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RESEARCH PAPER

Work Engagement and its Determinants in the Presence of Psychological Well-being

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ABSTRACT

This study tends to highlight the role work engagement, and focus on what traits will change Primary School Teacher toward work engagement. Psychological well-being acts as a mediator in the relationships between voice behavior and work engagement. Analyses were conducted using data from a sample of 450 male primary school teachers of Southern Punjab in the Multan, Khanewal and Vehari districts, Pakistan. Data was collected through a questionnaire based on adopted scales. Exploratory factor analysis, confirmatory factor analysis, and multi-group moderation was conducted to provide statistical evidence for hypotheses. Work Design and voice behavior were found significant in predicting work engagement through direct relationship. Voice behavior also was found having significant relationship through mediation of psychological well-being with work engagement. However, Occupational Self-efficacy has an insignificant direct relation with work engagement among primary school teachers. Additionally, psychological well-being (the mediator) was found to be a significant mediator of the hypothesized path between voice behavior and work engagement.

KEYWORDS: Work Design, voice behavior, work engagement, psychological well-being, Occupational self-efficacy

Introduction

Work engagement is a purely positive and satisfying work-related condition of mind consisting of three sides, namely vigor (that is physical component), dedication (that is an emotional component) and absorption (that is a cognitive component) and it is an important research subject for both practitioners and researchers for the reason that it connects with many work involvement outcomes (Rothmann & Rothmann, 2010).. Research study conduction by Ahmad et al. (2013), also provide evidence that teachers in government sector at primary level are less motivated and engaged due to many factors. Cheerful people belonging to youth force are not selecting teaching side as a professional career because the working conditions and life conditions in the primary levels schools of Pakistan are, to approximately the tiniest, with no attraction and there are significant number of teachers which are not still engaged in work efficiently and successfully as these teachers are serving for many years. Whereas, Dibua, Nzewi, and Onyegbuna (2023), revealed the fact that work design has been demonstrated to be significant for manufacturing companies as it aids in a number of outcomes, including low-absenteeism & retention, high enthusiasm, higher quality-engagement, & job satisfaction. Also, Ali et al, (2015) demonstrated its point of view that primary teachers have not been delivered with the sufficient resources and tools that are supportive in doing their job satisfactorily as they are less engaged due to low enthusiasm to work in their profession. The phenomenon of work engagement in education sector is evident. Especially in primary school education it is very rare to find the answers the research questions about work engagement. What certain factors (work design, voice behavior, occupational self-efficacy and psychological well-being) affect the engagement in

primary school teachers. This study actually with other implications is able to answer the research questions in education sector at primary level. The novel nature of this current research study is that it deals with an indication that is an integrated and united framework having no such combination of variables has been studied or observed before which implies that it inclines to fill in the research gap in research study. This study also has provided the answers for research questions about the determinations about the work engagement that is main focus among primary school teachers of public sector education in Southern Punjab, Pakistan. Influence of the three proposed independent variables on work engagement have certainly not been considered before in view of psychological well-being as mediation role for work engagement and voice behavior.

Literature Review

Schaufeli, (2013) demonstrated work engagement as a focused determined in work, energy utilized in work, involvement in work towards the accomplishment of mutual goals of organization and there are certain alike views between other researchers for engagement concepts and measures. According to Ahmad et at. (2013), government has focused only the higher education and primary education has been neglected. This ignorance of primary education system has created gaps between the education institutions at various levels. Shaikh et al. (2012), also found that the teacher engagement in specific educational tasks remains central in the teaching job performance debates. There are different perspectives about teacher engagement in Pakistan where teachers are which are less engaged are likely to have combination of low morale and job dissatisfaction, low incentives, and poor controls and other behavioral sanctions. As a result, standards of professional behavior and performance are low and falling. These are few major consequences if school teachers are not engaged with their profession. Furthermore, teachers are responsible for their students' learning taking place in or outside the class. The design of work and management of work can influence worker health both directly and indirectly. Whereas, findings of Dibua, Nzewi, and Onyegbuna (2023), revealed the fact that work design has been demonstrated to be significant for manufacturing companies as it aids in a number of outcomes, including low-absenteeism & retention, high enthusiasm, higher quality-engagement, & job satisfaction. Shantza, et al., (2013) also used these five dimensions of work design construct in his study to measure whole construct. In this study the main focus was on autonomy aspect of work design the prominent component of Job Characteristic Model. But the other dimensions of work design (feedback, task identity, task variety and task significance) were also part of this research study. In recent times, the interest has been re-energized through wider work design concept. Nowadays work design can be perceived as a part of a greater package of employment practices that as a result has a significant effect on employees' different benefits and work outcomes related with the workplace (Osterman, 2010). It signifies a new attitude towards organization of work that stimulates flexibility and teamwork, responds to variability and complexity of work assignments, and enriches skill development and employee's motivation.

According to study findings of Purcell, (2014), voice behavior in an organization is antecedent of employee's psychological well-being which is leading factor towards engagement of work by employees. The Kim, Lee, & Byun, (2020) exerted that coworker support can play a supplemental role in enabling the maintenance of a high level of voice behavior among employees who experience low job engagement. Results of Liu., Chen, & Lee, (2022) indicated that voice behavior and employees' moral personalities were positively correlated. It was noted that the relationship between moral identity and voice behavior and the mediating effect of work engagement as a motivational mechanism. Nazari, er al., (2021) demonstrated that teachers who receive voice complaints are less engaged at work than those who do not. Treatment for voice disorders in teachers should receive full attention due to the central role that work engagement plays in organizational, social, and financial systems. In addition, in a research study among

Indian software programmers in India, occupational self-efficacy was described to be a significant predictor of employee engagement with work, with the relationship being mediated by supervisory and organizational support (Pati & Kumar, 2010). Moreover, as we know the encouraging employee voice and behavior is crucial to the sustainable long-term performance of the company. Thus, it can be concluded from a survey of 629 workers in China's service sector that voice behavior and work engagement are positively correlated (Du, & Wang, 2021).

Occupational self-efficacy with high level could be anticipated to relate with positive work engagement and there is also significant relationship between employee engagement and occupational self-efficacy (Chaudry et al., 2012). On the other hand, Hartman, & Barber, (2020) claimed that the relationship between men's and women's occupational self-efficacy and work engagement was not statistically significant. Nonetheless, it was discovered that men's career aspirations are statistically significantly higher than women's. Orgambídez., Borrego, & Vázquez, (2020) discovered Although work engagement either fully or partially mediates its effect (e.g., affective commitment) or partially (e.g., job satisfaction), self-efficacy appears to be a significant determinant of QWL in nursing staff. The findings of Chan, et al. (2020) demonstrated that, via the mediation of work engagement, TAs' self-efficacy is positively correlated with their job satisfaction.

Researchers involved in the measurement and impact of psychological well-being recognizes two extensive approaches to the concept. The first broad approach generally referred to as "hedonic" that associate's well-being with the experience of positive feelings i.e. feeling good (moods and emotions) and factors such as overall life satisfaction and other is frequently discussed to as the "eudemonic" approach that takes into account purpose (Robertson and Cooper. 2010). The results of Koroglu, & Ozmen, (2022) demonstrated that work engagement (WE), interpersonal conflict (IPC), psychological well-being (PWB), and innovative work behavior (IWB) are all related positively. This means that in order to increase WE and IWB, components are essential. Such a slight focus risks losing the gains connected with higher levels of psychological well-being, for both the employees themselves and organization. Depression is one of the most shared psychological disorders and illness among adolescents and children (Merry et al., 2012) and has been linked to negative cognitive functioning and poor academic performance. Anwar, Kee, and Ijaz (2022), concluded that the Pakistani hotel industry ought to of cyber harassment and establish protocols and guidelines to preserve a pleasant workplace for staff members' mental welfare and guarantee that they derive fulfillment from their work. According to Robertson et al. (2012), the psychological well-being is engrossed and stated indirectly or directly by some perspective of attitudes and engagement that psychological well-being is linked with engagement. Better psychological well-being creates more work engagement. Greenier, Derakhshan, & Fathi, (2021) used a sample of 108 British as well as 255 Iranian English language teachers to evaluate the function of emotion regulation as well as psychological well-being (PWB) as exogenous variables of work engagement and measured that there was a higher correlation between work engagement & the P.W.B for British teachers. Kundi et al., (2020) evaluated that affective commitment may act as a mediator in the relationship between hedonic and eudaimonic psychological well-being and employee performance. Furthermore, the relationship between affective commitment and psychological well-being (hedonic and eudaimonic) is mitigated by perceived job insecurity. Whereas, Oktavia, Eva, & Achmad, (2021) exerted that psychological well-being and work engagement among millennial employees in Malang were positively and significantly correlated. Moreover, COVID-19 affects each person's working circumstances in addition to their mental health.

Social Cognitive Theory

Many theories have been proposed over the years to explain the developmental changes that people undergo over the course of their lives. Diversity in social practices produces substantial individual differences in the capabilities that are cultivated and those that remain underdeveloped. Social cognitive theory favors a model of causation involving triadic reciprocal determinism. In this model of reciprocal causation, behavior, cognition and other personal factors, and environmental influences all operate as interacting determinants that influence each other bi-directionally Knowledge of the factors, whether planned or fortuitous, that can alter the course of life paths provides guides for how to foster valued futures. At the personal level, it requires cultivating the capabilities for exercising self-directedness. These include the development of competencies, self-beliefs of efficacy to exercise control, and self-regulatory capabilities for influencing one's own motivation and actions. Some personal factors and resources expand freedom of action, and enable people to serve as causal contributors to their own life course by selecting, influencing, and constructing their own circumstances. With such skills, people are better able to provide supports and direction for their actions, to capitalize on planned opportunities. Freedom of actions that is basically autonomy of work enables to perform work in better way with motivation. Social cognitive theory describes that as the age of individual increases the occupational self-efficacious believes go stronger with the years of experiences. More years of experience means more strong self-efficacious believes. Theory also focuses on the behavioral aspects of individuals. Vocal expressions mainly serve interpersonal purposes and voice behavior increases sustainability. Behavior of intention expressions increases significance of positive state of behaviors in individuals. Social Cognitive Theory also links the state of happiness and satisfaction with engagement of work through motivation. As when individuals are happier and satisfied, they are more enthusiastically inclined to their work with devotion.

Hypotheses

H_1: Work design affects the work engagement.
H_2: Psychological well-being affects the work engagement.
H_3: Voice behavior affects the work engagement.
H_4: Voice behavior affects the psychological well-being.
H_5: Voice behavior affects the work engagement through mediating role of psychological well-being.
H_6: Occupational self-efficacy affects the work engagement

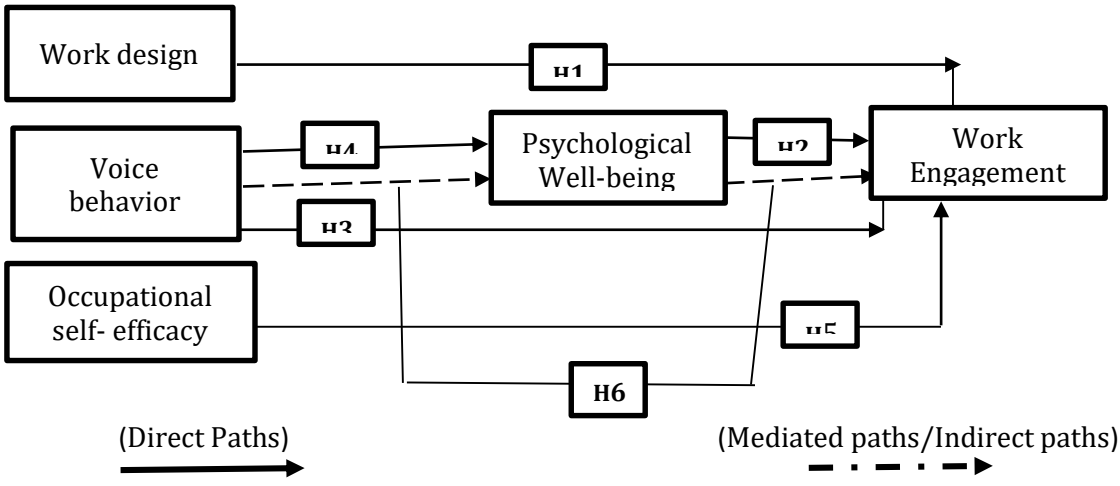

Figure 1 Conceptual Framework

Material and Methods

Work Engagement

Engagement is a fulfilling, positive, work-related state of mind that is characterized by vigor, absorption and dedication. More broadly, Kahn, (1990) defined engagement as the connecting of people's selves to their work, in such way that they exclusively invest their physical, emotional and cognitive resources in their work roles. In this study the measurement scale adopted by Schaufeli & Bakker (2003) which has three dimensions vigor, dedication and absorption. Vigor was measured by 6 items. Dedication was measured by 5 items. Absorption was measured by 6 items. Responses on items was tapped on 5-point Likert scale (1 being strongly agreed to 5 being strongly disagree).

Work Design

The five characteristics of work design are autonomy, task variety, task significance, task identity and feedback. These job characteristics particularly the autonomy are the elements that lead towards work engagement (Shantz et al., 2013). In this study the measurement scale adopted by Morgeson and Humphrey, (2006). The scale has five dimensions, autonomy, task variety, task significance, task identity and feedback. Autonomy was measured by 9 items. Responses on items was tapped on 5 point Likert scale (1 being strongly agreed to 5 being strongly disagree).

Psychological Well-Being

According to Bar-On (2005), feeling of satisfaction is situation of psychological well-being. Psychological well-being can be said as combination of depression, happiness and life satisfaction. In these three circumstances the depression is negative effect, life satisfaction links more widely cognitive evaluation of individual's life, happiness is emotional situation and these both are positive effects (Khramtsova et al, 2007). In this study the measurement scale adopted by Diener et al., (1985) to measure Psychological Well-being. The scale is unidimensional and was measured by five items. Responses on items was tapped on 5-point Likert scale (1 being strongly agreed to 5 being strongly disagree).

Voice Behavior

Behavior of speaking for betterment or to raise voice for removing dissatisfaction is basically promotive behavior that put pressure of disclosing challenging position except to criticizing the policies or other procedure of departments (Dyne and LePine, 1998). In this study the measurement scale adopted by Dyne & LePine, (1998). The scale is unidimensional and was measured by six items. Responses on items was tapped on 5-point Likert scale (1 being strongly agreed to 5 being strongly disagree).

Occupational Self-Efficacy

Belief of one owns self-abilities and competencies to perform occupational tasks is termed as occupational self-efficacy (Chaudhary et al., 2012). In this study the measurement scale adopted by Damasio, Freitas, & Koller, (2014). The scale is unidimensional and was measured by six items.

Sample selection

Targeted respondents of the study were male teachers of primary public schools of education sector in Southern Punjab of Pakistan. Sample of the population consists of

406 teachers from primary schools by following the rule developed by Chou and Bentler (1986), 7*58=406. For the accuracy, sample size was extended to 550. Out of 550 respondents 480 primary school teachers responded. In 480 questionnaires 30 questionnaires were containing missing values which were not forwarded in SPSS for further analysis. Quota sampling technique has been employed for data collection; Quota sampling is most appropriate sampling technique when population is documented. Quota sampling technique was used on those male educational staff which are engaged in primary level education in three districts of Southern Punjab, Multan, Khanewal and Vehari. It provided guarantee the participation of all three districts for their respective representation in study. In three districts of Southern Punjab there are total 4067 primary male teachers. To ensure the sample size of 450 it was very necessary to ascertain the total number of teachers from each district. In this regard the formula of ratio was used to find out the ratio of sample for participation from each district i.e. (450*PSTs of district/total number of teachers). So, depending upon the size of total primary teachers of each district the proportion was made according total number of teachers in respective district. There are 432 primary schools in Multan district in which 1377 primary school teachers are performing their jobs. There are 268 primary schools in Khanewal district which 1286 teachers are engaged with their profession. In Vehari district total number of primary schools are 546 in which 1404 primary teachers are serving. According to equal ratio for equal participation of sample from each district the 152 teachers from Multan, 142 from Khanewal and 156 teachers from Vehari district were included depending upon the total number of teachers. According to ratio the percentage of total analyzed sample of 450 is 34%, 31% and 35% from Multan, Khanewal and Vehari respectively. Total of 406 responses was required for the sake of data analysis but in this study sample size of 550 was targeted for better results out of which the data from 450 respondents was used. For the sample size calculation, the rule devised by Chou and Bentler (1986) has been followed which described that seven respondents are required against each question of questionnaire to obtain reliable estimates.

Data Analysis and Processing

Modern version of SPSS is used for data analysis processing. SEM-structural equation modeling analysis with AMOS latest version is used for this current study. Statistical Package for Social Sciences-SPSS is utilized for the analysis of the collected data from sample and according to described scale in the questionnaire coding has been completed. Additionally, the responses are entered according to the requirements of this study. As per requirement, the program named Analysis of Moment Structures-AMOS is also used for analysis of the data by using Structural Equation Modeling-SEM technique. To test the reliability of the instruments i.e. scale in current study, Statistical Package for Social Sciences-SPSS had been used. Further, SPSS is used to examine the data in terminologies of whole descriptive statistics. For the authentication of the analyzed results obtained from the study, Exploratory Factor Analysis-EFA and Confirmatory Factor Analysis-CFA both are used. Further, for the analysis of proposed hypothesis in this current study and model, Structural Equation Modeling-SEM is used. Structural Equation Modeling-SEM is also used as basic function of Analysis of Moment Structures-AMOS to examine and test the hypothesized model by extracting values obtained from SPSS data sheet.

Results and Discussion

Sample Demographics

Certain demographic factors of the sample under this study were explored by using descriptive analysis in SPSS, such as age, income and marital status. Tables 1 to table 4 provide a summary of the demographic analysis.

Descriptive Statistics

Table 1
Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15,000-20,000	189	42	42	42
	20,000-30,000	212	47	47	47
	30,000-40,000	49	11	11	100.0
	Total	450	100.0	100.0	

Table 2
Marital Status

		Frequency	Percent	Valid Percent	Cumulative %age
Valid	Single	165	36.7	36.7	36.7
	Married	285	63.3	63.3	100
	Total	450	100	100	

Table 3
Age

		Frequency	Percent	Valid Percent	Cumulative %age
Valid	20-25 years	174	38.7	38.7	38.7
	25-30 years	198	44	44	44
	30-35 years	78	17.3	17.3	100
	Total	450	100	100	

Table 4
Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	234	52	52	52
	Master (Graduate)	216	48	48	100
	Total	450	100.0	100.0	

Demographic tables given below shows the descriptive statistics for income, marital status and age. The table displays that there in big deal of variation in respondents (PSTs) in terms of income, age and their marital status. The results acquired presented that the number of primary school teachers were 52% whereas masters or graduate residents comprises of 48% of the sample size.

Measurement of normality

It is essential to check the assumptions of normality of data before moving forward to the SEM analysis. Normality of the data is considered by Kurtosis, Skewness and drawing normal curve in PSS. Higher values than certain limit of both kurtosis and skewness 54 describe non-normality exist in data (Hall and Wang, 2005). The cut-off values for kurtosis and skewness is range from +5 to -5. In this study, the values of skewness of work engagement, work design, voice behavior, occupational self-efficacy and psychological well-being is above the cut-off value of +5 to -5. In certain studies it is indicated that non-normality of the data does not cause problems and issues when data size is big as according to Ghasemi and Zahediasl (2012), with large enough sample sizes

(> 300, 400 or more), the violation of the normality assumption should not grounds for major problems; this infers that we can use parametric procedures even when the data from sample is not normally distributed.

Table 5
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEComL	450	1.12	3.59	2.1665	.43015	.202	.115	-.102	.230
WDComL	450	1.25	4.25	2.5207	.51950	-.004	.115	-.090	.230
VBComL	450	1.00	5.00	2.2311	.63124	.320	.115	.405	.230
OSComL	450	1.00	4.50	2.1785	.61127	.502	.115	.245	.230
PWComL	450	1.00	4.80	2.3316	.66923	.537	.115	.577	.230
Valid N (listwise)	450								

Assessment of Multicolinearity

An additional important assumption is to investigate whether data is free from multicollinearity issue. Since being there of multicollinearity leads to cause statistical disputes and discrepancies in application of model, it is necessary to remove any such 55 occasions. To attest presence of multicollinearity variance inflation factor (VIF) can be discussed to (Stine, 1985). Researchers have supported the assumption that if variance inflation factor (VIF) is greater than 10 then it points to the existence of multicollinearity in data (Kline, 1995).

Table 6
Coefficients

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(constant)	.608	.088		6.880	.000		
WDComL	.418	.035	.505	11.904	.000	.568	1.761
VBComL	.188	.028	.276	6.626	.000	.587	1.702
OSComL	-.040	.023	-.057	-1.783	.075	.987	1.013
PWComL	.074	.021	.116	3.552	.000	.961	1.040

a. Dependent Variable: WEComL

Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) is used to discover the possible structure of underlying factor of a set of measured variables without imposing any preconceived structure on the outcome. EFA inaugurates the relationship between the items and the construct on the basis of calculating the correlation that is it determines either the items are loaded on the same latent variable or other latent variable. The values or results of the correlations thus calculated must load high principally on the same latent variable whereas the correlations must be low on different powerful variables must be low (Byrne, 2001). EFA concludes that how much of the association among individual items are there that a single concept of model can explain. In EFA, there are three tables that are considered very useful. These tables are Rotated Matrix, Component Correlation Matrix and Structure Matrix. The Component Correlation Matrix supports to ascertain the power of the relationship between different factors. Rotational Matrix is suitable for observing the individual loadings of each item on the relevant factor, however the third

table Structure Matrix provides information about the correlation coefficient among different variables of study. Before extracting Rotated Matrix, Component Correlation Matrix and Structure Matrix a variable eigenvalue rule (Kaiser, 1960) and the scree test (Cattell, 1966) is set. The *eigenvalue rule* (Kaiser, 1960) is founded on the assumption that factors having eigenvalue less than one must be excluded from the analysis. Another important test named as scree test (Cattell, 1966) is applied for the sake of getting some information about the variables that have eigenvalue somewhat higher than one. This is so because eigenvalue rule exclude all the values less than one thus scree plot is a qualified and relative measure, whereas eigenvalue rule is an absolute measure. According to Scree plot rule suggested by Cattell (1966), the number of factors retained in determined by the magnitude of dropping of the curve. Current research study uses the principal axis factoring (PAF) as a rotation method as Fabrigar et al., (1999) proposes principal axis factoring to be the utmost applicable technique of factor analysis, when the data set is significantly not normal PAF technique provides with best results or when data is normally distributed in general or even, for the sake of rotation of data orthogonal technique with Varimax rotation is applied, as it advised by Anna and Jason (2005), provides best results. Construct of Work Engagement, initially consisted of 3-dimensions having 17-items. The construct of WE was restricted to one factor loading because through exploratory factor analysis (EFA) it was disclosed that this construct was having very poor loading on three dimension such as on F1 five retained with sufficient loading whereas on F2 five retained with sufficient loading whereas and F3 only four items were sufficient. When WE was restricted to only factor it was seen that WE had total of five items which sufficient loadings therefore continuing the analysis with F1 only. The name given to the factor was based on common relevance and characteristics of the items being loaded on the factor. The construct of Work Design also provided a new set of variables to be included in the model by retaining to 2 dimensions from which 1 dimension was finalized to measure autonomy in the work design construct. Work design was composed of initially 5 dimensions, furthermore reducing items count from 24-items to finally 8-items to be analyzed in the model. Initially the construct of Work Design had about five dimension i-e autonomy, task variety, task significance, task identity and feedback with twenty-four items representing the each dimensions when EFA was run, it was seen that the loading of items was not sufficient and they were cross loading as well, due to which the construct of WD was restricted to only one factor which was named as WDAT based on common characteristics of items being loaded. Thus, total of eight items were loaded on WDAT which sufficient loadings (greater than .5). Voice Behavior received full six items and Occupational Self Efficacy reduction of 2 items after applying exploratory factor analysis. Construct of multi-dimensional variables can be retained to one factor if there are issues related to item loading on their respective factors/construct (Andersson and Bateman, 1997). Psychological Well-being received full of its items in Exploratory Factor Analysis. The EFA for Work Engagement was run on the basis of Root Mean Criterion, and the loadings showed that total of 3 factors was generated, F1 and F2 having 5 item loadings whereas F3 having 4 items loading respectively. Therefore, none of the item was removed or reduced after applying exploratory factor analysis. Similarly, the EFA was run for Work Design as well on the basis of Root Mean Criterion, according to which two factors was generated F1 having 8 item loadings and F2 having 4 item loadings respectively.

1st and 2nd Order Confirmatory Factory Analysis

Confirmatory factor analysis (CFA) is a confirmatory theory driven technique. Therefore, the design of the analysis is driven by the theoretical relationships among the observed and unobserved variables in measurement model. Technically, the academic researcher wants to minimize the dissimilarity between the estimate and observed matrices (Hair et al., 2010). The objective of confirmatory factor analysis (CFA) of first order factor measurement model is a way to testing how good measured variables exemplify in a small construct. Prior to this study analysis, Cronbach Alpha, exploratory

factor analysis (EFA) and uni-dimensional (CFA) were performed so far. After the Cronbach-Alpha of the first order model, the five variables (11 dimensions of five variables) were further analyzed at the second order level. The second order analysis was carried out to attain a valid model fit for the data obtained along with theoretical supports behind the developed model (Hafiz and Shaari, 2013).

Work Engagement

Work Engagement is taken as a dependent variable in the model having 17 items in total which represents the whole construct, and this construct was of 3 dimensions to begin with. Three dimensions were Vigor, Dedication and Absorption. When EFA analysis was applied, the item loading was insignificant due to which number of items with insignificant loadings was removed and factor loading was 5, 5 and 4 on F1, F2 and F3 respectively. The overall scale reliability is 0.799. Firstly, first order CFA is applied and for generating a model fit changes were applied by joining residual terms. The total numbers of items which retained after applying CFA 1st and CFA 2nd order were 5 on single dimensions.

Work Design

Work Design is an independent variable in current study and comprises of five dimensions from which Autonomy 9-items, Task Variety of 4-items, Task Significance of 4-items, Task Identity of 4-items and Feedback has 3-items. All the dimensions are examined for first order CFA and then applied a second order CFA to evaluate model fit but due to poor loadings of items on each dimension it was restricted to only one factor when EFA was run on the construct on work design. The composite reliability of this scale is 0.871.

Psychological Well-Being

The construct of Psychological Well-being, which is acting as a mediator in this current study, initially consisted of total of 5 items, as it is uni-dimension the EFA analysis was run on the basis of fix factor one, after successful application of EFA, 1st order CFA was applied on this construct. Due to poor standardized regression weights of one item was not able to achieve the cut-off value of .4 so it was removed during 1st order CFA. The following items are shown in the table which remained after running 1st order CFA. The composite reliability of this construct is 0.700.

Voice Behavior

The construct of Voice Behavior is an independent variable in this research model which is unidimensional that comprises of 6 items. The composite scale reliability is 0.787. One item was discarded from further analysis as 1st order CFA of this unidimensional construct that is voice behavior was conducted in which 1 item was co-varied with other to achieve acceptable Standardized Regression Weights. But in full model measurement one item of Voice Behavior was removed due to low standardized loading.

Occupational Self-Efficacy

The construct of Occupational Self-efficacy, which is an independent variable in current study, initially consisted of 6-items. It was a uni-dimension construct. EFA analysis was run based on fixed number of factors, after successful application of EFA, all 6-items remained. After EFA, 1st order CFA was applied on this construct. Due to poor standardized regression weights of certain items, two items was removed due to poor loading with the dimension. All the variables had sufficient standardized regression (>.5)

weight so no item was removed after 1st order CFA. Items are shown in the table after running 1st order CFA. The composite reliability of this construct is 0.702.

Measurement Model Fit and Modification

This section emphases upon opening measurement model fit along with confirmatory factor analysis (CFA). CFA is one of the flawless techniques for analyzing the validity of factorial structures and it is worthwhile to evaluate the measurement model and examine either the items are loaded on their respective dimensions or on irrespective dimensions (Byrne, 2001). CFA provides a chance of correlation of error terms or residuals in case of common causes (Lei and Wu, 2007). CFA is a basic method of model identification, in a situation of elimination of a model fit a critical step is to put on techniques that lead to adequate or good model fit. AMOS outcomes give various options that help in the confirmation of dimension measurement and to analyze the model fit of study. Modification indices have regression weights variances and covariances and deliver an effective way to achieve a model fit. According to Lie and Wu (2007), modification index is fundamentally the decrease in degree of chi-square due to change of parameter estimate with respect to certain fixed parameter estimate and proposes that any modification index (>3.84) need to attain improve model. Standardized loading is also significant aspects that represents items are actually loading on that latent variables and lowest loading is 0.40 (Lewis and Byrd, 2003). So this suggests that if the loading is not supporting the model it requires deletion of items, add a new path or relate the residual terms to reach the model fit (Anderson and Gerbing, 1988). Therefore, the additional analysis is given in detail according to these assumptions:

KMO and Bartlett's Test of Sphericity

Table 7
KMO and Bartlett's Test (WE)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	**Approx. Chi-Square**	1857.166
	df	136
	Sig.	.000

Table 8
KMO and Bartlett's Test (WD)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3500.239
	df	276
	Sig.	.000

Table 9
KMO and Bartlett's Test (VB)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.819
Bartlett's Test of Sphericity	**Approx. Chi-Square**	678.893
	df	15
	Sig.	.000

Table10
KMO and Bartlett's Test (OS)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.790
Bartlett's Test of Sphericity	**Approx. Chi-Square**	378.061
	df	15
	Sig.	.000

Table 11
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.767
Bartlett's Test of Sphericity	**Approx. Chi-Square**	427.372
	df	10
	Sig.	.000

Overall Measurement Model Fit

This section contributes to study by examining the overall measurement model by combining all CFA's and EFA's previously discussed in above sections to measure and verify the dimensions. Up to this stage, the discussion has been related to the model measurement of dependent and independent variables. During the process of model measurement 6-items have been excluded from the model to achieve a better fit on the basis of results achieved from EFA, 1st order CFA and 2nd order CFA. Due to low standardized loading and the cross loading of an item on various factors few items were removed from the actual model. In this segment, an overall model has been tested to analyze the adequacy of measurement model which progressed through examining of covariance structures of dependent and independent with mediating variables. After elimination of 6-dimensions from 2 constructs and 4-items from 3 constructs, improved statistics resulted in improvement of overall measurement model. Thus, final 26-items of the different constructs provided appropriate fit between data and measurement model. Along with removal of these 6-dimensions from 2 constructs and 4-items from 3 constructs, the modification also put in an effort in order to provide a model fit statistic.

Analysis of Hypotheses

Work Design and Work Engagement

There is a significant relationship between work design and work engagement, where P-value is .000. Hence, hypothesis 1 is supported which states that work design affects work engagement. According to the results obtained work engagement positively influences work engagement.

Psychological Well-Being and Work Engagement

The standardized estimates for this Psychological Well-being and work engagement relationship provides us with value of .072 with a p-value=.005 representing that there exists a significant relationship between both of these constructs. Thus, the results are supporting the Hypothesis 2 stating that Psychological Well-being has an influencing effect on Work Engagement.

Voice Behavior and Work Engagement

The P-value = 0.000 of Voice Behavior and Work Engagement relationship leads to the conclusion that there is significant impact of Voice Behavior on Work Engagement hence it accepts hypotheses 3. However, study results are opposing to existing literature yet there are few studies which supports these results. According to Nadeem et at., (2011) it has been perceived that giving special handling to certain employees makes them motivated, feel obliged and committed towards work because they are of view that they have been preferred over other members due to some reasons for which they try to prove themselves worthy of being chosen for the respective post.

Voice Behavior and Psychological Well-Being

Significant relationship exists between the Voice Behavior and Psychological Well-being, where the P-value is 0.001. Thus, hypothesis 4 is supported as well. This relationship is also justified in the literature review. As according to Kuney (2003) increase in voice behavioral environment increases employee's psychological well-being. This type of voice behavior and psychological well-being represents a strong relationship.

Voice Behavior and Work Engagement with Mediating Effect of Psychological Well-Being

Psychological Well-being significantly mediates the relationship between Voice Behavior and Work Engagement with P = .003.

Occupational Self-Efficacy and Work Engagement

There exists an insignificant relationship between Occupational Self-efficacy and Work Engagement, where P-value is .115. Hence, hypothesis 6 is not supported which states that Occupational Self-Efficacy effects Work Engagement. According to the results obtained Occupational Self-efficacy do not significantly influence the Work Engagement directly in absence of mediator. It also demonstrated that in education sector specifically primary sector teachers of Southern Punjab Pakistan there exists no direct relationship of occupational self-efficacy and work engagement. Study conducted by David et al. (1998), also showed insignificant results and showed no relationship between independent and dependent variable.

Conclusion

From last one decade, the phenomenon of work engagement has become a matter of great concern for number of primary schools due to number of possible emerging issues within an education sector in Southern Punjab of Pakistan. It has become a vigorously considerable work-oriented attitude along with job performance and satisfaction. Save the Children Survey (2011), has described educational issues which exists in Pakistan. A key mediator named psychological well-being was added in the conceptual model which mediated the relationship between voice behavior and work engagement. Work design, psychological well-being and voice behavior are considered as an important predictors of work engagement as it has an immense effect on work engagement of male primary school teachers in education sector of Southern Punjab Pakistan. Primary school teachers are the prominent individuals of schools say who are held responsible for assigned responsibilities and duties i-e to lead work of education from basic level. They play a significant role in increasing or decreasing the commitment of students.

The current study concluded that psychological well-being partially mediated the relationships between proposed independent and dependent variable, and they were significant with P value of .003. All outcomes were consistent with existing literature except occupational self-efficacy, which were; (a) work design directly influences to work engagement (b) psychological well-being influences to work engagement (c) voice behavior directly influences to work engagement (d) voice behavior directly influences to psychological well-being (e) voice behavior influences to work engagement through mediating effect of psychological well-being. Whereas the hypothesis (f) occupational self-efficacy has no influence on work engagement and it was found as insignificant variable in current population of PSTs of Southern Punjab in direct relationship without mediator. The aim of this research was to facilitate the public sector Primary Schools of

Southern Punjab, Pakistan to take into account the issues related to teacher's work engagement.

Recommendations

Although the present research has been accompanied by careful and a planned process but still it offers more areas to be addressed and apply advanced research tools. This study provides following suggestions for future research studies.

Conceptual model can be enhanced by either adding or removing few constructs, and by adding more complication to the proposed model. A comparative study can also be conducted for the same conceptual model of study, either by collecting data from different sample set or collecting data from different population; the same analysis can be conducted on cross-national too on cross-country basis. Any other or different sampling technique like probability sampling can be used for further future research to increase the generalizability of the research findings.

The current research is specifically for the public sector primary schools of Southern Punjab, it can be further extended for other service organizations as well. New construct can be added in the model like compensations, social life balance etc. to measure the effects on work engagement. Longitudinal analysis can also be performed for understanding the perception of teachers towards working environment, as time passes by the perceptions formed by primary teachers changes, either it improves or worsens.

Limitation of the Study

As the study was conducted with a few numbers of constructs in this research, it could have been possible that there may be present number of exogenous variables that might not have been considered or studied and they could possibly have an influential impact on the dependent variable. As the data was collected only from the public sector primary schools of Southern Punjab, Pakistan covering region of Vehari, Multan and Khanewal. This study can be extended by collecting data from privately owned primary schools of other cities or countries, and a cross-national or cross-country analysis can be performed by examining the perception of primary teachers related to work engagement policies. The questionnaire provided by the present study was quite lengthy which could have contributed towards the fatigue of the respondent (Anastasi, 1976) so may reducing the length of questionnaire, significant results could be drawn. Furthermore, by integrating the same variables and newly developed construct (as the number of items have reduced) for any extra sample could generate more precise results.

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