



## Work Engagement and Demographic Variables: A Study of State Universities of Haryana

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### Abstract

The study investigated the relationship between respondents' work engagement and personal or demographic variables like faculty work area, type of institution, designation, total experience, age, gender, educational background, monthly salary etc. Work engagement was considered as dependent variable and demographic variables were considered as independent variables. In the current study the dependent variable namely work engagement was measured as a scale variable and all independent variables namely the personal variables were measured as categorical variables. Hence, the difference in mean work engagement across the samples categorized on the basis of personal variables was analyzed using one-way analysis of variance (ANOVA) and WELCH test on the basis of levene test value that is related to check the homogeneity of variance. It was found that work engagement of faculty members varies significantly with faculty work area/ discipline, designation, total experience, age, educational background and salary.

**Keywords:** Work Engagement, Factors, Faculty Members and Haryana.

### Introduction

Highly engaged employees are more likely to put efforts in their assigned task, be creative and innovative in problem solving and offer initiatives for organizational improvements. In a recent Gallup study (2014), it is found that lack of engagement among employees or disengaged employees have raised the cost of transactions in the range of \$450 billion and \$550 billion annually. This additional cost can be attributed to reduced productivity, increased absenteeism, and increased turnover rate among disengaged employees. Over the past decade, understanding the organizational determinants of work engagement has become the utmost concern to human resource managers, business leaders, and academic researchers because of the widely held



belief that an engaged workforce improves business outcomes and reduces labor costs (Kahn, 1990; Saks, 2006; Schaufeli, Salanova, Gonzalez-roma, & Bakker, 2002). Work engagement has also drawn great interest of practitioners and academic researchers because it represents an important aspect of work behavior: the extent to which employees are energized and willing to give their maximum effort and focus to their job (Kahn, 1990).

### **Literature review**

It is evident that the role of employees is found to be critical in regards to innovation, organizational performance and competitiveness. As a result, a stream of literature is dedicated to understand and explore the appropriate working conditions which can ensure employee engagement (Wollard & Shuck, 2011). Specifically, in industries which are human capital intensive, the organizational performance heavily relies on employee initiatives and performance. Currently, organizations expect their employees to be initiators, creative, collaborative and team worker. Employees have to deliver as per the high-quality standards and are supposed to be working for their own professional development by continuously acquiring and updating their skill sets. As a result, demands on employees to be engaged and dedicated to their work are increasing constantly.

Employee engagement is very sound and emotional relationships in between an organisation and employee. An engaged employee is one who is fully observed by and enthusiastic about their duty and responsibility. For this, he/she takes positive actions to attain and maintain the organisational interest and reputation. This concept was already in practice in the industrial and service sector with different dimensions and has lots of valuable results.

Khan (1990) studies propounded factors like Psychological, meaningfulness, Psychological safety, Psychological availability. Luthans & Peterson, (2002) studies related to Employee engagement: cognitive and emotional, Manager self-efficacy (as a mediator).

Manager effectiveness. Lohman, (2005) Three environmental factors: lack of time for learning, proximity to learning resources, meaningful rewards for learning. One additional factor was limited decision-making power adopted from literature. Bakker & Demerouti, (2008) Job resources, personal resources, job demands, work engagement and performance Andrew



&Sofian, (2012) studies related to Employee communication, their development and co-employee support.

Bendarkar & Pandita, (2014) studies analysis the Leadership, communication, work life balance, employee performance, organizational performance and many more studies are belongs to various factors from review of literature. as the studies implies these factors have direct or indirect, positive or negative impact on work engagement and organizational effectiveness.

### **Objective of the study**

The following research objectives have been framed from the research gap identified:

- To study different demographic variables of work engagement of state universities of Haryana.
- To analysis the effect of demographic variables on work engagement of state universities of Haryana

### **Research Methodology**

#### **Sampling Design**

The respondents were faculty members working in higher education in Haryana as they represent the largest demographics. This study uses non-probability sampling technique.

#### **Methods of Data Collection**

Primary data was collected from the respondents using an online questionnaire survey with the help of Google forms. 325 respondents belonging to State Universities of Haryana region were selected for the survey. However, 300 valid responses were received which were used for the study twenty-five incomplete responses were rejected.

#### **Research Tools**

Statements were presented in five-point Likert type scale ranging from strongly disagree coded as one (1), three (3) being neutral and five (5) is strongly agree. As mentioned, the questionnaire was divided into two sections, demographic information and statements to obtain qualitative



information. Information collected through survey was further analysed using SPSS using t-test, ANOVA etc.

### Analysis and Interpretation

To study whether work engagement varies significantly across the two types of higher education institutions namely government, and private, hypothesis H0(1) was framed. H0(1): Work engagement does not differ across the type of institution. The mean and standard deviation scores of work engagement of respondents employed in the two types of higher education institutions are tabulated in Table 4.2.11. Here we apply T test to know about the significant difference between work engagement and type of institution test is a robust test to analysis the variance with data is categorical with two categories specifically.

#### i) Relationship Between Work Engagement and Type Of Institution

Table 4.1 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
WE	Equal variances assumed	67.051	.000	5.488	298	.000	.736	.134
	Equal variances not assumed			7.303	111.511	.000	.736	.101

To study whether work engagement varies significantly across the two types of higher education institutions namely government, and private, hypothesis H0(1) was framed. H0(1): Work engagement does not differ across the type of institution. The mean and standard deviation scores of work engagement of respondents employed in the two types of higher education institutions are tabulated in Table 4.1. Here we apply T test to know about the significant difference between work engagement and type of institution. T test is a robust test to analysis the variance with data is categorical with two categories specifically.



**ii) Relationship between work engagement and departments**

The mean score of work engagement across the four faculty work areas namely Commerce and Business Management (CBM); Science, Engineering and Technology (SET); Education and Humanities (EHUM) and others are tabulated in Table 4.2. on the basis of leven test value is <0.5 so we will go for welch test with postdoc games howless. The results suggested that faculty work engagement of education and humanities group was significantly higher than applied medical sciences as well as commerce and business management.

**Test of Homogeneity of Variances**

WE

Levene Statistic	df1	df2	Sig.
10.475	3	296	.000

**ANOVA**

WE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	73.755	3	24.585	40.459	.000
Within Groups	179.867	296	.608		
Total	253.623	299			

**Robust Tests of Equality of Means**

WE

	Statistic <sup>a</sup>	df1	df2	Sig.
Welch	53.398	3	161.942	.000

a. Asymptotically F distributed.

**Table 4.2 Multiple Comparisons**

Dependent Variable:

Games-Howell

(I) Department		Mean Difference (I-J)	Std. Error	Sig.
commerce and business management	science,engineering and technology	.433*	.127	.005



	education and humanities		- .408*	.131	.012
	others		-.992*	.123	.000
science,engineering and technology	commerce and business management		-.433*	.127	.005
	education and humanities		-.841*	.125	.000
	others		-1.426*	.116	.000
education and humanities	commerce and business management		.408*	.131	.012
	science,engineering and technology		.841*	.125	.000
	others		-.585*	.121	.000
others	commerce and business management		.992*	.123	.000
	science,engineering and technology		1.426*	.116	.000
	education and humanities		.585*	.121	.000

\*. The mean difference is significant at the 0.05 level.

### iii) Work engagement and designation

To study whether work engagement varies significantly with the designation of faculty members, hypothesis H0(3) was framed. H0(3) : Work engagement does not vary with designation. The mean scores of work engagement across the designation based categories namely Assistant Professor, Associate Professor, Professor or equivalent in Table 4.3 They were compared across the groups using one-way ANOVA. The F value was significant at 0.05 level of significance (Table 4.2.12). The results of ANOVA, suggested that there was significant difference in work engagement across the designations. Hence, the null hypothesis



H0(5) was rejected. On making multiple comparisons using Least Square Difference (LSD) method, work engagement of Lecturers was found to be significantly different from Associate Professors, Professors and Heads of Departments at 0.05 level of significance. Mean work engagement score of Lecturers at 4.368 was significantly lower than Associate Professors (4.83), Professors (4.75) and Heads of Departments (5.09). On similar lines the mean work engagement of Assistant Professors was 4.53, which was also significantly lower than that of Associate Professors at 4.83 and Heads of Departments at 5.09.

**Descriptives**

WE

	N	Mean	Std. Deviation	Std. Error
assistant professor or equivalent	221	2.87	0.935	0.063
associate professor or equivalent	70	2.72	0.875	0.105
professor or equivalent	9	2.27	0.745	0.248
Total	300	2.82	0.921	0.053

**Test of Homogeneity of Variances**

WE

Levene Statistic	df1	df2	Sig.
2.122	2	297	.122

**ANOVA**

WE

	Sum of Squares	df	Mean Square	F	Sig.
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Between Groups	3.941	2	1.971	2.344	.098
Within Groups	249.681	297	.841		
Total	253.623	299			

**Robust Tests of Equality of Means**

WE

	Statistic <sup>a</sup>	df1	df2	Sig.
Welch	3.080	2	21.774	.066

a. Asymptotically F distributed.

**4.3 Multiple Comparisons**

Dependent Variable: WE

Games-Howell

(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	Sig.
assistant professor or equivalent	associate professor or equivalent	0.146	0.122	0.456
	professor or equivalent	0.602	0.256	0.099
associate professor or equivalent	assistant professor or equivalent	-0.146	0.122	0.456
	professor or equivalent	0.456	0.269	0.251
professor or equivalent	assistant professor or equivalent	-0.602	0.256	0.099
	associate professor or equivalent	-0.456	0.269	0.251

**iv) Work engagement and total experience**

Work engagement does not vary with total experience. The mean scores of work engagement across the total experience categories namely  $\leq 5$  years,  $>5 \leq 10$  years,  $>10 \leq 15$  years,  $>15 \leq$





20 years and >20 years are tabulated (Table 4.4). They were compared across the groups using one-way ANOVA. The F value at 3.264 was significant at 0.05 level (Table 4.4). The results of ANOVA, suggested that there was significant difference in work engagement across the categories. Hence, the hypothesis H0(6) was rejected. On making multiple comparisons using Least Square Difference (LSD) method, work engagement of faculty members having total experience of > 20 years was found to be significantly different from those with total experience of  $\leq 5$  years as well as  $> 05 \leq 10$  years at 0.05 level of significance.

**Descriptives**

WE

	N	Mean	Std. Deviation	Std. Error
less than 10	208	2.93	.937	.065
10 to 15	81	2.60	.846	.094
more than 20	11	2.29	.721	.218
Total	300	2.82	.921	.053

**Test of Homogeneity of Variances**

WE

Levene Statistic	df1	df2	Sig.
3.130	2	297	.045

**ANOVA**

WE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.220	2	4.610	5.602	.004
Within Groups	244.402	297	.823		
Total	253.623	299			

**Robust Tests of Equality of Means**

WE

	Statistic <sup>a</sup>	df1	df2	Sig.
Welch	6.633	2	27.894	.004



a. Asymptotically F distributed.

Table 4.4 Multiple Comparisons

Dependent Variable:

Games-Howell

(I) Total Experience (in years)		Mean Difference (I-J)	Std. Error	Sig.
less than 10	10 to 15	.323*	.114	.015
	more than 20	.634*	.227	.040
10 to 15	less than 10	-.323*	.114	.015
	more than 20	.311	.237	.412
more than 20	less than 10	-.634*	.227	.040
	10 to 15	-.311	.237	.412

\*. The mean difference is significant at the 0.05 level.

### Finding and Conclusion

The study investigated the relationship between respondents' work engagement and personal or demographic variables like faculty institutions type, designation, total experience, and departments etc. Work engagement was considered as dependent variable and demographic variables were considered as independent variables. In the current study the dependent variable namely work engagement was measured as a scale variable and all independent variables namely the personal variables were measured as categorical variables. Hence, the difference in mean work engagement across the samples categorized on the basis of personal variables was analyzed using one-way analysis of variance (ANOVA). After performing ANOVA, wherever the difference was found to be significant, Post-Hoc tests using Least Square Difference (LSD) were applied. It was found that work engagement of faculty members varies significantly with faculty institutions type, designation, total experience, and departments.



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