IMPACT ASSESSMENT OF EMPLOYEE CAREER MANAGEMENT ON EMPLOYEE WORK ENGAGEMENT BY ADOPTION OF OCM AND UWES MEASUREMENT SCALES – A SECTORAL STUDY

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ABSTRACT

The sectoral study aims to undertake an assessment of the relationship between ''employee career management'' and ''employee work engagement'' including the relationships between the sub-dimensions of these two constructs by adopting standard instruments i.e. Organization Career Management (OCM) scale and Utrecht Work Engagement Scale (UWES). The study was undertaken in the IT companies of Visakhapatnam district using a non-probability and convenience sampling method. Data collection was undertaken using a valid and reliable survey questionnaire and were subjected to statistical analysis (Descriptive Analysis, Correlation Analysis, and Multiple Regression Analysis) using software tools like SPSS and Excel. The study was limited to employees of IT Companies working in middle and junior management level with different demographic profiles. Results of the study demonstrated that, by attainment of all the sub-dimensional aspirations of the construct, 'employee career management' (i.e. development programme, appraisal, and training) has significant effects on all sub-dimensions of the construct 'employee work engagement' (i.e. Vigour, Dedication and Absorption).

KEY WORDS:*OCM, UWES, CDP-Career Development Programme, CAA-Career Appraisal & Advice. CTR-Career Training.*

INTRODUCTION

Motivated and engaged employees contribute more by performing productively towards the attainment of organisational goals thereby scripting success stories is an undeniable fact. In the 21st-century competitive business scenario, companies are aiming to almost double their size of business with marginal induction of skilled manpower. Though the presence of IT companies in the Visakhapatnam district is substantially less in comparison to southern cities (i.e. Hyderabad and Bengaluru), these handfuls of IT companies, are believed to have maintained focus on employee development through training and career progression initiatives so as to manage complex and diversified market demands.

PROBLEM STATEMENT

The primary challenge confronting these companies is to balance its resources and building human capital and a requisite strategy so as to be competitive in the full spectrum of operations of the IT industry. Assessment of employees' ''*Career*

Management'' and *''Work Engagement''* are key concerns for ensuring organisational productivity by the growing IT industries in India. IT companies of Visakhapatnam are anxious to witness growth by visible enhancement in their performances while giving adequate emphasis to training and career development. However, as the scarcity of sectoral and organisational studies undertaken in Visakhapatnam district, has restricted the knowledge base of the IT industries in this region for implementing HRD policy decisions, which has prompted to undertake this study.

BRIEF LITERATURE REVIEW

A literature review of the present study was confined to the specific aspects that included one of the drivers of employee engagement i.e. Training and Career Development as well as the usages of Organization Career Management (OCM) including the Utrecht Work Engagement Scale (UWES). The key aspects and variables have been discussed in the succeeding paragraphs.

Employee Engagement

According to Harter *et al.,* 2002, employee engagement is *"the individual's involvement and satisfaction with, as well as enthusiasm for work"* and employee engagement, is expected to occur when *"individuals are emotionally connected to others and cognitively vigilant".* Employee engagement leads to enhancement of performance and productivity, where the drivers of employee engagement (i.e. organisation, culture, organisation policies, work environment, leadership, communication, training & career development, work-life balance, team & co-worker relationship and compensation) play crucial roles. Employee engagement is assessed with the Gallup Workplace Audit (GWA), Harter et al., (2002), and the GWA reflects an employee's satisfaction with the workplace, but also processes and conditions that are antecedents to satisfaction and engagement (Harter and Schmidt, 2008).

Career Management

Career is a life-long, uninterrupted experience of work, which can be divided into neat stages of development, starting with initial ideas about working and ending with retirement (Super 1957; Schein 1971). Career development is the process of managing life, learning, and work over the life span (Patton & McMahon 2001). Development seems to reduce the turnover rate of employees (Deckop et al. 2006) Organizations need to invest in continuous employee development in order to maintain employees as well as the organization success (Khawaja & Nadeem 2013). Career management is a great way to engage, recognize, motivate, and retain employees.

Training and Career Development

Training is as a systematic approach of learning and development that, *''improve individual, group and organization''* (Goldstein and Ford 2002) as well as *''technical skills of employees''* (Manju

and Suresh 2011) collectively leading to enhanced productivity. It also focuses on employee behaviour for improving current and future state of job performances. Training and career development are the basic elements which make an employee engaged in their work and also keep them productive throughout the organization. If employee's desire to make advancement in their own career is not fulfilled, then they drift away.

OBJECTIVES AND HYPOTHESES

With a broader aim to study the relationship between, *''Employee Career Management''* and *''Employee Work Engagement''*, the objectives have been defined (i.e. to identify whether training will influence different levels of employee engagement, to identify whether the career development opportunities provided by the organisation influences the levels of employee engagement, to explore, whether career development raises the levels of employee engagement more so than the training does. Further, the following hypotheses were developed (Figure 1) and investigated by employing Multiple Regression analysis: -

(+)H1: There is a statistically significant relationship between OCM-Career Development Programme (CDP) and the overall dimensions of employee engagement; i.e. +H1(a)/CDP→VIG, +H1(b)/CDP→DEI, +H1(c)/CDP→ABS.

(+)H2: There is a statistically significant relationship between OCM-Career Appraisal and Advice (CAA) and the overall dimensions of employee engagement; i.e. +H2(a)/CAA→VIG, +H2(b)/CAA→DEI, +H2(c)/CAA→ABS.

(+)H3: There is a statistically significant relationship between OCM-Career Training (CTR) and the overall dimensions of employee engagement; i.e. +H3(a)/CTR→VIG, +H3(b)/CTR→DEI, +H3(c)/CTR→ABS.

RESEARCH METHODOLOGY

To choose a representative sample from a population (i.e. IT companies located in Visakhapatnam), non-probability convenience sampling technique was adopted. OCM scale developed by Kong, Cheung and Song (2011) and UWES-17 scale developed by Schaufeli and Bakker (2003) were adopted and used as a survey instrument. Subsequently, the survey questionnaire was posed to 150 IT professionals working in different IT companies and completed responses from the online survey was received for 127 respondents working in different profiles (i.e. 20-Team Leaders/Jr. Management, 23-Manager/Middle Management and 84-Others/developers and engineers. These fully completed responses (84.66%) were accepted as representative sample. The research design has been descriptive. The primary source of information was obtained from the junior and middle-level Managers and for secondary

sources information from various research articles, journals, magazines, websites were used. The data was gathered using quantitative methodology in the form of questionnaires that was divided into three sections (I-Demographic Questionnaire, II-Organizational Career Management (OCM) Questionnaire. III-Utrecht Work Engagement Scale (UWES) Questionnaire.

OCM-Measurement Scale

The OCM scale was developed by Kong, Cheung and Song (2011) and comprises of three factors, i.e. Career Development Program-CDP (05-items), Career Appraisal & Advice-CAA (05-items) and Career Training-CTR (03-items). Total 13-item OCM scale was used in this study to measure the construct. Each item was rated on a 7-point Likert scale (0= strongly disagree to 6= strongly agree). The scale is original to Kong et al. (2011) and was verified to be internally consistent and to have content, convergent and discriminant validity. The scale was reliable with 'α'=0.84 (CDP), 'α'=0.79 (CAA), and 'α'=0.77 (CTR).

UWES-Measurement Scale

The UWES-17 scale was developed by Schaufeli and Bakker (2003) and distinguishes three specific directions, namely; *Vigor*-VIG (06-items), *Dedication*-DEI (05-items) and *Absorption*-ABS (06-items). The 17 items scale of UWES was used to measure the construct and each item was scored on a 7-Point Likert scale (0=Never to 6=Always). According to Schaufeli et al. (2003), *Vigor*-VIG refers to the high level of energy and mental resilience while working, the willingness to invest effort in One's work, and persistence in the face of difficulties. *Dedication*-DEI refers to being involved in one's work, finding meaning in one's work, being challenged and experiencing sense of enthusiasm, inspiration and pride. *Absorption*-ABS refers to being fully concentrated and engrossed in one's work, whereby the time passes quickly and one has difficulties detaching oneself from work. With acceptable internal consistencies in respect of *Vigor*-VIG, *Dedication*-DEI and *Absorption*-ABS, scales, i.e. 'α' between 0.80 and 0.90 (Schaufeli and Bakker, 2003), the UWES-17 scale is considered reliable. The structural validity of UWES score was evaluated by Schaufeli (2002); Salanova *et. al.,* (2002) by employing Confirmatory Factor Analysis (CFA) and found satisfactory.

DATA ANALYSIS

Descriptive statistics for demographic characteristics of participants were computed in the form of frequencies and percentages. Majority of the respondents were male and the composition of gender is n=98 Male (77.2%) and n=29 Female (22.8%). The largest proportion of respondents comprised of respondents in the age group 21-30 years, that is 64.5% (n=82), followed by those in the age group 31-39 years who constituted a further 33% of the sample (n=42). The remaining respondents were in the age group of 41-43 yrs. constituted only

2.4% (n=3). With respect to the educational level of respondents, it may be seen that 55.1% of the respondents are Post Graduates (n=70). Moreover, 43.5% (n=55) were Undergraduates and 1.6% of the respondents (n=2) were Intermediates. Also, respondents having < 5yrs of service are 51.2% (n=65), service between 5-10 yrs. are 38.6% (n=49) and remaining 10.2% of respondents (n=13) are having service > 10 yrs. It also emerges that 98.4% respondents (n=125) and 1.6% (n=2) are on full time and part-time employment respectively. Further job tenure is Long term for 95.3% (n=121) respondents and short term for 4.7% (n=6) respondents. In their present organization, 96.1% (n=122) respondents were permanent employees and 3.9% (n=5) were temporary employees. Demographics further indicates that 66.1% of the sample (n=84) were others/developers and networking engineers, 18.1% of the respondents (n=23) being Managers/Middle Management and remaining 15.7% (n=20) of sample were Team Leaders / Jr. Management. Mean and Standard Deviation of Demographic Data is tabulated in Table 1.(See Tables & Figure)

Also, as part of descriptive analysis, concluded on the basis of variables included in the questionnaire, the measures of central tendency and dispersion for the dimensions of employee engagement have been tabulated. Table 2((See Tables & Figure) provides descriptive statistics for the dimensions of employee engagement (UWES). Lowest mean value was for Vigor (Mean=4.26, S.D = 1.24), followed by Absorption (Mean = 4.30, S.D = 1.262), while the highest mean value was for Dedication (Mean = 4.94, S.D = 1.163). Table 3 provides descriptive statistics for the dimensions of organization career management (OCM). The lowest mean value was for Career Training (Mean=3.44, S.D = 1.887), followed by Career Appraisal Advice (Mean = 3.84, S.D = 1.671), while the highest mean value was for Career Development Programme (Mean = 3.96, S.D = 1.514).

Cronbach's Alpha

Cronbach's 'α' in the study was computed to be > .7 in respect of for the OCM and UWES questionnaire including sub-dimensions of the constructs (Table 4) (See Tables & Figure), which confirms the reliability status of the survey instrument.

Pearson Correlation Coefficient

The Pearson Product-Moment Correlation Coefficient (Pearson's 'r') has been used to determine how strong the relationship between dimensions of the OCM & UWES (Table 6). Pearson's 'r' is a measure of the linear dependence between dimensions of OCM & UWES, giving the value between +1 and -1 (+1=Positive linear correlation, 0 = No linear correlation, -1=Negative linear correlation). Table 5 indicates that there is a statistically significant and direct correlation between all three dimensions of work engagement (i.e. Vigor, Dedication and Absorption) with all three

dimensions of OCM (i.e. Career Development Program, Career Appraisal & Advice and Career Training).

Multiple Regression and Model Fitness

Multiple Regression Analysis employed in the study to predict the variables of employee engagement (dependent-UWES) based on the value of two other variables i.e. training and career development (independent-OCM). The independent variables are also called the predictor, explanatory or regressor variables. SPSS (Ver. 20) was used to compute the results. Assuming that no assumptions have been violated, the results of Multiple Regression Analysis has been interpreted and tabulated in Table 6(See Tables & Figure). ''Model Summary'', provides the R, R^2, adjusted R^2, and the standard error of the estimate, which can be used to determine how well a regression model fits the data. ''ANOVA'' table in which the F-ratio tests whether the overall regression model is a good fit for the data. ''coefficient table'', indicates how much the dependent variable varies with an independent variable when all other independent variables are held constant. Also, relevant scatterplots and histogram (with a superimposed normal curve) have been depicted for better appreciation. In the 'Model Summary Tables', the value of R indicates a good level of prediction. It can be seen from the R^2 value that our independent variables explain good % of the variability of our dependent variable that has been further interpreted by $adj.$ R^2 values in respective tables. 'ANOVA Tables' shows that the independent variables statistically and significantly predict the dependent variable. Therefore, the regression model is a good fit for the data. Statistical significance of each of the independent variables is obtained from the 'Coefficient Tables' that tests whether the unstandardized (or standardized) coefficients are equal to 0 (zero) in the population. As the value of $p <$ .05, we can conclude that the coefficients are statistically significantly different to 0 (zero). The t-value and corresponding p-value (Sig.) suggests that all independent variable coefficients are statistically significantly different from 0 (zero).

RESULTS OF HYPOTHESES TESTING

Post testing of the Hypotheses (i.e. H1, H2 and H3) the result is summarised in Table 7, which establishes that H1, H2 and H3 are supported. Results derived from the data analysis suggests that there is a statistically significant and direct correlation exists between variables of OCM, i.e. Career Development Programme (CDP) which includes ''succession planning policy exists, job rotations timely are done, job posting has been adequate'' and the UWES-overall dimensions of employee engagement; i.e. Vigor-''At my job I feel strong & Vigorous'' (+H1(a)/CDP→VIG), Dedication-''My job inspires me'' (+H1(b)/CDP→DEI), Absorption-''I am immersed in my job'' (+H1(c)/CDP→ABS). Career

Development Programme (CDP) positively predicts all dimensions of work engagement. Therefore, *Hypothesis +H1 is supported*.

Results suggest that there is a statistically significant relationship and direct correlation exist between variables of OCM, i.e. Career Appraisal and Advice (CAA) and the UWES-overall dimensions of employee engagement; i.e. Vigor-''At my job I feel strong & Vigorous'' (+H2(a)/CAA→VIG), Dedication-''My job inspires me'' (+H2(b)/CAA→DEI), Absorption-''I am immersed in my job'' (+H2(c)/CAA→ABS). Career Appraisal and Advice (CAA) positively predicts all engagement dimensions (i.e. vigour, dedication and absorption). Therefore, Hypothesis *+H2 is supported*.

Further the results also suggest that there is a statistically significant relationship and direct correlation exists between variables of OCM, i.e. Career Training (CTR) – ''In-house training programmes are given priority, career workshops are regularly conducted and external study & visits regularly done'' and the UWES-overall dimensions of employee engagement, i.e. Vigor-''At my job I feel strong & Vigorous'' (+H3(a)/CTR→VIG), Dedication-''My job inspires me'' (+H3(b)/CTR→DEI), Absorption-''I am immersed in my job'' (+H3(c)/CTR→ABS). Career Training (CTR) positively predicts all engagement dimensions (i.e. Vigour, Dedication and Absorption). Therefore, Hypothesis *+H3 is supported*.

SUGGESTIONS

The results suggest that Career Development Programme (CDP) is more likely to increase the levels of employee engagement as against Career Training (CTR). The present study contributes practically by concluding that training and career development definitely provide the strong base for the dynamic organization and to manage the creative culture that can promote their abilities and competence as well as strategic priorities to gain competitive advantages. Findings of this study theoretically suggested that the career development prospects in the IT companies across Visakhapatnam district significantly contributed to the variables of employee engagement more than training initiatives alone. The study cannot be generalized within the state of Andhra Pradesh, as the Visakhapatnam district has got its own advantages and limitations. However, the study can be generalized to other similarly placed districts across the country. Due to time and cost constraints, additional sample could not be collected and the small sample size of 127 has been accepted for analysis.

AREA FOR FUTURE RESEARCH

Although research has been done in most of the drivers of employee engagement, this study supports interesting directions for future research on employee engagement is significantly being driven by training and career development variables. In practice, organizations may invest and encourage

training & career development for taking employee engagement to further higher levels. As the study was limited to the IT Companies of Visakhapatnam district; further studies may be conducted around this phenomenon that focuses on other sectors and other geographical locations in India.

TABLES & FIGURES

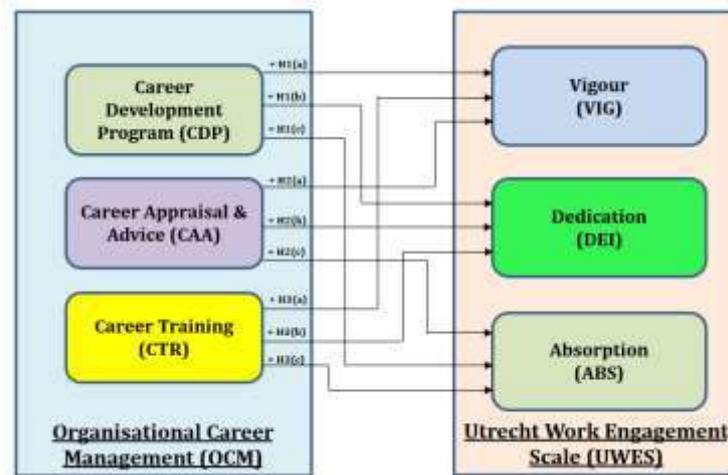### Figure 1: Conceptual and Hypothesised Model of the Study

Table 1: Mean and Standard Deviation of Demographic Data

	Gender	Age of Respondent	Marital Status	Highest degree	Employment Status	Job Tenure	Org. Tenure	Job Title	Years of Service
Mean	1.23	29.55	1.55	2.54	1.02	1.95	1.96	2.50	1.59
N	127	127	127	127	127	127	127	127	127
Std. Dev.	.421	4.737	.499	.531	.125	.213	.195	.755	.671

Notes. Included N=127, 100%: Excluded N=0, Total = 127, 100%

Table 2: Means, SD, Min. & Max. Scores for the dimensions of UWES

UWES Variables	'N' (Sample Population)	Min. Score	Max. Score	Mean (μ)	Std. Dev (σ)	Variable Values used in SPSS
Vigor	127	0	6	4.26	1.248	0 = "Never - Never" 1 = "Almost Never - A few times a year or less"
Dedication	127	0	6	4.94	1.163	2 = "Rarely - Once a month or less" 3 = "Sometimes - A few times a month" 4 = "Often - Once a week"
Absorption	127	0	6	4.30	1.262	5 = "Very Often - A few times a week" 6 = "Always - Everyday"

Table 3: Means, SD, Min. & Max. Scores for the Dimensions of OCM

OCM Variables	'N' (Sample Population)	Min. Score	Max. Score	Mean (μ)	Std. Dev (σ)	Variable Values used in SPSS
Career Development Program (CDP)	127	0	6	3.96	1.514	0 = "Strongly Disagree" 1 = "Completely Disagree"
Career Appraisal & Advice (CAA)	127	0	6	3.84	1.671	2 = "Somewhat Disagree" 3 = "Agree" 4 = "Somewhat Agree"
Career Training (CTR)	127	0	6	3.44	1.887	5 = "Completely Agree" 6 = "Strongly Agree" 9 = "NA"

Table 4: Reliability Statistics for Dimensions of OCM & UWES Questionnaires

Questionnaire	Cronbach's Alpha	N of Items
Organizational Career Management (**OCM**)	.933	13
Utrecht Work Engagement Scale (**UWES**)	.855	17

Table 5: Pearson's Correlation Matrix between OCM and UWES Variables

Correlation is significant at the * 0.01 level (2-tailed) ** 0.05 level (2-tailed)		**OCM**		
		CDP	CAA	CTR
UWES	Vigor	.296** .209*	.267** .190*	.250** .225*
	Dedication	.262** .207*	.289** .209*	.239** .192*
	Absorption	.273** .201*	.232** .201*	.213*

Table 6: Multiple Regression Analysis

Model Summary[b]				ANOVA[b]		Coefficients[b]				
R	**R²**	**Adj. R²**	**Std. Errors of the Estimate**	**F**	**Sig. F**	**B**	**Std. Error**	**Standardised Coefficients 'β'**	**t**	**Sig.**
OCM-CDP & UWES-Vigour Predictors (Constant); *"Succession planning policy exits"* Dependent variable; *"At my job, I feel strong and vigorous"*										
.268[a]	.072	.064	1.166	9.666	.002[a]	.218	.070	.268	3.109	.002
OCM-CDP & UWES-Dedication Predictors (Constant); *"Job rotations timely done"* Dependent variable; *"My job inspires me"*										
.244[a]	.060	.052	1.178	7.909	.006[a]	.190	.068	.244	2.812	.006
OCM-CDP & UWES-Absorption Predictors (Constant); *"Succession planning policy exists"* Predictors (Constant); *"Succession planning policy exists, Job posting has been adequate* Dependent variable; *"I am immersed in my work"* Model 1 - *"Succession planning policy exists"* Model 2 – *"Job posting have been adequate"*										
Model-1										

.298[a]	.089	.082	1.022	12.226	.001[a]	.150	.069	.207	2.172	.032
Model-2										
.344[b]	.118	.104	1.009	8.323	.000[b]	.148	.073	.104	2.029	.045

Table 7: Results of the Hypotheses Test

Hypothesised Relationship		Hypotheses	Inferences	
CDP→UWES	CDP→VIG	**+H1**	+H1(a)	Supported
	CDP→DEI		+H1(b)	Supported
	CDP→ABS		+H1(c)	Supported
CAA→UWES	CAA→VIG	+H2	+H2(a)	Supported
	CAA→DEI		+H2(b)	Supported
	CAA→ABS		+H2(c)	Supported
CTR→UWES	CTR→VIG	+H3	+H3(a)	Supported
	CTR→DEI		+H3(b)	Supported
	CTR→ABS		+H3(c)	Supported

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