

Employee Well-Being and Performance in Organized Healthcare Sector: Exploratory and Confirmatory Validation with the help of AMOS SEM- 2020

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ABSTRACT

The goal of the paper is to empirically analyze, using a sample of Healthcare sector representatives from the organized healthcare field, the main factors influencing the relationship between personal and professional wellbeing with task, adaptation and contextual performance. It is a primary data-based analysis of discovery in five major City hospitals of Indore. Convenience Method of sampling and correlation of well-being and performance of the health care workers were analyzed. A modern confirmative study by IBM AMOS has been performed to classify well-being factors that influence employee performance in the workplace directly or indirectly. The results showed that the six dimensions of employee well-being physical, social, mental, intellectual, financial and job-related are very closely linked to performance. Well-being of health workers is a crucial factor in the organized health sector in India. As after the situation in Covid 19 health workers works in a tense and traumatic atmosphere. In order to structure and promote the treatment line, health care workers play an essential part. It is therefore necessary to increase their efficiency and to control their encouragement to provide efficient healthcare. This research aims to improve productivity and efficiency by improving the well-being of healthcare professionals and workers. There is no such research in past literature to look at the link between healthcare worker welfare and efficiency as well as to explore the link between employee well-being and healthcare performance in the city of Indore.

Research Type – Original Research Paper

Keywords- Healthcare Employees', Performance, Wellbeing, AMOS SEM

INTRODUCTION

One of the major challenges of conflict and job separation is the efficiency of employees. Employees are structured and must be trained and properly established to achieve the objectives and goals of the company (Brewster 2007). The term "well-being" encompasses the full variety of various attitudes, characters and social relationships. Bernardini, the Italian physicist (1633–1714), one of the first individuals to write about the effect of stress on workers (work conditions) and the probability of preventive action, begins the tradition of occupational health (Gainer, 2008). There has been a perceived shift in health-care financial transparency from government to employer during this time. Wellness was largely motivated by cost reduction at the worksite (Reardon, 1998). This was also connected to the work of the OSH and WHP movement that started at the turn of the 1970s (DeJoy & Southern, 1993) and to a healthier company which is directly reflected in the good health and well-being of enriched workers with higher productivity (Institute of Directors, 2006)). (DeJoy & Southern, 1993). The good health and welfare of improved workers, resulting in higher productivity, is a direct outcome of a healthy company (Institute of Directors 2006). Evaluation of the wellbeing of workers is important to businesses because a poor wellbeing will have negative effects on employees and a substantial economic burden. Health was consistently related to employee performance, and well-being deteriorated resulted in decreased results (Judge, Thoresen, Bono & Patton, 2001). It is in the best economic interest of a organization to encourage the overall health of workers as employees prefer to produce an improved result. Although the study has found a clear link between goodness and results, this relationship is considerably more complicated than it was expected to be, with the proof that happiness is a key moderator in this relationship (Wright & Cropanzano, 2000; Wright, Cropanzano and Bonett CIPD) shows that organization are the main areas of concern The organization needs to focus on a common definition of employee productivity and happiness because they would definitely have more workers if any of these factors were effectively changed. A combination of personal well-being (physical, social, mental, financial, spiritual and emotional) as well as work-related good (Seligman, 2011; Huppert & So, 2013; Zheng et al., 2015), according to different scholars. IIT Kharagpur India's TAC Model (Task, Adaptive & Contextual Model) is also used to assess employees' performance.

RESEARCH OBJECTIVE

- To identify and confirm the most important factors of healthcare employees' wellbeing linking their performance using IBM AMOS and SPSS 23.0

RESEARCH METHODOLOGY

It is a primary data-based confirmative factor analysis to understand the relationship between the well-being and performance of employees. For data collection via built questionnaire, a comfortable sampling method has been implemented. Included in the study was health staff in Indore hospitals. Maharaja Yaswantrao (MY), Cloth Market hospital, Choithram hospitals, Bombay Hospital, and Aurbindo hospital were among the hospitals included in the report. Two hundred and fifty (250) respondents completed the questionnaire. The interviewees are well balanced in both genders (male and female) as

well as private and public practitioners. The questionnaire has been created by the writer, driven by experts using the Wellbeing Assessment System from the University of Western Michigan and IIT Kharagpur TAC Performance Model, on a 7-pointer scale Likert-scale ranging from 1=strongly Agree, 2=Somewhat Agree, 3=Slightly Agree, 4=Neither Agree Nor Disagree, 5=Slightly Disagree, 6=Somewhat Disagree, to 7=Strongly Disagree.

Hypothesis Formulation

On the basis of literature hypothesis formulated as under

H1.1 –There is a positive link between employees' Physical wellbeing and Task Performance.

H1.2 - There is a positive link between employees' Physical wellbeing and Adaptive Performance

H1.3- There is a positive link between employees' Physical wellbeing and Contextual Performance

H2.1 –There is a positive link between employees' Social wellbeing and Task Performance.

H2.2 - There is a positive link between employees' Social wellbeing and Adaptive Performance

H2.3- There is a positive link between employees' Social wellbeing and Contextual Performance

H3.1 –There is a positive link between employees' Emotional wellbeing and Task Performance.

H3.2 - There is a positive link between employees' Emotional wellbeing and Adaptive Performance

H3.3- There is a positive link between employees' Emotional wellbeing and Contextual Performance

H4.1 –There is a positive link between employees' Intellectual wellbeing and Task Performance.

H4.2 - There is a positive link between employees' Intellectual wellbeing and Adaptive Performance

H4.3- There is a positive link between employees' Intellectual wellbeing and Contextual Performance

H5.1 –There is a positive link between employees' Spiritual wellbeing and Task Performance.

H5.2 - There is a positive link between employees' Spiritual wellbeing and Adaptive Performance

H5.3- There is a positive link between employees' Spiritual wellbeing and Contextual Performance

H6.1 –There is a positive link between employees' financial wellbeing and Task Performance.

H6.2 - There is a positive link between employees' financial wellbeing and Adaptive Performance

H6.3- There is a positive link between employees' financial wellbeing and Contextual Performance

H7.1 –There is a positive link between employees' Work related wellbeing and Task Performance.

H7.2 - There is a positive link between employees' Work related wellbeing and Adaptive Performance

H7.3- There is a positive link between employees' Work related wellbeing and Contextual Performance

FINDINGS

1.1-Different frequency distribution of sample on the basis of age, gender and sector wise distribution

Table1 (Demographic Variable N=250)

The study consists of 250 Healthcare workers, both men and women (56-43 percent). Around 73.2% of respondents between the age of twenty and fifty years and 26.8% over 50 years. Many (approximately 82.0%) of respondents are married and only 18.0% are unmarried. The measurement of reliability shows the alpha results of Cronbach as a.961, nice and which showed that the method is correct.

<u>Demographic Variable</u>	<u>N(%)</u>	<u>Demographic Variable</u>	<u>N(%)</u>
Age		Designation	
20-30	53 (21.2)	Administration	20(8.0%)
31-40	64 (25.6)	Doctor	45 (18.0%)
41-50	66 (26.4)	Nurse	76 (30.4%)
51-60	67 (26.8)	Staff	109 (43.6%)
Gender		Marital Status	
Male	142 (56.8%)	Married	205(82.0%)
Female	108 (43.2%)	Unmarried	45 (18.0%)

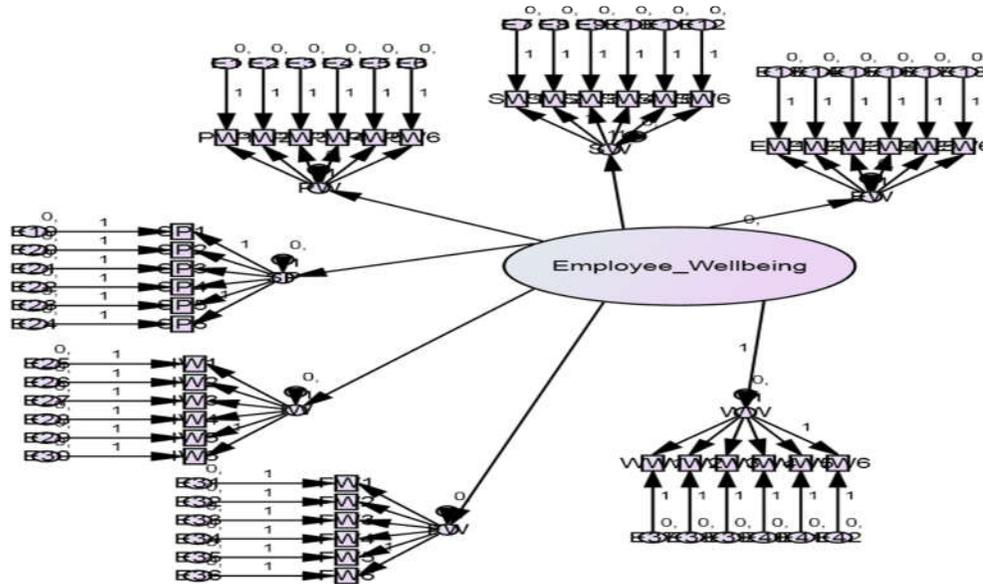
Confirmatory Factor Analysis

From KMO & Bartlett's test of Sphericity it is observed that Bartlett Test is significance at 5% level of Significance [chi-square (465) =6383.3, $p < 0.05$]. Thereby rejecting the null hypothesis of no correlation between variables. Hence, it is concluded that at least a few variables are related to KMO measure of sampling adequacy is more than 0.5 indicating that the amount of the relationship between the variables are adequate for a stable factor solution. The factors are generated by the extraction Method. There are ten factors suggested by extraction method. These are divided into two categories namely employee wellbeing and performance. The first seven factors belong to employee wellbeing and the rest three factors belong to employee performance. Referring the Table1 researcher try to find the correlation between the variables after checking the reliability and Average variance extracted (referring to table2) indicated good fit researcher further proceed further to validate the structural model indicating dependence relationship between latent constructs. Confirmatory Factor analysis is applied to test how well the indicators of a construct represent the construct. SEM consists of two Models: a) Measurement Model and b) Structural Model. The researcher's hypothesized model is consisted of two latent constructs (employee wellbeing and employee performance) All constructs have factor loadings above the threshold point of 0.5 except for Spiritual wellbeing SPW. However, they retained in the model for the significance in the model.

Measurement model of employee wellbeing-

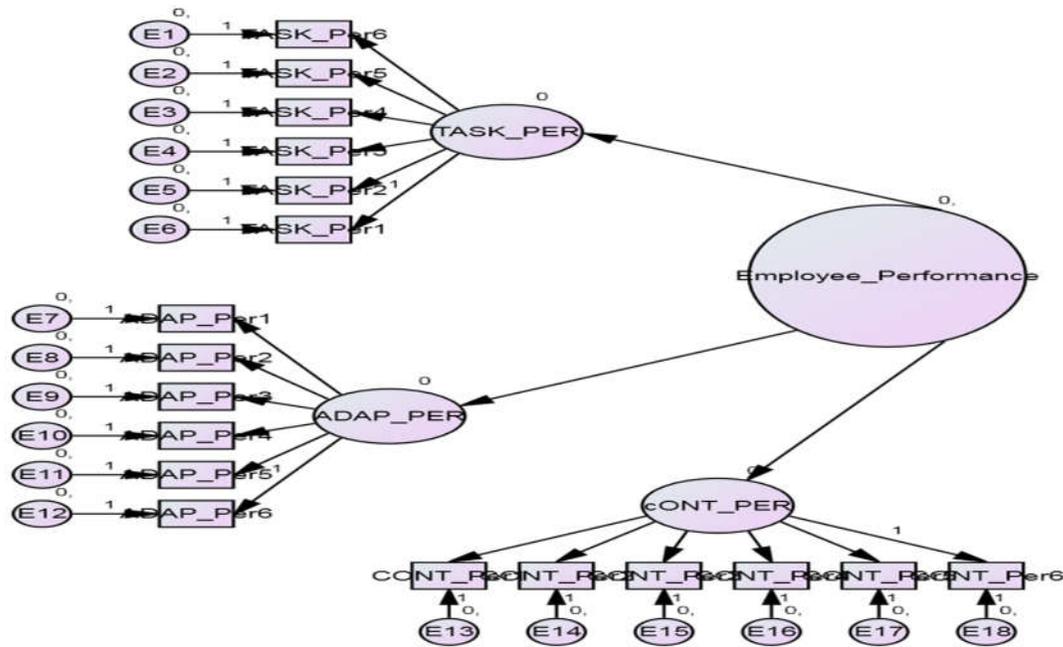
H1- Confirmatory factor analysis (CFA) model-fit indices for the measurement models determine whether a one-factor or two-factor model of well-being best represented the data. Discriminant validity between different constructs (physical, social, emotional, intellectual, financial, spiritual and work related wellbeing) and indicators was tested in two ways. First, the magnitude of the latent correlation between constructs was examined. A very strong correlation would suggest negligible unique variance between factors. Second, convergent validity coefficients were compared. We estimated correlations between all types of well-being and related variables. Although conventional model-fit cutoffs exist for the CFI, NNFI, RMSEA, and SRMR (e.g., Hu & Bentler, 1999; CRI/NNFI $\geq .95$; RMSEA/SRMR $\leq .08$), these standards are shown to vary across model types (Fan & Sivo, 2007; Kenny & Mc Coach, 2003) and may be too stringent (Marsh, Hau, & Wen, 2004). Rather than focus solely on covariance discrepancies, we interpreted our models based on building both accurate and parsimonious theories for

the science of well-being (Mulaik et al., 1989). Which suggest that Null hypotheses rejected and alternate hypothesis accepted.



Measurement model of employee performance-

H2-Confirmatory factor analysis (CFA) model-fit indices for the measurement models of Employee Performance best represented the data. Discriminant validity between different constructs (Task, adaptive and Contextual Performance) and indicators was tested in two ways. First, the magnitude of the latent correlation between constructs was examined. A very strong correlation would suggest negligible unique variance between factors. Second, convergent validity coefficients were compared. We estimated correlations between all types of well-being and related variables. Although conventional model-fit cutoffs exist for the CFI, NNFI, RMSEA, and SRMR (e.g., Hu & Bentler, 1999; CFI/NNFI \geq .85; RMSEA/SRMR \leq .09), these standards are shown to vary across model types (Fan & Sivo, 2007; Kenny & McCoach, 2003) and may be too stringent (Marsh, Hau, & Wen, 2004). Rather than focus solely on covariance discrepancies, we interpreted our models based on building both accurate and parsimonious theories for the science of well-being (Mulaik et al., 1989). Which suggest that Null hypotheses rejected and alternate hypothesis accepted



Structural Equational Model of employee wellbeing on employee performance-

Results- Five fit indices are used to assess the model fit. These are CMIN/DF, PNFI,GFI,CFI, AND RMSEA. Results of the model fit indices are mentioned in the below

Table 1.2:

Fit Indices	Observed Value	Criteria for Acceptable Fit	Result
CMIN/DF(Minimum discrepancy as indexed Chi-square)	4.347	Less than 5 (Schumacker & Lomax 2004)	Acceptable Fit
CFI(Comparative fit Index)	0.954	More than 0.9 for good fit , between 0.9 to 0.8 for borderline fit (Byrne, 1994)	Acceptable Fit
GFI(Goodness of fit index)	0.986	More than 0.9 (Byrne, 1994)	Acceptable Fit
PNFI (Parsimonious normal fit)	0.688	More than 0.5 (Byrne, 1994)	Acceptable Fit
RMSEA(Root mean square error of approximation)	0.086	Less than 0.08 for adequate fit, between 0.08 and less than 0.1 acceptable fit(L. Hu and P.M. Bentler, 1999)	Acceptable Fit

Source: Primary Source

(Model fit summary model for annexure)

CMIN/DF (MINIMUM DISCREPANCY AS INDEXED CHI-SQUARE)

CMIN//DF is the minimum discrepancy divided by its degree of freedom. Schumacker & Lomax (2004), suggest a ratio of approximately five or less beginning to be reasonable. The value of CMIN//DF is reported as 4.347 from the above table. It shows an acceptable fit between sample and the model.

CFI (COMPARATIVE FIT INDEX):

The Comparative fit index is a recommended index of overall fitness. This index compares a proposed model with the null model assuming that there are no relationships between the measures. Comparative fit index value close to one are generally accepted as being indications of well-fitting models. The value of CFI should be greater than 0.90 for an acceptable fit to the data, according to Byrne (1994), Here, the value of CFI is 0.954. This indicates an acceptable fit between sample and the reflective model.

GFI (GOODNESS OF FIT INDEX):

This index measures the fitness of the model compared to another model. GFI tells what proportion of the variance in the sample variance-covariance matrix is accounted for a good model. The value of GFI is reported as 0.986, which is acceptable.

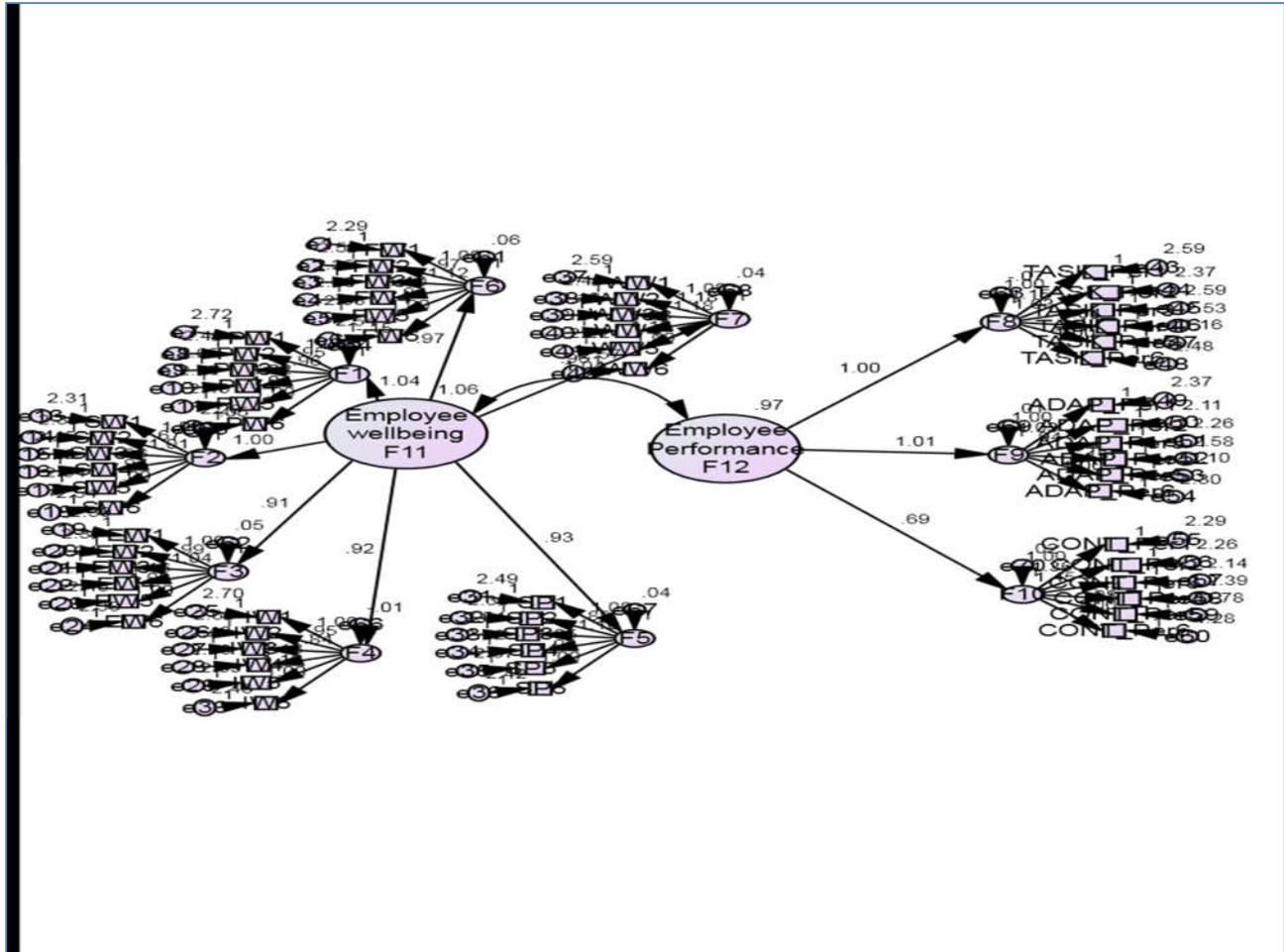
PNFI (PARSIMONIOUS NORMAL FIT INDEX):

This index put penalties to less parsimonious model and favors simpler models as NFI and CFI indices, when multiplied by parsimony index gives parsimony adjusted measures of PNFI and PCFI respectively. Arbuckle (2012) opined that PNFI value should be greater than 0.5 for the acceptable model fit. Here the value of PNFI is 0.688, which indicates an acceptable fit between sample and the reflective model.

RMSEA (ROOT MEAN SQUARE ERROR OF APPROXIMATION):

The Root Mean Square Error of Approximation provides discrepancy per degree of freedom for a model. It is used to assess the residuals. This index adjust the parsimony in the model is relatively insensitive to sample size. L.Hu and P.M. Bentler (1999) opined that the value of RMSEA should be equal to or less than 0.08 for an adequate model fit. The value of RMSEA is reported as 0.086, which indicates an acceptable fit between sample and the reflective model.

It can be seen from the above table 1.2 that all of the model fit indices have acceptance level suggested by previous research. It demonstrates that the model exhibited a good fit between sample and the reflective model. Henceforth, the reflective model of Social Wellbeing is validated.



DISCUSSION AND INTERPRETATION

56 percent of the respondents were male and 44 percent were female in the search for gender distribution. Other figures on demographics indicate that 82 % of respondents are married and that 72,4% of the respondents are within the 20-50 age group. This demographic sample reflects a community of respondents with greater dedication to work. Cronbach's alpha results were seen in reliability calculation as .961 and the method is good and accurate. The author discussed clustered hypotheses H1 H2, H3, H4, H5 and H6, which the data analysis supports. The research identified various constructions for the exploration of ties between well-being and performance of healthcare workers in Indore, India. Once the H1 hypothesis was investigated, if healthcare workers are healthy physically it would improve task, adaptive and contextual performance. The hypothesis H2 and H3 showed a positive link to task adaptive and contextual success between social and emotional wellbeing. Which showed social and emotional development for healthcare workers in the health care industry allows them to better understand the patient. Hypothesis H4 indicates a positive relationship between spiritual health and performance. The health care staff has a spiritual quotient that enables them to recognize the religious values of their patients and therefore their identification of patient psychology is that strongly leading to improved results. Hypothesis H6 shows that the correlation between task adaptive and contextual performance has been positive when organization pay medical staff promptly and adequately. Also Hypothesis H7 showed that when the climate of an workplace's workplace is

optimistic, compassionate and health care employees believe like they deserve to be better adjusted and fulfilled and it improvised their performance.

LIMITATIONS

- Inherent limitations of secondary data based study.
- The literature is so exhaustive that it is difficult to conceptualize the linkage.

IMPLICATION OF THE STUDY

Indian health industry should use the well-being of its workers to increase their working efficiency and seek to eradicate these limitations from its understanding in order to achieve a breakthrough. The findings of this study have established seven dimensions of the health of employees, namely physical, social, mental, intellectual, financial and work-related well-being and spiritual well-being, while all three dimensions of performance have a close relationship with employee well-being. Hospitals must take certain steps to strengthen the established well-being factors. Organization may affect this wellbeing by providing different types of facilities and improving the performance of employees that relate productivity / organizational quality directly or indirectly.

CONCLUSION

Over the last three decades, the well-being of workers has been thoroughly established and examined. This paper highlighted the key wellness factors which improve the performance of healthcare professionals directly and positively. There have been various forms and factors influencing healthcare. This research also indicates that a healthy workplace has direct consequences for the good health and well-being of the rich workforce who achieve higher productivity (Institute of Directors, 2006). The report also confirms previous studies. It also has been noted that evaluating employee well-being is critical for organizations, because low welfare can cause adverse reactions to workers, resulting in substantial economic burdens, during the research done by (Judge, Thoresen, Bono & Patton, 2001). Health has been significantly associated with the success levels of workers, with reduced well-being outcomes

APPENDIX

Table 1: Correlational Table

	Physical	Social	Emotional	Spiritual	Intellectual	Financial	Work Related Wellbeing	Task Performance	Adaptive Performance	Contextual Performance
Physical	1									
Social	.809**	1								
Emotional	.798**	.817**	1							
Spiritual	.411**	.383**	.386**	1						
Intellectual	.797**	.796**	.813**	.484**	1					
Financial	.799**	.818**	.832**	.489**	.787**	1				
Work Related	.815**	.829**	.824**	.570**	.813**	.811**	1			

Wellbeing										
Task Performance	.928**	.783**	.761**	.470**	.740**	.756**	.758**	1		
Adaptive Performance	.862**	.863**	.780**	.320**	.792**	.790**	.813**	.746**	1	
Contextual Performance	.928**	.783**	.796**	.813**	.740**	.756**	.758**	.678**	.567**	1

Table2: Constructs Reliability and Average Variance Extracted

Constructs	No of Attributes	Cronbach's Alpha	Average Variance Extracted (Construct Validity)
Employee Wellbeing	7	0.867	0.67
Employee Performance	3	0.789	1.6

Source: Primary Data

Table 3:Factor Loadings of Measurement Model

Measured Indicators		Construct	Factor Loading	Result
PW1	←	F1	0.857***	Significant
PW2	←	F1	0.383***	Significant
PW3	←	F1	0.766***	Significant
PW4	←	F1	0.858***	Significant
PW5	←	F1	0.829***	Significant
PW6	←	F1	0.783***	Significant
SW1	←	F2	0.863***	Significant
SW2	←	F2	0.683***	Significant
SW3	←	F2	0.757***	Significant
SW4	←	F2	0.483***	Significant
SW5	←	F2	0.566***	Significant
SW6	←	F2	0.658***	Significant
EW1	←	F3	0.757***	Significant
EW2	←	F3	0.683***	Significant
EW3	←	F3	0.566***	Significant
EW4	←	F3	0.848***	Significant

EW5		F3	0.839 ^{***}	Significant
EW6		F3	0.807 ^{***}	Significant
IW1		F4	0.313 ^{***}	Significant
IW2		F4	0.766 ^{***}	Significant
IW3		F4	0.858 ^{***}	Significant
IW4		F4	0.829 ^{***}	Significant
IW5		F4	0.857 ^{***}	Significant
IW6		F4	0.383 ^{***}	Significant
SPW1		F5	0.466 ^{***}	Significant
SPW2		F5	0.457 ^{***}	Significant
SPW3		F5	0.383 ^{***}	Significant
SPW4		F5	0.466 ^{***}	Significant
SPW5		F5	0.357 ^{***}	Significant
SPW6		F5	0.303 ^{***}	Significant
FW1		F6	0.766 ^{***}	Significant
FW2		F6	0.858 ^{***}	Significant
FW3		F6	0.857 ^{***}	Significant
FW4		F6	0.433 ^{***}	Significant
FW5		F6	0.566 ^{***}	Significant
FW6		F6	0.848 ^{***}	Significant
WW1		F7	0.839 ^{***}	Significant
WW2		F7	0.723 ^{***}	Significant
WW3		F7	0.817 ^{***}	Significant
WW4		F7	0.353 ^{***}	Significant
WW5		F7	0.746 ^{***}	Significant
WW6		F7	0.888 ^{***}	Significant
TASK_Per1		F8	0.819 ^{***}	Significant
TASK_Per2		F8	0.827 ^{***}	Significant
TASK_Per3		F8	0.313 ^{***}	Significant
TASK_Per4		F8	0.706 ^{***}	Significant

TASK_Per5	←	F8	0.348 ^{***}	Significant
TASK_Per6	←	F8	0.659 ^{***}	Significant
ADAP_Per1	←	F9	0.583 ^{***}	Significant
ADAP_Per2	←	F9	0.898 ^{***}	Significant
ADAP_Per3	←	F9	0.453 ^{***}	Significant
ADAP_Per4	←	F9	0.467 ^{***}	Significant
ADAP_Per5	←	F9	0.858 ^{***}	Significant
ADAP_Per6	←	F9	0.890 ^{***}	Significant
CONTE_Per1	←	F10	0.383 ^{***}	Significant
CONTE_Per2	←	F10	0.766 ^{***}	Significant
CONTE_Per3	←	F10	0.858 ^{***}	Significant
CONTE_Per4	←	F10	0.829 ^{***}	Significant
CONTE_Per5	←	F10	0.783 ^{***}	Significant
CONTE_Per6	←	F10	0.863 ^{***}	Significant

Source: Primary Data

Where 'N.S' Not Significant, '***' Significant at 0.1 % level of Significance

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