



Measuring Work Engagement of Technical Institute Teachers in Arunachal Pradesh

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Abstract

Education is the spark of illumination of life. It assumes a prominent role in the lives of human beings by empowering them with various abilities, skills, and competencies that ensure enhanced quality of life. Also, education is the ability to face life's situations, a character-building process, making them rational, capable and responsive. Thus, a teacher has to face enormous challenges and equally play different roles as a professional and as an administrator. Effective teaching and efficient learning are considered the vital factors of success in academia.

Conventionally, a teacher brings subject expertise and knowledge of teaching methods to the classroom that is of absolute value to the learners/students. Higher/technical education is pivotal for developing a modern economy, building a dynamic society and promoting a right style of leadership. It meets the market demands and equips the students with ample opportunity across the globe through education and employment. Human resource capital is considered one of the essential factors for achieving organizational goals and objectives (Mosadragh, 2003). Thus, it is very prompt to address the issue of faculty (teachers) work engagement and its impact on technical institutes in Arunachal Pradesh. As can be noted from the records, that the educational sector in Arunachal Pradesh is growing and blooming in the recent past, that needs to be managed for real-time sustainability and competitive edge. Bakker et al., (2008), brought out that employees those who are engaged are more willing to travel the extra mile, in addition to being highly creative and productive. Also, work engagement strongly related to creativity and promote transformational leadership – being able to coaching, stimulating and inspiring (Bakker et al., 2006).

Work engagement, improved by stimulating jobs with much resources that results in positive organizational outcomes (Schaufeli, 2012). According to Chigetai and Zafar (2006), it is essential to nurture organizational commitment among the employees. As they likely to be highly absorbed in place of work, perform better than the poorly committed employees, and they stay longer with the organization. The present study has 310 participants, randomly selected from the technical institutes of North-east India, to measure, validate and confirm Utech Work Engagement Scale (UWES) among the teachers of technical institutes along with their demographic characteristics, with Confirmatory Factor Analysis (CFA).

Keywords – Work engagement, Construct validity, Confirmatory Factor Analysis.

Introduction

In general, educational institutes are vital doorways to development. In specific, technical education/institutes has a vital role in the commercial and socio-economic development of a country/state. It exhibits more than a single role like making new knowledge, capitalizing on new abilities and develop a profound human resource asset, through emphasized pedagogy, research profiles, and extension activities to meet the needs and the demand. Jawaharlal Nehru, states that “A university, determines or confirms for humanism, for tolerance, for the adventure of ideas and search of truth, for a reason. Also, it extends for the onward march of the human community towards reaching of ever higher objectives. If the universities execute their responsibilities adequately, then it is well with nature, people and the overall environment”. Davis George (2013), states that An archetype change is being displayed in higher education nowadays, from the national level to global level, from single time education for a few to continuous education for all and more towards the approach of a learner-centric education. These changes make new expectations and throw new medium of awakenings to the existing or organized education methods, procedures, and practices.

Teachers play a vital and essential role, that can see and make things happen for a better future, shaping the economy and society. However, other factors do influence the educational system. Thus, strengthening the role of teachers, especially those teaching in technical institutes, with due introspection they can make a vibrant change in the life of the students and can mold them as they want to be. As there is a boom in the educational economy in the state in late 2000 onwards, new public and private technical institutions should fall in place in embracing the vital importance of teachers of their institute. Moreover, to promote a congenial and productive work culture in the educational system. Thus, the factors of work engagement, factors of Transformational leadership, Affective commitment and overall and generalized level of job satisfaction of the teaching faculty of the technical institutes has an essential part in the technical education system in the state. Organizations hold a significant effect on the personnel who work for them, and few of those impacts display as to how people feel about their workplace or work-related matter.

Principals and teachers determine the quality of education. As most of the educational activities are carried out by teachers in the class, they are responsible for students' achievement directly or indirectly (Meyer, J. W., Rowan, B., & Meyer, M. W. (1978). More than just delivering knowledge in the class, teaching is an emotional process. Olivier and Roth Mann (2007), suggests, that work is a statement of the individual doing the activity. Kahn (1990), brought out that people, while at work, make substantial contributions either physically, emotionally or cognitively. It is essential to understand that people at work are entirely engrossed in their job and adequately exhibit their physical, emotional as well as cognitive abilities, this commitment termed as Personal engagement. In the personal engagement, people pitch themselves to their work roles and are fruitful to their fullest extent without any limitation in displaying their complete performance.

Arunachal means ‘Land of Rising Sun,’ is a sprawling mountainous territory, with a breath-taking spectacle of nature in all glory, raw and unspoiled and untamed in a wild profusion of flora and fauna, customs, language, wild jungles, dress, and tribal communities. Directorate of HTE, Government of Arunachal Pradesh, since 1996, has been intended to good teaching routines and advocate active learning ambiance in the higher educational institutions of the state. According to the Census 2011, 66.95% of the people in the state are considered literate (Literacy rate) and Gross Enrolment Ratio (GER) of higher education in the state in the age group of 18-24 years is 8.3. Presently, there are a total of 08 Private Universities, 32 different types of educational institutions and 08 Polytechnic colleges functional in the state. The participants of the study are the teaching faculty members of the technical institutes in the state.

Few of the institutions are new and yet to start the planned and approved courses of education. Though the pass percentage in these colleges are not in the promising range, yet many efforts taken by the side of the Indian Government and the Government of Arunachal Pradesh, for the overall and inclusive development of technical education in the state. Also, there is a significant imbalance between the candidates of Professional and Technical education programs and their availability of the

number of seats for the same. Thus, in this context, it is appropriate to study the engagement level of the faculty of such institutions and the quality of pedagogy imparted in technical education to the future generation of the state.

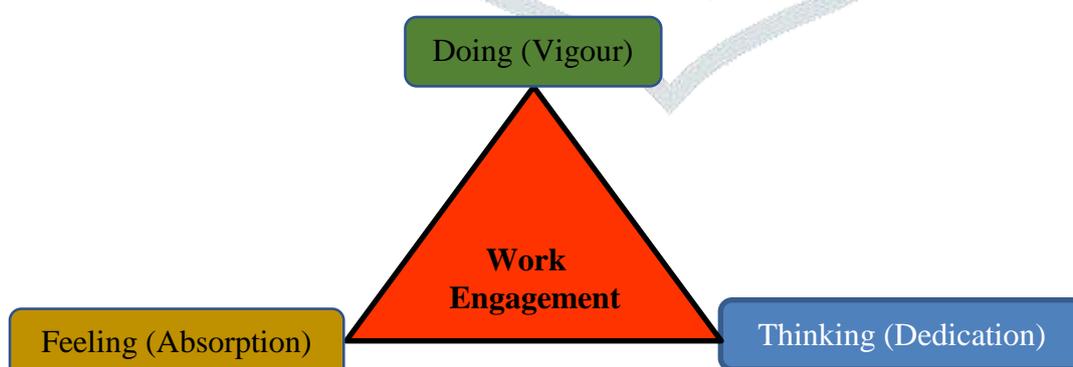
As per Census Board of India, 2011 report, 55% of the population of India would be under the age of 30 years of age on 2020, as compared to the West and other major Asian countries. The social, commercial, and active growth of a nation depends upon the credibility of the educational background of its people, implies that a large, young and energetic workforce will be available for the overall contribution of growth, development, and economy of our country. Thus, it is vital to impart quality education and shape the growing process. Also, the role of teachers in this great partnership is very influential, and their engagement with their profession invites a concern in the right direction.

Literature Review

Work Engagement

Empirical research of work engagement reveals that it is closely linked positive organizational outcomes like pro-negative attitudes, the higher intention of staying in the organization and profession, effort making and increased job performance. Work Engagement is a beneficial, affective-motivational status of fulfilment that is exhibited by Vigour, Dedication, and Absorption. Vigour promotes excellent energy level – any individual with this special implant exhibits more effort and hence can face many problematic situations more efficiently and effectively. Dedication signifies to the active engrossment in any job or useful task assigned – anybody exhibited with this feature always holds a sense of pride in his work and transforms to inspire others in their workplace. Absorption considered as an in-depth reimbursement and involvement in work – anyone with this character always takes more enjoyment in their work to the extent that they get lost in work.

The engaged employees more often display and exhibit positive emotions and arm them with more productivity. Engagement initiates from the process of early induction of an employee into an organization and is nourished and nurtured through relevant learning and development opportunities to do the job assignment as well as receiving top management support from the hierarchy of leadership (Macey et al., 2009).



Dimensions of Work Engagement

Schaufeli and Bakker (2004), postulated that engagement improves employees' confidence towards the organization and increases the intention to stay with the organization. Employees those are engaged, are expected to feel and display three attributes of Vigour, Absorption and Dedication, exhibited as emotional, physical and cognitive modes (Kahn, 1990). Harter et al., (2002), narrates employee engagement as a significant performance outcome to achieve beneficial business results for different organizations. Moreover, they proved that highly engaged employees in the organizations have dominant levels of

customer satisfaction and loyalty, more productive and commercially beneficial than those of less engaged employees. Highly engaged employees perform and exhibit more creative, productive and are more willing to go the extra mile and work (Bakker and Demerouti, 2008; Bakker et al., 2004). Shuck et al., (2011), favourably found that work engagement can enhance learning, innovation, and performance, that reemphasizes the importance of work engagement as a success factor of the organization.

Employees are more prone to interchange their engagement, for resources and benefits provided by the organization. By doing so, they display a varying degree of engagement is the outcome of economic and socio-emotional resources they receive from the organization. Arnold B Bakker (2011), brings out that there are at least four reasons why engaged employees perform better than non-engaged employees,

- Engaged employees, frequently experience positive emotions, with the inclusion of gratitude, joy, and enthusiasm. These positive emotions perceived to broaden people's thought-action repertoire, implying that they progressively work on their organizational resources
- Engaged employees feel and exhibit good health, remain focused, dedicate all their capabilities and vital energy resources to their workplace and environment.
- Engaged personnel display creativity in their job and personal resources and
- Engaged individuals transform their engagement to others in their near surrounding work atmosphere (Bakker & Xanthopoulou, 2009).
- Finally, engaged employees have high levels of energy, enthusiasm, and immersion in their jobs as compared to burn-out employees (Bakker, Schaufeli, Leiter & Tarris 2008).

Engaged personnel demonstrates a certitude in the organization, desire to perform better and make things acceptable, understand the context of 'big-picture' and will be courteous and benefit to their colleagues in willingness 'to go the extra mile' and adhere them abreast with the happenings in the field. Steger et al., (2013), consider, Work engagement has great significance both for the employees and the organization. Earlier studies in organizational psychology, exhibit a growing fond of Work engagement (Sonntag, 2011). It is displayed by an ever-emerging concern in certain areas of work and organizational life and partially by developing the understanding that organizations require employees who glued together mentally with their work and work environment. Personnel those are engaged in their work or job are fully connected in physical, cognitive and emotional dimensions of their work roles (Kahn, 1990). They are fully energized and feel part of, a sense of importance, inspiration, personal enthusiasm, and work challenge (Bakker, 2011). In specific attention towards the engagement of teachers, it profoundly affects all the stakeholders of the organization.

Scope

For the present and the future, education is a distinct investment. Education has an accommodating role; it rarefies approaches and awareness that complement to social coherence, independence of wisdom and knowledge and spirit, and provides a scientific attitude – thus extending the goals of collectiveness, social harmony, and democratic values entrusted in our constitutional architecture. As the educational development is seeing a vibrant change in the present scenario by addition of institutions in the state, the status of existing faculty of the technical institutes and their engagement levels will pave some directions for the days to come, may as guidelines of reference. Work engagement seizes the employee work participation in their routine work. It should be as appealing and forceful and an element to which they want to commit time and effort (the

vigour component). Also, it should be a symbolic and worthwhile pursuit (dedication); and as involving and something on which entirely absorbed into the work absorption; (Bakker et al., 2008).

Sample

In order to achieve adequate distribution of the number of questionnaires for all the technical institutes, nearly 400 questionnaires distributed, but only 344 responses were received, i.e., the response rate is 86% and only 304 responses were found valid on scrutiny and is used effectively for further statistical analysis, which is almost close to the determined sample size. The data collected from respondents of the technical institutes of Arunachal Pradesh.

Instrument used

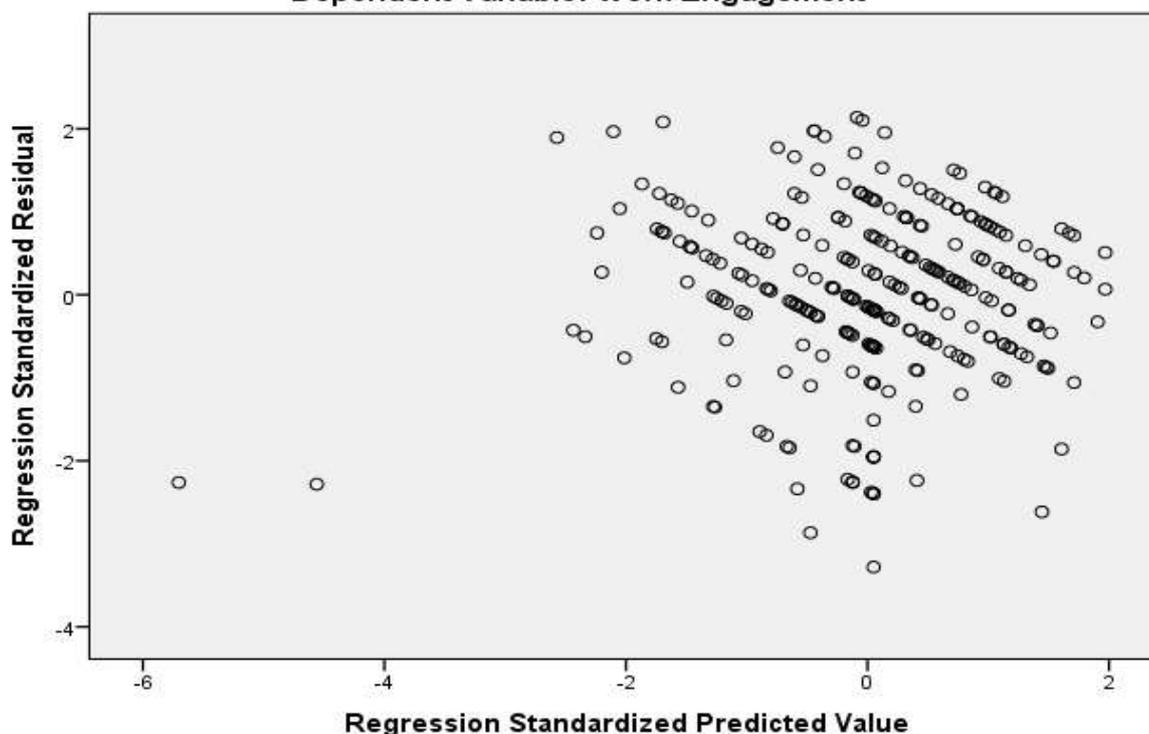
The statistical properties of Central Tendency, Dispersion, and Shape provide a good picture of quantitative data that they often obviate the need for tabular presentations (Singleton Ja Straits, 2005). For work engagement, Utrecht work engagement scale (UWES) developed by Schaufeli and Bakker (2003) used. It has 03 dimensions of Vigour, Dedication, and Absorption with a total of 17 items. Vigour has 06 items; Dedication has 05 items and Absorption has 06 items.

Descriptive statistics

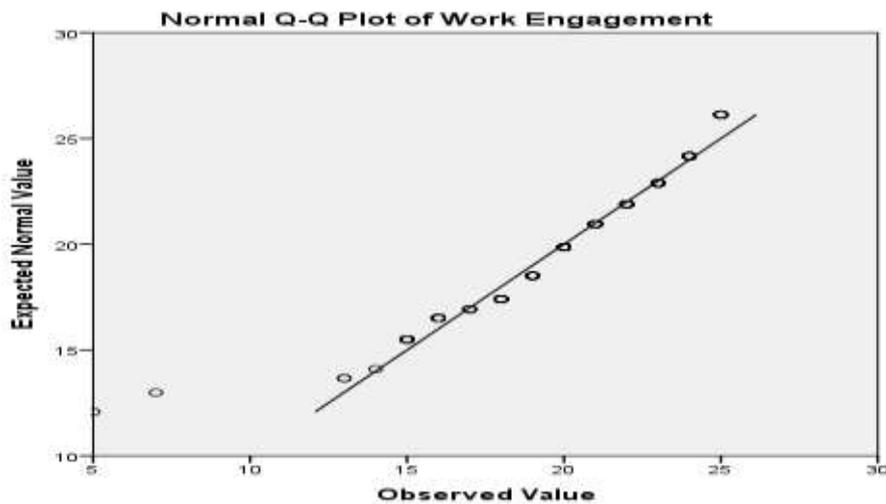
It is found that the Cronbach alpha and KMO value are higher than 0.70 and significant at 1% level. Scatter plots show the variability of one variable over others and the relationship between two variables that is a correlation. Homoscedasticity is the central assumption to linear regression models. The problems associated with heteroscedasticity is the fact that the standard errors are biased and that may lead to incorrect conclusions about the significance of the regression coefficients. Scatter graph is one way helpful in checking of homoscedasticity; the scatter of data of the variable should not follow a pattern in homoscedasticity.

Scatterplot

Dependent Variable: Work Engagement



The Q-Q plots compare ordered values of a variable with quantities of a specific theoretical distribution (i.e., normal distribution). If both the distributions match, the points on the plot form a linear pattern passing through the origin with a unit slope. The Q-Q plots below of the variables under study shows that the data points not severely deviated from the fitted line. They also indicate consistency for which the variable distributed normally.



Karl Pearson Correlation coefficient between factors of Work engagement under study

	A	B	C
A	1	0.551**	0.456**
B	-	1	0.420**
C	-	-	1

Note: ** Denotes Correlation is significant at 1% level

A – Vigour, B – Dedication, C – Absorption

The table above displays that for a p-value less than 0.001** for all the factors of consideration at a 1% level of significance. Hence, it concluded that there are positive and linear significant association factors of Work engagement.

Inferential statistics

The primary objective of the research, depending on the observed relationship between variables (Best and Kahn, 2009). Descriptive statistics are designed to summarize the data at hand; while, Inferential figures indicate the limitation to which one may quantify the data generally beyond the data set and within the sampling frame. It is used to make findings from its data to more common universal conditions. Most of inferential statistics emerge from a broader family of the statistical model known as General Liner model. (Singleton Straits, 2005).

Inferential statistics make inferences using a random sample of data of the population. Inferential statistics evaluate a random sample of data taken from a population to verify and make inferences about the universal community.

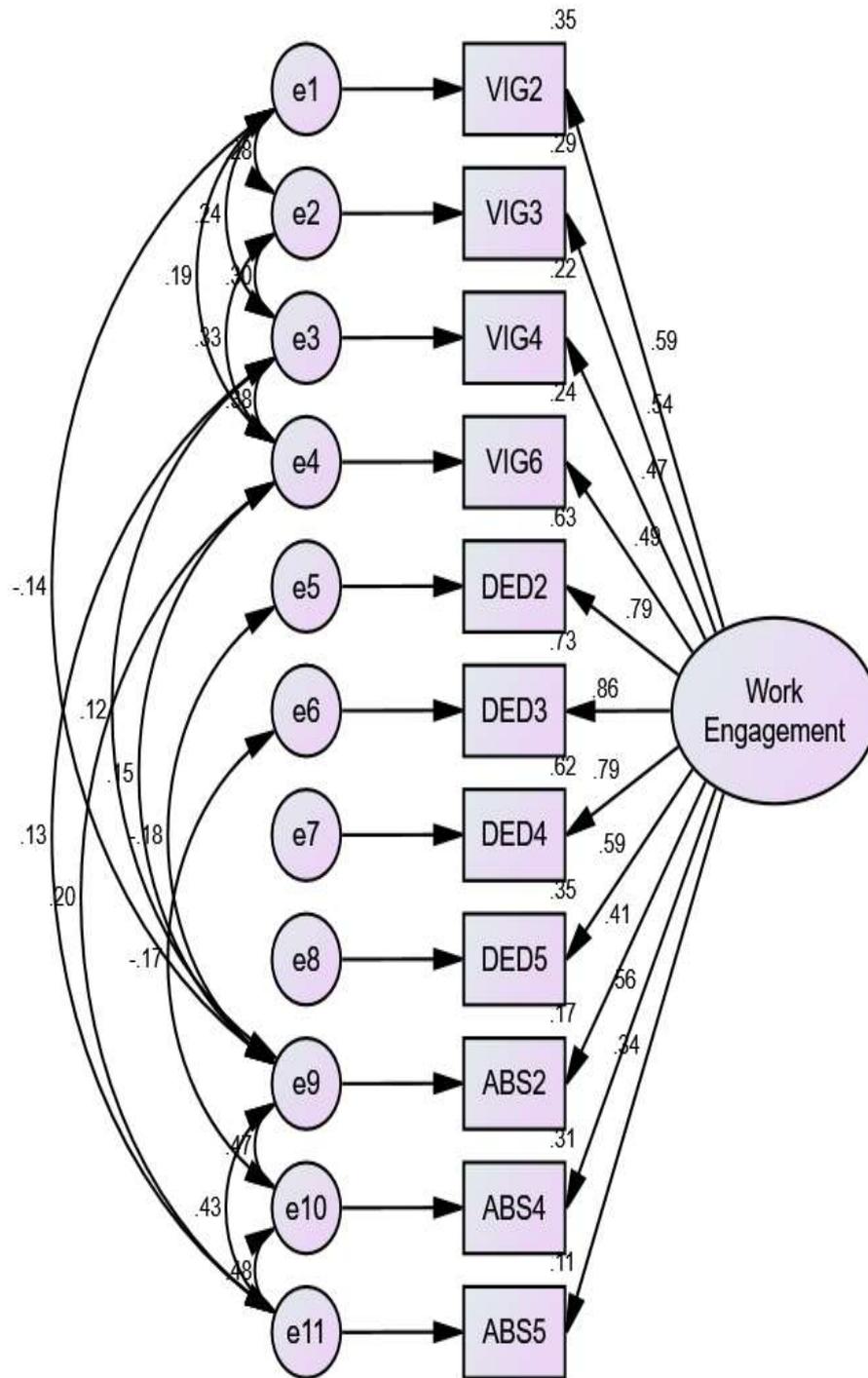


Fig 1 - Confirmatory Factor Analysis of Work engagement

Table 1 - Reliability table of Work engagement (CFA)

Indices	Initial construct	Sub construct	Final construct
Chi-square value	390.392	56.164	6.423
DF	44	28	5
P value	< 0.001	0.001	0.267
C _{Min} /DF	8.873	2.006	0.267
GFI	0.771	0.968	0.992
AGFI	0.657	0.925	0.975
NFI	0.738	0.962	0.990
CFI	0.759	0.980	0.998
RMR	0.065	0.033	0.011
RMSEA	0.161	0.058	0.031
No. of items	11	11	5
Cronbach alpha	0.875	0.875	0.841

It is noted from the table above, that the construct validity of dimension Work engagement, form eleven items reduced to five correct items, statistically tested and nearly perfect fit with suggested values. The reduction in number items in the construct indicates that the items are highly correlated and they are not relevant to the sample of respondents.

Table 2 - t-test for Male and Female genders concerning Factors of Work engagement.

Proposed hypothesis **H₁**: - Male and Female faculty members have no significant difference concerning Factors of Work engagement,

Factors of research	Gender				t Value	p-Value
	Male		Female			
	Mean	SD	Mean	SD		
Vigor	15.52	2.41	15.54	2.03	0.107	0.915
Dedication	16.59	2.51	16.04	1.17	2.418	0.016*
Absorption	10.99	2.36	11.04	2.13	0.213	0.546

Note: 1. ** notifies significance at 1% level

2. * notifies significance at 5% level

From the table above, the p-value is not more than 0.05*; the null hypothesis rejected at 5% level of significance about Dedication. Hence, a significant difference exists between male and female faculty members concerning Dedication. Comparing the means, i.e., based on the mean score, male faculty members have a high value of dedication than the female counterparts. In the educational field of teaching, gender discrimination should be regarded as a primary influencing dimension that might have some impact on the levels of work engagement (Lourdes Rey et al., 2012). Male and female faculty members show no significant difference concerning Vigor and Absorption. Hence, the proposed null hypothesis not rejected.

Table 3 - t-test for Permanent and Contractual employees concerning Factors of Work engagement

Proposed hypothesis **H₂**: - Permanent and Contractual faculty members show no significant difference concerning Factors of Work engagement

Factors of research	Employment Type				t Value	p-Value
	Permanent		Contract			
	Mean	SD	Mean	SD		
Vigor	15.87	2.28	14.92	2.26	4.846	<0.001**
Dedication	16.59	2.30	16.19	2.64	1.851	0.065
Absorption	11.15	2.29	10.73	2.30	2.148	0.032*

From the above table, the p-value is less than 0.001** for Vigor, as the p-value is <0.001**, the proposed null hypothesis not accepted at a 1% level of significance concerning Vigor and concluded that there is a significant difference between Permanent and Contractual faculty members about Vigor. Based on the mean score, the permanent faculty is better than the contractual faculty concerning Vigor. Work engagement is the indication of work well-being that includes vigor, dedication, and absorption (Schaufeli et al., 2002). Characteristic of the high level of energy while working is Vigor, which is delivered by strong effort and persistent, which is dominant in case of permanent faculty members as compared with contractual ones. Also, the contractual faculty is more averse to organizational handlings than the permanent faculty.

As p-value is not more than 0.05*, the proposed null hypothesis not accepted at 5% level of significance about Absorption and hence, there is a significant difference between permanent and contractual faculty members concerning Absorption. Comparing the means, i.e., based on the mean score, permanent faculty members have a high value of Absorption and Intellectual stimulation than the temporary counterparts. Contractual faculty members perceive HR practices as differentiating actions, while the permanent faculty sees them as coordinated actions (Eisenberger et al., 1986). In the delivery of vision change and for a smooth transition, transformational leaders are found to be successful towards the shift (Chamber et al., 2014).

Table 4 - t-test for Married and Unmarried faculty members concerning Factors of Work engagement, Transformational leadership, Affective commitment, and Job satisfaction

Proposed hypothesis **H₃**: - Married and Unmarried faculty members show no significant difference concerning Factors of Work engagement

Factors of research	Marital Status				t Value	p-Value
	Married		Unmarried			
	Mean	SD	Mean	SD		
Vigor	15.56	2.34	15.47	2.27	0.472	0.637
Dedication	16.15	2.51	17.04	2.14	4.509	<0.001**
Absorption	11.07	2.35	10.87	2.20	0.991	0.322

From the table above, the p-value is not more than 0.001** for Dedication. The p-value is <0.001**, the null hypothesis not accepted, at a 1% level of significance, concerning Dedication. Thus, evaluated that there is a significant difference between Married and unmarried faculty members about the dimension Dedication of work engagement. Based on the mean score, the unmarried faculty is better than the married faculty concerning Dedication. Engaged faculty can demonstrate faith in the organization, have an aspiration to perform to make things improved, are considerate about the organization, promotes and instills the 'bigger picture.' Means show respect and facilitate their colleagues, have a zeal to 'go the extra mile' (Robinson, Perryman and Hay Day, 2004). Employee engagement is a diverse and vibrant process that illustrates each person's unique, personal association with work (Litten, Vaughan and Wildermuth, 2011).

Table 5 - t-test of Head of the Departments (HoD) and other faculty members concerning Factors of Work engagement.

Proposed hypothesis **H₄**: - Head of the Departments and other faculty members show no significant difference concerning Factors of Work engagement

Factors of research	Appointment				t Value	p-Value
	HoD		Others			
	Mean	SD	Mean	SD		
Vigor	16.70	1.93	15.30	2.31	5.547	<0.001**
Dedication	17.06	2.64	16.33	2.37	2.555	0.012*
Absorption	11.66	2.89	10.88	2.15	3.092	0.002**

From the table above, the p-value is not more than 0.001** for Vigor, Absorption, Idealized influence, Inspirational motivation, Intellectual stimulation, and Affective commitment. The p-value is <0.001**, the proposed null hypothesis not accepted at a 1% level of significance concerning Vigor, Absorption, Idealized influence, Inspirational motivation, Intellectual stimulation, and Affective commitment. Thus, concluded there is a significant difference between Head of the Departments (HoDs) and other faculty members of the institute about Vigor, Absorption, Idealized influence, Inspirational motivation, Intellectual stimulation, and Affective commitment. Based on the mean score, the Head of the Department has higher values than other faculty concerning Vigor, Absorption, Idealized influence, Inspirational motivation, Intellectual stimulation, and Affective commitment. Engagement creates an optimal relationship among the employees of an organization. A highly engaged employee would strongly identify with his work, will possess good mental health, have positive emotions, perform well (Rich et al., 2010), would experience internal motivation and work towards accumulating self-efficacy. They are dynamic and efficiently more linked to their work, and all of these individual outcomes would benefit the organization as a whole, in a way that the organization may be able to retain its talented and valued employees and would have a positive image in the society (Schaufeli and Salanova, 2007).

For p-value not more than 0.05*, the proposed null hypothesis not accepted at 5% level of significance about Dedication and Job satisfaction. There is a significant difference between the Head of the Departments (HoDs) and other faculty members concerning Dedication and Job satisfaction. Comparing the means, i.e., based on the mean score, Head of the Department has higher values than other faculty members in Dedication. Engaged employees would have a more comprehensive perspective of their functions in the organization and would increase the scope of activities in their job, which infers that engagement has a positive influence on the way the employees would perform their duties (Gupta et al., 2015). The emphasis moved from the leader to the value of the relationship between the leaders and their fellow-workers. High-quality workforce relationships are fundamental pillars of actual work and organizational outcomes (Li and Hung, 2009).

Discussion

As we can notice from the above table that the educational sector in Arunachal Pradesh is blooming as a high potential field, to be capitalized by all the stakeholders. Therefore, it is necessary at this juncture of the emerging educational sector, to introspect and further develop the strategies that are conducive to the growing field. Engaged employees expected to have a fistful of resources which willingly they infuse in their workplace. They are energetic about their work, fully immersed in their work activities and pursues them even when confronted with high demands and hurdles. Numerous studies have proved that work engagement is a critical indicator of job and organizational performance. Strong evidence provided by research, that engagement preeminent to prime organizational outcomes including,

- Creativity and innovation (Arnold Bakker, 2017)
- Positive business results (Ott, 2007; Coffman, 2000)
- Reduced sickness absenteeism (Feather, 2008; Bharathi, 2010)
- Strong motivation and psychological involvement (Ashford and Humphrey, 1995)
- Positive emotions (Fredrickson, 2001)
- Alienate their engagement to the near environment including the individuals (Bakker and Xanthopoulou, 2009)

Engaged employees hold high energy levels, and are desirous about their work, can rebound from the worst situation and feel time flows faster when they are working (Schaufeli and Bakker, 2004). Olivier and Rothman (2007), suggest that work is a visible display of the individual actively doing the task. Work engagement is said to be a natural firm process and not an interim or short-term state of mind. Also, deduced that transformational leadership behaviours, such as galvanizing co-workers and subordinates with an optimistic vision and exhilarating them to challenge the status quo, positively affect the performance of the employees in their workplace. IES (2004), brings out a transparent view of the behaviours demonstrated by the engaged employees,

- Belief in self and the organization
- The desire to work together and to make things better
- Understanding the mission and the context of 'bigger picture.'
- Respectful of and helpful of fellow workers and subordinates
- Acceptance and willingness to go the 'extra mile.'
- Keeping abreast with developments in the field

Conclusion

General drivers of and strategies for improving work engagement

In general, engagement is about the psychological state in which the employee held a positive attitude towards the organization and its values to perform to the level that exceeds the stated job requirements. Mercer (2007), has categorized in general, for standard main and essential drivers of work engagement,

- The work itself, including opportunities for development

- Confidence and trust in leadership
- Recognition and rewards
- Organizational communication

Strategies to improve Work engagement

- ❖ UGC Academic Staff college (HRDC)
- ❖ Opportunities for PhD
- ❖ Work-life balance for married faculties
- ❖ Promotion of development programs for young faculties
- ❖ Uniform and overall HRD process
- ❖ Enhancement of job satisfaction
- ❖ Intervention mechanisms for change
- ❖ Organisational culture & Transparency in governance
- ❖ Career enhancement and development activities
- ❖ Cross-functional development & HR audit
- ❖ Gender equality and the encouragement of more women in the profession
- ❖ Recruitment and development of locals (domicile status)

Critical findings of the research study

- Central / State government should strengthen and energize the present shape and size of the technical education institutions in the state, in terms of financial, infrastructure and human resource requirements, on priority
- The state should house at least one UGC HRDC (University Grants Commission Human Resource Development Centre), to meet the professional requirements of both the teaching and non-teaching staff of technical institutes in the state
- Permanent faculty to be recruited for higher work engagement and institutional outcomes

- It is a matter of concern, that faculty below 50 years of age are not satisfied with their profession, that necessitates growth and develops opportunities, needs introspection
- It is encouraging to find that, faculty above 50 years of age are highly engaged and committed to their profession, needs to be exploited
- Faculty from Arunachal Pradesh (Domicile) display a lower level of Work engagement, Leadership, Commitment, and Satisfaction, is a matter of concern
- 46% of faculty display moderate level of work engagement and 48% display a moderate level of leadership and commitment that shows significant potential in hand, to be taken advantage for the development of the institute and the individuals.

Future scope of research

The study has significant limitations as mentioned earlier and has a scope for further improvement and research prodding.

- A qualitative study co-opted along with quantitative study for different family and socio-economic background of teachers and a comparative study can be conducted to analyse gaps in resources with different regions and states
- Effects of organizational culture, organizational support and other drivers of work engagement involved in the analysis of work engagement
- Collective or Teamwork engagement: there are symptoms that the process of emotional contagion is amenable for the emergence of the combined cognitive state of teamwork engagement (Bakker et al., 2006). Collective engagement research studies will be futuristic and implemented at the organizational level.

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