulou et al., 2007).

Another key factor leading to the rejection of hypothesis could be nature of specific job resources which are included in this research. It is quite possible that the resources tested in this study may fall short of having any effect on engagement of university teachers or the jobs the teachers perform may not require them to adopt and learn new skills. In conclusion, our three hypothesis found confirm relationship, therefore our three hypothesis are accepted and one hypothesis is rejected.

5. Implications of the study

This research may enhance the value of the existing literature since it is going to fill the gap by researching influence of various personal and job resources on work engagement in the context of education sector of Pakistan. This study may be applied to future researches as to elaborate the theoretical essence of research and to set their research objectives.

The result of this study highlighted the fact that certain resources; such as self- efficacy, trait competitiveness, and supervisor support are very important factors having emphatic influence on the university teachers in getting them engaged in their job. So the present research may bear fruitful results for the management of different universities to understand that resources (self-efficacy, trait competitiveness and supervisor support) increase work engagement of university teachers. Also in the light of this research; the management of such universities and other educational institutions is in a better position to take serious initiatives for increasing the work engagement of employees by dint of improving and enhancing the resources at workplace. This study reveals that the management of educational institution should mainly focus on maximizing the personal and job resources. In fact, such resources create the healthy work environment and optimize the work engagement of universities teachers and ultimately increase employees' performance and organizational citizenship behavior for providing quality education.

6. Limitations and future research

This Study was conducted within limited public universities of Pakistan, Universities located at far areas were not covered in this analysis so the results would have been different if the sample size would have been increased and data have been collected from other universities too. Another limitation; this study used self- reporting instrument which may resulted in common method bias problem. Third, Sample size of this study was quite small.

This study found that certain personal (self-efficacy and trait competitiveness) and job resources (supervisor support) contribute in creating work engagement of university teachers. The future researcher should examine the effect of other less investigated personal and job resources on employees' engagement in different industries such as telecommunication, financial institution, and secondary education. A comparative study should be conducted on private and public universities of Pakistan to examine the difference in influence of these investigated resources on teachers' engagement. Future research should be conducted on investigation of some other personal factors e.g. optimism, Organizational based self -esteemed OCB, Big five traits) and job based resources such as (autonomy, training and development). The attention should also be given on examining

mediating effect of personal resources between job resources and work engagement in education sector of Pakistan. Availability of job resources may contribute in creating certain individual's personal resources, resources may promote higher work engagement (Xanthopoulou et al., 2007).

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