WORK ENGAGEMENT INFLUENCES AFFECTIVE COMMITMENT: A STUDY ON TEACHING FACULTY OF TECHNICAL INSTITUTES IN ARUNACHAL PRADESH (INDIA)

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Abstract

India has the most efficient and effective technical workforce across the globe. The scope for improvement in this arena is vast and needs a dynamic transition, at a faster phase. Arunachal Pradesh is one of the North Eastern states of India, which shares international boundaries with Bhutan, China, and Myanmar. Since 1996, the Directorate of Higher and Technical Education, Government of Arunachal Pradesh has been committed to promote friendly academic ambiance and inculcate good practices in the Higher Educational institutions of the State. To develop higher/technical education offers an excellent grip on the knowledge economy, this key is to develop higher/technical education and accelerate the pace of building a knowledge-based society. Teacher's work performance is a significant issue facing contemporary education theorists and practitioners. Organizational commitment is one of the widely researched studies in the field of organizational behavior. Organizational/Employee commitment linked with several desirable positive and behavioral outcomes, that aligned with the organizational goals and adequate performance. Also, Human resource professionals and management had significantly identified the concept of employee/work engagement as the positive, affective psychological work-related state of mind that leads employees to invest themselves physically, emotionally and cognitively actively. Studies reveal that Work engagement and Organizational/Affective commitment plays a vital role in stimulation of positive work behaviors and outcomes. Higher enthusiasm will be exhibited by the engaged and committed employees, when the work environment is much relaxed, even with limited resources. Thus, the present study is carried out to find out the impact of work engagement on affective commitment among the faculty of technical institutes of Arunachal Pradesh (India). Findings provide useful suggestions and insights for the management in technical education of the state and by the institutes by adopting effective and efficient HRM practices that could lead to organizational competitiveness and increased performance.

Keywords: - Work engagement, Affective commitment, Technical education, positive outcome

1.1 Introduction

India is condidered as one of the most abundant technical workforce in the globe. However, there lies a significant and significant scope for improvement and development in harnessing this technically efficient workforce. The Higher and Technical Education, Government of Arunachal Pradesh, has been committed to promote friendly academic ambiance and to inculcate good practices in the Higher Educational institutions of the State. Developing higher/technical education offers an excellent grip on the knowledge economy, this key is to improve the progress of development of higher/technical education and accelerate the pace of building a knowledge-based society. Therefore, it is crucial to consider teacher's work performance facing contemporary education theorists and practitioners. The factors that affect work performance of teaching faculty is the necessary road to promote the reform of higher technical education further and improve human resource development of the faculty/institute. The main factors affecting faculty work performances should be identified, and a suitable mechanism needs to be established.

Chughtai and Zafar (2006), found out that fostering organizational commitment among employees is very vital because employees who are highly committed towards their organizational are likely to stay longer, have better performance, and they tend to be highly involved at the workplace. Also, (Dey, Kumar and Kumar, 2014), brought out that committed employees show their loyalty and become productive individuals in their organization. Thus, such employees display a positive attitude towards organizational goals and values and are likely to develop positive work-related behaviors. In specific, organizational commitment regarded as a vital component of the management of organizations. Studies also reveal that organizational commitment has a direct effect on employees' performance (Jaramillo, Mulki, and Marshall, 2005; Meyer, Stanley, Herscovitch and Topolnytsky, 2002; Siders, George and Dharwadkar, 2001).

Kahn (1990), provided a foundation for the theoretical development of employee engagement at work and is the degree of physical, cognitive and emotional involvement in a work role, how much a worker puts into a job and work interactions and personal connections with work and co-workers. Employees who exhibit engagement are physically involved in their tasks, are cognitively alert, attentive and are emotionally connected to their work and to others in the workplace (Ferrer, 2005). Work engagement benefits the organisation by stimulating task and contextual performance (Halbesleben, Harvwey and Bolino, 2009). Work engagement may result in job performance and satisfaction, organizational commitment and turn over intention (Bothma and Roodt, 2012; Field and Buitendach, 2011; Mendes and Stender, 2011; Newman, Joseph and Hulin, 2010; Salanova, Agut and Peiro, 2005; Schuafeli and Bakker, 2004).

2.1 Objectives

The present study of 'Impact of Work Engagement on Affective commitment' is aimed to determine the level of strength of work engagement on Affective commitment and its impact. Also, to find out the and display the measured levels of the said variables and its significance graphically, as per the primary data collected using survey questionnaire along with specific demographic variables.

3.1 Review of Literature

3.1.1 Affective Commitment

Organizational Commitment is identified as an important variable in organizational literature towards the understanding of work-related behavior of employees in organizations (Meyer et al., 2002; Meyer and Herscovitch, 2001; Mowday, Steers and Porter, 1979). As Meyer and Allen (1991), outline, Organizational commitment consists of three dimensions, namely,

- **Affective** - defined as the employees' positive emotional attachment to the organization
- **Continuance** - defined as the employees' attachment to the organization because of the perceived high costs of leaving the organization.
- **Normative** - defined as an employees' attachment to the organization because of feelings of obligation, loyalty and duty

Meyer et al., (2002), examined the validity of all the three dimensions, out of which Affective commitment had the most reliable and most favorable correlations with organization relevant (attendance, performance, and organizational citizenship behavior) and employee relevant (stress and work-family conflict) outcomes. Therefore, Affective commitment is a dependent variable in this study. Specific to the context, it is imperative to build organizational commitment among the employees of various technical institutes in Arunachal Pradesh to enhance their potential and competitiveness. Insufficient studies are existing on teachers of the technical education sector. Thus, the study on the impact of work engagement on affective commitment will provide useful insights to the management in higher technical institutes to formulate the strategies that could help them to retain the committed employees for a long term. Also, Researchers have shown that commitment has an impact on several work-related attributes,

- **Intention to stay** (Chew and Chan, 2008; Mathieu and Zajac, 1990; Meyer et al., 2002; Porter et al.,1974)
- **Absenteeism** (Angle and Perry, 1981; Meyer et al., 2002; Porter et al., 1974)
- **Job satisfaction** (Chughtai and Zafar, 2006; Meyer et al., 2002; Yousef, 2000)
- **Motivation and Job performance** (Abdul Rashid, Sambasivam, and Johari, 2003; Chen, Silverthorne and Hung, 2006; Samad, 2005; Yousef, 2000)

3.1.2 Work Engagement

Increased research interest in the area of work engagement is trending in the field of Organizational Psychology. The same is prominently explained by growing interest in the positive related aspects of work and organizational life (Nelson & Cooper, 2007). Employee/work engagement refers to the positive, affective psychological work-related state of mind that leads employees to invest themselves, emotionally, physically and cognitively actively (Schaufeli et al., 2002). It is a motivational idea and alludes the nature of employees in the face of their work (Christian, Garza & Slaughter, 2011). Work engagement defined as a positive, fulfilling work-related state of mind that is characterized by,

- **Vigor** - is characterized by high levels of energy and mental resilience at work
- **Dedication** - refers to a state of being intensely involved in one's work and experiencing a sense of pride, inspiration, and enthusiasm for one's work
- **Absorption** - is characterized by significant levels of concentration and engrossment in one's work

Hakenen, Perhoniemi, and Toppinen-Tanner (2008), has shown that presence of job resources would undoubtedly result in work engagement. Also, they brought out that when an employee has control over his/her job and experience organization-based self-esteem, he/she will exhibit, high levels of work engagement. Work engagement is related to positive attitude towards work and towards the organization, such as job satisfaction, organizational commitment and lower turnover intention (Demerouti, Bakker, Nachreiner and Schaufeli, 2001). Abu-shamaa, Al-rabayah, and Khasawneh, (2015), found that work engagement was a significant predictor of organizational commitment.

4.1 Hypothesis

H_1: Level of Work engagement and Affective commitment of faculty members of technical institutes in Arunachal Pradesh is equally distributed.

H_2: There is no significant difference between Work engagement and other demographic factors, i.e. Technical Institutes, Age group and Marital status of faculty members of technical institutes in Arunachal Pradesh

H_3: There is no significant difference between Affective Commitment and other demographic factors i.e. Employment type, Age group, Educational qualification, and Experience of faculty members of technical institutes in Arunachal Pradesh

H_4: The hypothesized model has a good fit

5.1 Methods and Measures

The study is exploratory and descriptive that based on the collection of primary data of faculty those are working with higher technical institutes in Arunachal Pradesh (India). A total of 400 survey questionnaires were distributed to teaching faculty members and collected 304 valid data sheets from the teaching faculty members of institutes of higher technical education institutes. The procedure of simple random sampling was followed, which gave equal opportunity to all the samples equally. The structured questionnaires are filled in on a Likert scale of 1-5. The data were collected in due time and fed to SPSS trial version for analysis and inference.

Work engagement is measured with the Utrecht Work Engagement Scale (UWES) - long form, that contains seventeen items with distinct components of Vigour, Dedication, and Absorption (Schaufeli & Bakker, 2001). Affective Commitment is measured using a scale of six items (five items from Meyer and Allen's Affective Commitment scale (Meyer and Allen, 1997; Meyer, Allen and Smith, 1993) and one item from Organizational Commitment scale of Mowday, Steers and Porter, 1993).

6.1 Data Analysis and Interpretation

Table 6.1.1 Demographic profile of the participants,

Demographic Variables	Characteristics	Frequency	Percentage
Institute	NERIST, Nirjuli NIT, Yupia TOMI, Basar RGGP, Itanagar RGU, Doimukh	168 64 32 25 15	55.3 21.1 10.5 8.2 4.9
Gender	Male Female	221 83	72.7 27.3
Designation	Professor Associate Professor Assistant Professor	55 57 192	18.1 18.8 63.2
Qualification	Ph.D. PG Graduate	121 128 55	39.8 42.1 18.1
Age group	< 40 41 - 50 > 50	162 96 46	53.3 31.6 15.1
Employment type	Permanent Contractual	213 91	70.1 29.9
Experience	< 5 Years 6 – 10 Years > 10 Years	136 103 65	44.7 33.9 21.4

Marital status	Married Unmarried	233 71	76.6 23.4

From the table above, we can read that, a majority of higher technical education institutes of Arunachal Pradesh were involved in the study, including both public (Government) and private technical educational institutions. The participants were inclusive of the demographic variables as mentioned above and it is self-explanatory.

Table 6.1.2 Descriptive statistics and Reliability test,

Variables	Mean	SD	Cronbach's alpha
Vigour	3.895	0.577	0.835
Dedication	4.093	0.561	0.862
Absorption	3.785	0.709	0.830
Affective Commitment	3.982	0.698	0.893

From the above table, we infer that all the data collected from the samples are reliable as mentioned against each variable (as determined by Cronbach's alpha, which should be higher than 0.70), this shows the data is having internal consistency among the scales/items. The teaching faculty highly dedicated towards their job/profession since the mean value of dedication is higher than the other two variables of Work engagement (i.e., Vigour and Absorption) and Affective commitment.

6.2 Chi-square goodness of fit test

The Chi-square goodness of fit test, is a non-parametric test that is used to find out how the observed value of a given phenomenon is significantly different from expected value. The term goodness of fit is used to compare the observed sample distribution with the expected probability distribution. It determines how well the theoretical distribution fits the empirical distribution. The date in the sample tested for consistency with the hypothesized distribution of the population.

Table 6.2.1 Chi-square test of goodness of fit for Level of Work engagement and Affective commitment of faculty members of technical institutes in Arunachal Pradesh

Null Hypothesis $\mathbf{H_1}$: Level of Work engagement and Affective commitment of faculty members of technical institutes in Arunachal Pradesh are equally distributed.

Factors		Frequency	Percentage	Chi-Square value	p - Value
Level of Affective Commitment	Low	77	25.3	28.349	**< 0.001****
	Moderate	145	47.7		
	High	82	27.0		
Level of Work Engagement	Low	105	34.5	1.309	0.520
	Moderate	92	30.3		
	High	107	35.2		

Note: ** denotes significant at 1% level

From the above table, the p-value is less than 0.001** and significant at 1% level, shows there is a significant difference of data distribution in the level of Affective commitment, among the faculty members of technical institutes in Arunachal Pradesh. Level of Affective commitment shows, 27% of the sample are highly committed, 47.7% are moderately committed, and 25.3% are poorly committed.

In case of Work engagement, the p=value is 0.520, which is higher than 0.05, shows there is no significant difference between the level of work engagement among the faculty of technical institutes in Arunachal Pradesh.

6.3 ANOVA (t-test)

Analysis of Variance (ANOVA), is a method for testing a hypothesis, that there is no significant difference between two or more population means. For ANOVA, assumes the data normally distributed with the same variance (homogeneity of variance).

Table 6.3.1 ANOVA (t-test) for significant variables (for Work engagement)

Null hypothesis **H_2**: - There is no significant difference between Work engagement and other demographic factors, i.e. Technical Institutes, Age group and Marital status of faculty members of technical institutes in Arunachal Pradesh

Work Engagement		Mean	SD	t - value	p - value
Institute	NERIST	20.61	2.73	4.775	**0.001****
	NIT	19.08	3.08		
	RGU	20.27	4.10		
	RGGP	20.28	2.76		
	TOMI	21.41	1.72		
Age group	< 40	20.60	2.95	8.508	**< 0.001****
	41 - 50	19.41	2.84		
	> 50	21.26	2.14		
Marital status	Married	20.14	2.96	4.129	**0.043***
	Unmarried	20.93	2.50		

Note: 1. ** denotes significant at 1% level

2. * denotes significant at 5% level

From the above table of ANOVA for Work engagement, it infers that there is the positive and significant difference at 1% level, in the measure of work engagement of faculty of different technical institutes of Arunachal Pradesh. TOMI institute displays the highest level of work engagement as compared to other institutes under study. In the same way, there is significant and positive relationship within different age groups of faculties of technical institutes in Arunachal Pradesh. The faculty of age group more than fifty years of age display a high level of engagement as compared to other age groups.

In case of the Marital status of the faculties, the unmarried faculty displays a little higher level of work engagement as compared to their counterparts. The positive relation significant at 5% level

Table 6.3.2 ANOVA (t-test) for significant variables (for Affective Commitment)

Null hypothesis **H_3**: - There is no significant difference between Affective Commitment and other demographic factors, i.e. Employment type, Age group, Educational qualification and Experience of faculty members of technical institutes in Arunachal Pradesh

Affective Commitment		Mean	SD	t - value	p - value
Employment type	Permanent	16.29	2.63	4.202	**0.004****
	Temporary	14.81	3.19		
Age group	< 40 Years	15.76	2.80	7.493	**0.001****
	41 – 50 Years	15.32	3.03		
	> 50 Years	17.26	2.44		
Educational qualification	Ph.D.	16.69	2.24	9.346	**< 0.001****
	PG	15.38	3.12		
	Graduate	15.07	3.19		
Experience	< 5 Years	15.19	2.88	8.685	**< 0.001****
	6 - 10 Years	16.04	2.79		
	> 10 Years	16.92	2.72		

Note: 1. ** denotes significant at 1% level

2. * denotes significant at 5% level

From the above table of ANOVA for Affective commitment, it infers that there is the positive and significant difference at 1% level, between permanent and temporary faculty members. From, the measure of Affective commitment of permanent and temporary faculty, the permanent faculty display higher level of Affective commitment as compared to temporary ones. In the factor of age group, the ANOVA table displays a positive and significant relationship between faculty of different age groups, in which the faculty of age group above 50 years has the highest level of commitment as compared to other age groups.

In case of educational qualification, the ANOVA table displays a positive and significant relationship among different educational qualification at 1% significance level. Faculty with Ph.D. qualification display the highest level of Affective commitment, as compares to PG and Graduate qualifications. In the same way, there is significant and positive relationship within different years of experience of faculties of technical institutes in Arunachal Pradesh. The faculty of having more than ten years of experience display highest level of commitment as compared to other experience categories.

6.4 Measurement model (CFA)

Confirmatory factor analysis (CFA) and Structural equation modeling (SEM) techniques always accompany the terms observed (manifest) variables and Unobserved (latent) variables. CFA is a confirmatory technique driven by theoretical understandings and relationships. CFA uses hypothesized model to estimate a population covariance as compared with the observed covariance matrix. SEM is described, as a combination of Exploratory factor analysis and Regression (Ullman, 2001). SEM extends the possibility of relationships among the latent variables and derives two components,

- A measurement model (essentially CFA) and
- A structural model

Fig. 6.4.1 Structural Equation Model (SEM) – Measurement Model (CFA)

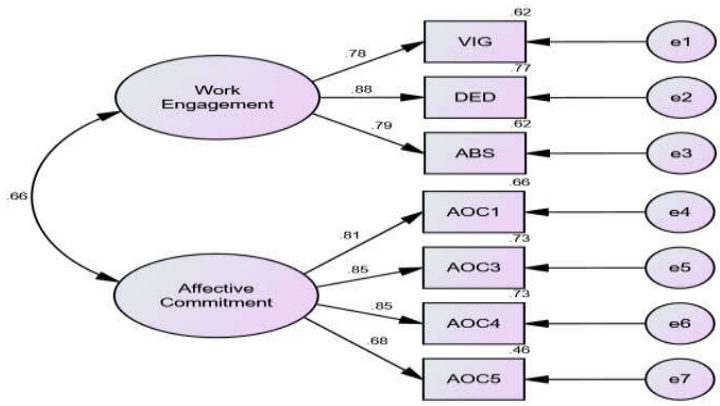

Table 6.4.2 CR and AVE of constructs (Convergent and Discriminant Validity) of Work engagement and Affective commitment

Factors	CR	AVE	Squared Inter Correlation (SIC)	
			AC	WE
Affective Commitment	0.878	0.645	**0.803**	-
Work Engagement	0.851	0.539	0.674	**0.734**

Gaskin J and Lim J (2016) 'Master validity tool' AMOS Plugin

** Significant at 1% level

From the above table, Composite reliability, which is a measure of the internal consistency is above 0.6 for all the variables (Farnell and Larker, 1981) is accepted. AVE (Average Variance Extracted) for Affective commitment and Work engagement is above 0.5 (Hair et al., 1998) and accepted as good measure of convergent validity. Thus, convergent validity is nearly a good fit. For Discriminant validity check, the value of AVE's compared with a squared correlation of the constructs. The thumb rule is that the square root of AVE should be

more significant than the squared correlation between the constructs (Cooper and Zmud, 1990; Hair et al., 1998), in this model the values are adequately fit and discriminant validity established as a good fit. Thus, after validation, the measurement model was satisfied to confirm the hypothesized structure.

Table 6.4.3 Reliability measures of Measurement (CFA) model

Chi-square Value	DF	C_{Min}/DF	P Value	CFI	RMR	RMSEA
8.671	13	0.667	0.797	0.999	0.011	0.009
Cutoff criteria*	Poor Acceptable Excellent	> 5 > 3 > 1	< 0.01 < 0.05 > 0.05	< 0.90 < 0.95 > 0.95	> 0.10 > 0.08 < 0.08	> 0.08 > 0.06 < 0.06
Model fit measures		Excellent	Excellent	Acceptable	Excellent	Excellent

*Note: Hu and Bentler (1999, "Cut-off Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives")

Gaskin, J. & Lim, J. (2016), "Model Fit Measures," AMOS Plugin.

From the above table, the measurement model of SEM has a very valid output, as presented. The ratio C_{Min}/DF criteria are excellent, as the value is greater than 1, as Bryne (2006), suggested that the ratio should not exceed the value of three and it predicts minimum discrepancy divided by its degrees of freedom. The p-value is above 0.05 signifies the null hypothesis to be accepted, proves no significant difference between observed model and global fit model. The fit index measure, CFI (comparative fit index) is of the value 0.999, close to the value of one perfect fit (Bentler, 1990). RMSEA (Root mean square approximation) value is .009, which is nearly less than 0.05, considered as a good fit (Arbuckle, 2005) are in acceptable and excellent range, and therefore the model is accepted as a nearly perfect fit, as confirmed on the theoretical grounds.

6.5 Path model – Structural Equation modeling

The actual strength of structural equation modeling is that one can estimate and specify more complicated path models, with influencing variables between the exogenous and endogenous variables. Path model analysis is a statistical technique used to examine causal relationships between two or more variables. Fitting a model to data means solving a set of equations. In SEM, it is usually assumed that the sample data follow a multivariate normal distribution, so that the means and covariance matrix contain all the information (Boomsma, 1997). Path analysis is a subset of SEM, the multivariate procedure that is defined by Ullman (1996), “allows examination of a set of relationships between one or more independent variables, either continuous or discrete.” Path analysis deals only with measured variables.

Fig. 6.5.1 Structural Equation Model (SEM) – Path Model

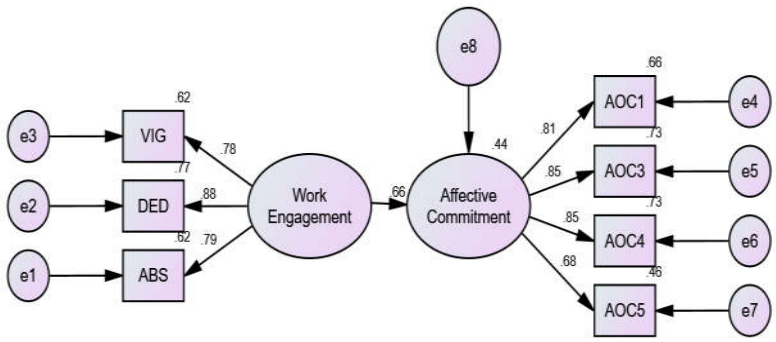

Table 6.5.2 Reliability measures of a Path model

Fit Indices	SEM Model measures	Suggested value
Chi-square value (C_{Min})	8.671	-
Degrees of Freedom (DF)	13	-
P value	0.797	> 0.05 (Hair et al., 1998)
C_{Min}/DF	0.667	< 5.00 (Hair et al., 1998)
Goodness of fit index (GFI)	0.992	> 0.90 (Hu and Bentler, 1999)
Adjusted goodness of fit index (AGFI)	0.983	> 0.90 (Hair et al. 2006)
Normative fit index (NFI)	0.993	> 0.90 (Hu and Bentler, 1999)
Comparative fit index (CFI)	0.999	> 0.90 (Daire et al., 2008)
Root mean square residual (RMR)	0.011	< 0.08 (Hair et al. 2006)
Root mean square error of approximation (RMSEA)	0.009	< 0.08 (Hair et al. 2006)

The above table indicates the standardized parameter estimates of SEM path model, the table is self-explanatory and shows a perfect model fit and linear relationship between Work engagement and Affective commitment.

Table 6.5.3 Standardized regression weights of SEM model

Null hypothesis **H_4**: The hypothesized model has a good fit

Faculty Work Engagement Model	Regression weight	Standardized estimate	Standardized error	Critical Ratio	p-value	Remarks
AC ← WE	0.906	0.661	0.102	8.899	< 0.001**	**Null hypothesis accepted**

** Denotes significant at 1% level

The above table indicates the parameter estimates of SEM model, the standardized path coefficients, standard error estimates, t distribution value (C.R,), p-value (path significance), and the remarks column that indicates the acceptance of the null hypothesis. From the presented values it is noted that the path AC ← WE are statistically significant and has a positive linear relationship with an estimate of 0.661. Thus, the null hypothesis is accepted, i.e., the model is substantially a perfect fit.

7.1 Discussion and Conclusion

The study aimed to measure the strength and level of Affective commitment and Work engagement and to find out their linear and positive relationships. It found that about 35.2% of faculty are highly engaged, and equally 30.3% faculty moderately engaged. The issue and strategy for engaging 34.5% of teaching faculty need to be taken into consideration. Also, more than 60% faculty of higher technical education in Arunachal Pradesh (India) are adequately committed in their profession, as it is a positive sign of progress towards a better knowledge sharing or transformation.

Comparison of levels of Work engagement and Affective commitment of different institutes in Arunachal Pradesh, is beyond the scope of this study, as it depends on a lot of other factors and organizational framework. The measure of work engagement for the age group 41 – 50 years, invites more considerable attention, as they display the lowest value for work engagement. The strategies drawn for inclusive development from the top-down approach.

Affective commitment is higher for permanent faculty indicates making the temporary faculty permanent or recruitment of permanent faculty is highly encouraged. The higher commitment of faculty above fifty years of age needs to be transmitted to lower age groups, which will make a significant contribution in the knowledge economy, as nearly 85% of the faculty are below fifty years of age, a suitable measure to be taken for the same. It seems that higher the educational qualification, higher the level of commitment, which promotes opportunities

for higher studies and development for faculty to increase the level of commitment. Nearly 60% of the faculty does not hold a Ph.D. qualification, drives the respective management/department to look into the matter for concern and necessary intervention.

Greater organizational commitment linked to low rates of absenteeism and better job performance. Most commonly cited outcomes of organizational commitment are that,

- It is the relative strength of an individual's identification with and involvement in a particular organization (Mowday et al., 1982)
- It is the psychological state that binds the employees together with the organization (Allen and Meyer, 1990)
- It is the desire to belong to the organization, a willingness to display effort on behalf of the organization and identification with values and goals of the organization
- It is the degree to which an employee identifies with an organization and its goals and desires to remain with the organization (Robbins and Judge, 2012)

Thus, organizational commitment contributes positively to organizational outcomes such as improved performance and productivity, improved quality and innovation, a higher level of job satisfaction, lower level of absenteeism and turnover intention (Natarajan, 2011).

This study shows that there is a definite and significant relationship between Affective commitment and work engagement, agrees and in line with previous studies and researchers. The impact of work engagement on affective commitment was drawn over SEM and justified for its positive and linear strong relationship. As we know, that Work engagement and Affective commitment being a concern for the present work environment to improve the performance and productivity. The organization should provide the best to the faculty and is very important to understand their needs too. The continuous intervention of HRD and regular appraisal programs should be facilitated to motivate the employee to out-perform and to go the 'extra mile.' It should be equally contributed by the faculty too to maintain a congenial work environment, that should always enhance the group dynamics and keep all the members active. The negative aspects and criticisms to viewed as footsteps for further improvement and growth.

This study reveals the importance of Work engagement and Affective commitment, in an organization concerning higher technical educational institutes in Arunachal Pradesh. The need for continuous improvement and development both on the part of the faculty and the organization emphasize for the productive work environment. The aspects of the low level of Work engagement, and Affective commitment to be addressed appropriately and minimized.

References

1. Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career development international*, *13*(3), 209-223.
2. Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of organizational behavior*, *29*(2), 147-154.
3. Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, *22*(3), 309-328.
4. Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European journal of work and organizational psychology*, *20*(1), 4-28.
5. Bezuidenhout, A., & Cilliers, F. V. (2010). Burnout, work engagement and sense of coherence in female academics in higher-education institutions in South Africa. *SA Journal of Industrial Psychology*, *36*(1), 1-10.
6. Buys, C., & Rothmann, S. (2010). Burnout and engagement of reformed church ministers. *SA Journal of industrial psychology*, *36*(1), 1-11.
7. Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with the task and contextual performance. *Personnel Psychology*, *64*(1), 89-136.
8. Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. *Work engagement: A handbook of essential theory and research*, *65*, 147-163.
9. Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of school psychology*, *43*(6), 495-513.
10. Nerstad, C. G., Richardsen, A. M., & Martinussen, M. (2010). Factorial validity of the Utrecht Work Engagement Scale (UWES) across occupational groups in Norway. *Scandinavian journal of psychology*, *51*(4), 326-333.
11. Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and teacher education*, *27*(6), 1029-1038.
12. Kompaso, S. M., & Sridevi, M. S. (2010). Employee engagement: The key to improving performance. *International journal of business and management*, *5*(12), 89.
13. Laguador, J. M., & Dotong, C. I. (2014). Knowledge versus Practice on the Outcomes-Based Education Implementation of the Engineering Faculty Members in LPU. *International Journal of Academic Research in Progressive Education and Development*, *3*(1), 63-74.
14. Javier, F. V. (2013). Assessing an Asian University's Organizational Effectiveness Using the Malcolm Baldridge Model. *Asian Journal of Business and Governance*, *2*(1).
15. Kim, W., Kolb, J. A., & Kim, T. (2013). The relationship between work engagement and performance: A review of the empirical literature and a proposed research agenda. *Human Resource Development Review*, *12*(3), 248-276.
16. Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: a literature review. *Journal of Management Development*, *35*(2), 190-216.

17. Top, M., Akdere, M., & Tarcan, M. (2015). Examining transformational leadership, job satisfaction, organizational commitment and organizational trust in Turkish hospitals: public servants versus private sector employees. *The International Journal of Human Resource Management*, *26*(9), 1259-1282.
18. Messner, W. (2017). The role of gender in building organizational commitment in India's services sourcing industry. *IIMB Management Review*, *29*(3), 188-202.
19. Jo, S. H. (2014). Teacher commitment: Exploring associations with relationships and emotions. *Teaching and Teacher Education*, *43*, 120-130.
20. Lima, A. J. P., Loob, J. T. K., & Leec, P. H. (2017). THE IMPACT OF LEADERSHIP ON TURNOVER INTENTION: THE MEDIATING ROLE OF ORGANIZATIONAL COMMITMENT AND JOB SATISFACTION. *Journal of Applied Structural Equation Modeling*, *1*(1), 27-41.
21. Zumbo, B. D. (2005). Structural equation modeling and test validation. *Wiley StatsRef: Statistics Reference Online*.
22. Hanaysha, J. (2016). Testing the effects of employee engagement, work environment, and organizational learning on organizational commitment. *Procedia-Social and Behavioral Sciences*, *229*, 289-297.
23. ÇAĞRI SAN, B., & TOK, T. N. (2017). THE RELATIONSHIP BETWEEN TEACHERS'WORK ENGAGEMENT AND ORGANIZATIONAL COMMITMENT. *Pamukkale University Journal of Social Sciences Institute/Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (26).
24. Affum-Osei, E., Acquaah, E., & Acheampong, P. (2015). The relationship between organizational commitment and demographic variables: evidence from a commercial bank in Ghana. *American Journal of Industrial and Business Management*, *5*(12).
25. Ghosh, S., & Swamy, D. R. (2014). A Literature Review on Organizational Commitment-A Comprehensive Summary. *Int Journal of Engineering Research and Applications*, *4*(12), 04-14.
26. Ambreen, S., Naz, I., Bhatti, K. I., & Khan, H. H. (2014). Perceived Organizational Support Moderating the Relationship between Autonomy, and Affective Commitment. *International Journal of Operations and Logistics Management*, *3*(2), 170-179.
27. Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of educational research*, *99*(6), 323-338.
28. Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Articles*, 2.
29. Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scaling development. *Journal of marketing research*, *38*(2), 269-277.
30. Weston, R., & Gore Jr, P. A. (2006). A brief guide to structural equation modeling. *The counseling psychologist*, *34*(5), 719-751.