



Working women: personality dimensions as predictors of work engagement

Rajeshwari Gwal and Anant Gwal

Acropolis Faculty of Management and Research, DAVV Indore, India
rajeshwarigwal@acropolis.in

Available online at: www.isca.in, www.isca.me

Received 20th May 2019, revised 15th May 2020, accepted 3rd July 2020

Abstract

Work engagement of female employees is crucial and worthwhile for the employers as she is actively involved in setting a positive happy working environment in the organizations. Males and females in organizations have almost similar levels of engagement. The current study tried to study the impact of various personality dimension (extraversion, agreeableness, conscientiousness, emotional stability and openness) on work engagement levels of Married vis-à-vis Unmarried working women in Indore city. Results indicate a moderate Correlation between Personality and Work Engagement ($r=.385$, $p<0.05$). With Multiple Regression when various personality dimensions were predicted it was found that Extraversion (Beta =.251, $p<.05$) and Agreeableness (Beta=.175, $p<.05$) were significant predictors. Conscientiousness (Beta=.175, $p<.05$) was a mild predictor, Emotional Stability (Beta=-.092, $p<.05$) and Openness (Beta=-.165, $p<.05$) were not a significant predictor. Moderately engaged employees can easily drift towards the negative end of the Engagement scale resulting in negative outcomes. Organizations having global presence need to cater to this group of employees. The value of linear regression being 40.7% of the variance in the data clearly indicate that personality does play a vital role in work engagement.

Keywords: Personality, work engagement, big five inventory, ultrect work engagement scale.

Introduction

Working women: It does not matter; what work she does, where she works, how she works, how long she works; what matters is she works-today, tomorrow and the day after – making a difference in her life and to those around her.

Working women are the females in paid employment. Globalization and technological developments have pushed them to speculate and enter into every field of science and technology; resulting into learning, making contributions, resulting into new discoveries and inventions.

Theoretical Framework: Work Engagement: Engaged individuals are mentally vigilant, apparently physically involved and emotionally coupled with their work¹. Engagement involves constructive and affirmative mental state stimulating work related behavior specifically marked by vigor, dedication and absorption². In current scenario of competition, employees have to be highly enthusiastic, energetic and mentally resilient while working and should put in all their efforts with determination even if they face hurdles³.

Personality: Personality of employees working in an organization is an important construct for work engagement. No two employees can have the same levels of work engagement. For a successful organization, there has to be a true match of job and employee skills. If there is a proper match; it is not only beneficial to employees but also to organizations in terms of

positive outcomes like increased productivity, efficiency and growth.

Big five model has personality measures classified as dimensions⁵ which are significantly related to various cultures⁶. These measures are inherited⁷ having genetic base⁸. The magnitude of the personality measures result into diversified personalities⁶.

Extraversion implies an energetic approach and includes traits such as gregarious, social, talkative active. Agreeableness includes traits such as cooperativeness, tolerant, good natured, courteous⁹. Conscientiousness includes traits such as responsible, organized, playful, dependable and hard working. Emotional stability includes calm, relaxed and secured traits. Openness to experience has traits of curiosity, intelligence, broad mindedness, imaginative¹⁰.

Methodology

The study was exploratory in nature. In this study, working women—both married and unmarried—from Indore city were selected for data collection. Non-probability sampling method was used. It was a purposive sampling where respondents were chosen in the age group 25-34 years, 35-44 years and above 45 years working in different sectors with minimum qualification being undergraduate.

Sample: 300 working women which includes 150 married and 150 unmarried women.

Tools for data collection: Two questionnaires were distributed among the subjects for data collection: The Big Five Inventory (BFI) and Utrecht Work Engagement Scale (UWES).

Tools for data analysis: Data was analyzed using SPSS 20. Hypothesis were tested using correlation and multiple regression.

Objectives of study: i. To study the nature and extent of relationship between Independent (personality) and Dependent (Work Engagement) variable. ii. To identify the predictors of work engagement of working women in Indore city.

Hypothesis: i. H_{01} : There is no significant correlation between Personality and Work Engagement. ii. H_{02} : There is no supported relationship between Personality Dimensions and Work Engagement.

Results and discussion

The study has tried to explore the impact of personality dimensions as Independent variable on Work Engagement levels of working women of Indore city. Personality dimensions were Big Five Factor namely extraversion, agreeableness, conscientiousness, emotional stability and openness whereas Work Engagement levels were measured by the levels of Absorption, Dedication and Vigor. Using Enter method Multiple Regression Technique was applied. The P-P Plot in Figure-2 represents the two cumulative distribution functions against each other and clearly assesses how closely the two data sets agree with each other.

The reliability coefficient as seen from Table-1 indicates the consistency of the results of this study.

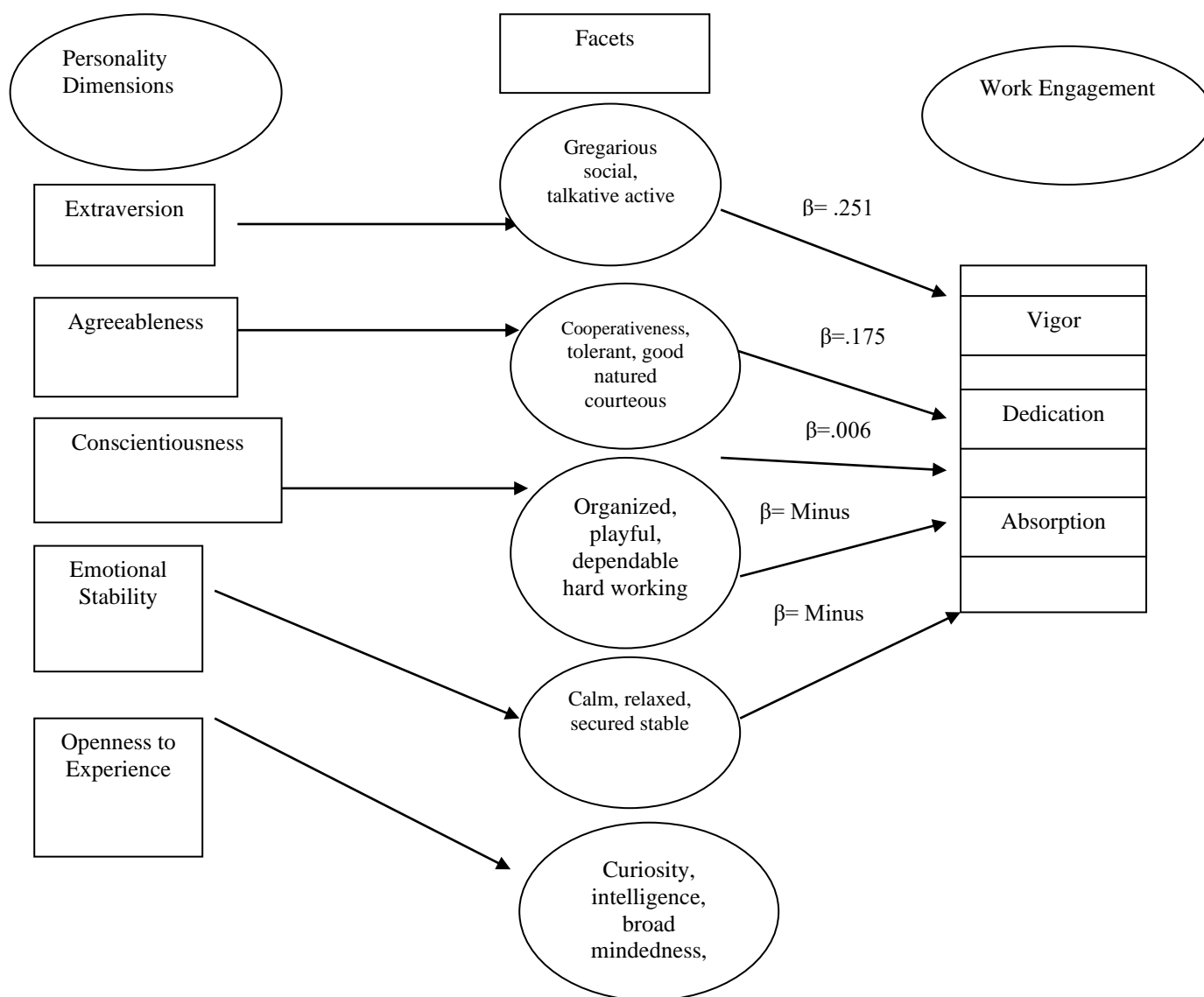


Figure-1: Proposed Research Framework.

Table-1: Reliability analysis of all variables.

Characteristics	Items	Cronbach alpha
Big 5 Inventory	BFI 44-item	0.698
Extraversion	BFI 1, 6R1, 11, 16, 21R, 26, 31R, 36	0.739
Agreeableness	BFI2R, 7, 12R, 17, 22, 27R, 32, 37R, 42	0.644
Conscientiousness	BFI3, 8R, 13, 18R, 23R, 28, 33, 38, 43R	0.725
Emotional Stability	BFI 4, 9R, 14, 19, 24R, 29, 34R, 39	0.752
Openness to Experience	BFI5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44	0.739
Work Engagement	UWES 17-item	0.946
Vigor	UWES 1, 4, 8, 12, 15, 17	0.860
Dedication	UWES 2, 5, 7, 10, 13	0.885
Absorption	UWES 3, 6, 9, 11, 14, 16	0.865

From Table-1; it is seen that the alpha coefficients for the Big Five Inventory and Utrecht Work Engagement Scales are greater than 0.7 and hence the scales are acceptable according to the value given by Nunnally and Bernstein¹¹ (0.70).

The result in Table-2 indicates that the correlation between Personality and Work Engagement of working women is .385. The p-value is .542 which is more than 0.05, the assumed level of significance. This implies that the correlation coefficient between Personality and Work Engagement is high and

statistically significant. Hence there exists a moderate correlation between Personality and Work Engagement.

Table-2: Correlation between Personality and Work Engagement.

Correlation		Personality	Work Engagement
Personality	Pearson Correlation	1	.385
	Sig.(2-tailed)		.542
	N	300	300
Work Engagement	Pearson Correlation	.385	1
	Sig.(2-tailed)	.542	
	N	300	300

The multiple linear regression model summary and overall fit statistics is seen in Table-3; which shows that the adjusted R^2 of our model is .0398 and $R^2 = .407$. This indicates that 40.7% of the variance in the data exists. Durbin-Watson $d=1.747$ (between $1.5 < d < 2.5$) and therefore first order linear autocorrelation in our multiple linear regression data is missing.

From Table-4, the information regarding our model; whether the Independent Variable is a significant predictor of Work Engagement; is seen. The significance value (.026) is less than $p=0.05$. Hence the regression model significantly predicts Work Engagement.

The results indicated that the model was a significant predictor of Work engagement, $F(6,294) = 2.598$, $p = .026$.

Table-3: Regression results testing the relationship between Personality Dimensions and Work Engagement. Model Summary^b.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.638	.407	.398	8.19291	.577	2.598	6	294	.026	1.747

a. Predictors: (Constant), Openness, Extraversion, Agreeableness, Emotional Stability, Conscientiousness. b. Dependent Variable: Work Engagement score.

Table-4: ANOVA^a.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	602.640	6	120.528	2.598	.026 ^b
	Residual	13640.440	294	46.396		
	Total	14243.080	300			

a. Dependent Variable: Work Engagement score, b. Predictors: (Constant), Openness, Extraversion, Agreeableness, Emotional Stability, Conscientiousness

Table-5: Co-efficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	43.605	4.779		9.125	.000	34.200	53.010
Extraversion	.251	.111	.133	2.266	.024	.033	.469
Agreeableness	.175	.106	.099	1.654	.019	-.033	.383
Conscientiousness	.006	.117	.003	.052	.048	-.224	.236
Emotional Stability	-.092	.108	-.053	-.855	.393	-.304	.120
Openness	-.165	.089	-.108	-1.848	.166	-.340	.011

Normal P-P Plot of Regression Standardized Residual

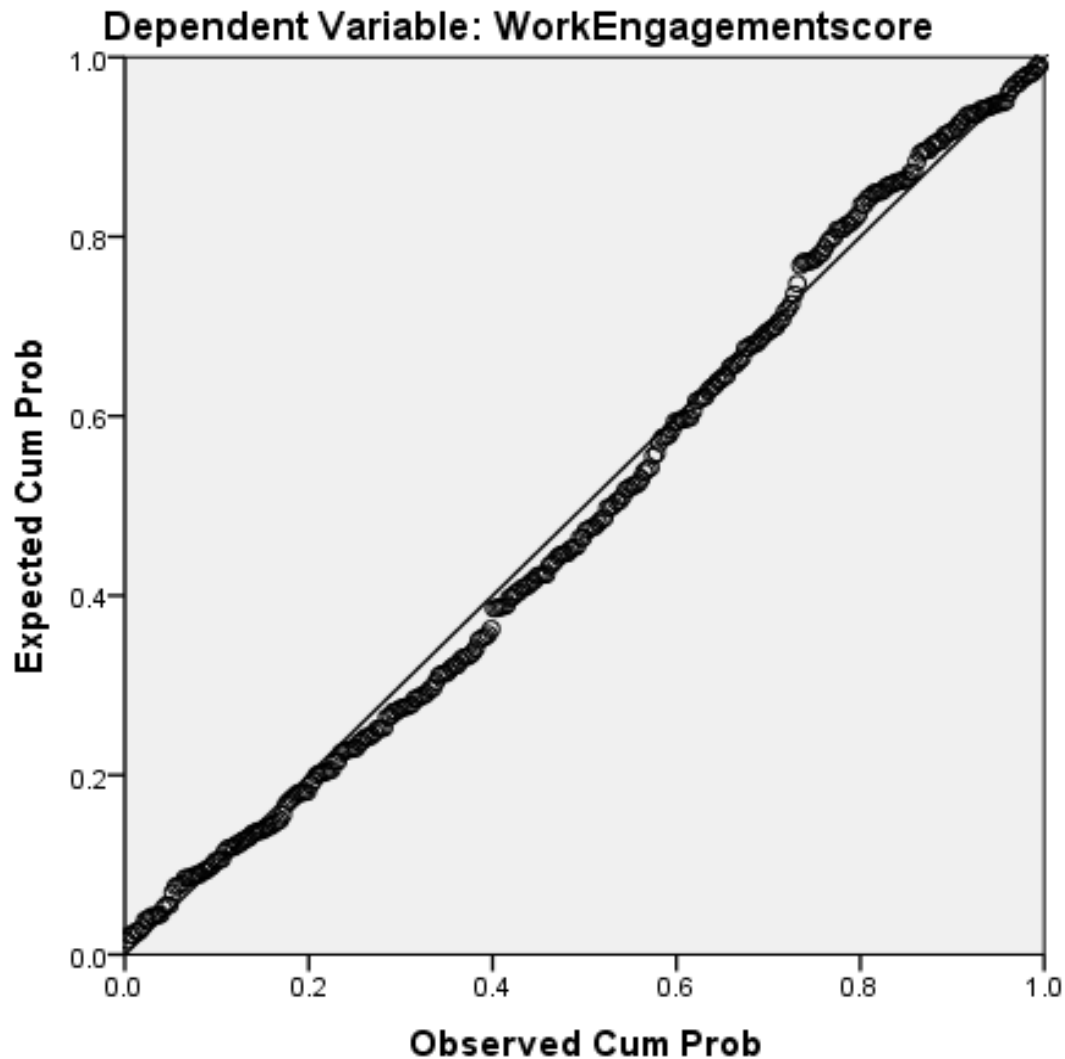


Figure-1: Normal P – P Plot.

Figure-1 is the normal P-P Plot. There are no deviations seen. Residuals are normally distributed.

When various personality dimensions were predicted it was found that Extraversion (Beta =.251, $p < .05$) and Agreeableness (Beta=.175, $p < .05$) were significant predictors. Conscientiousness (Beta =.175, $p < .05$) was a mild predictor, Emotional Stability (Beta =-.092, $p < .05$) and Openness (Beta=-.165, $p < .05$) were not a significant predictor.

Estimated Model Coefficient: The general form of equation is: Predicted Work Engagement = $43.605 + .251(\text{Extraversion}) + .175 (\text{Agreeableness}) + .006 (\text{Conscientiousness}) - .092 (\text{Emotional Stability}) - .165 (\text{Openness})$.

Conclusion

The result reveals that Extraversion and Agreeableness are significant predictors whereas Conscientiousness was a mild predictor. There was no direct relationship between Emotional stability and Openness with work engagement.

High scores for Extraversion predict Work Engagement. Extraversion is signified by constructive and affirmative thoughts, feelings, emotions, behavior and experiences and affect work engagement positively¹². Working women with high levels of Extraversion will experience positive emotions and hence will be motivated indicating more propensity for engagement¹³. Working women demonstrate Agreeableness¹⁴ is by being nice, enjoyable, affectionate, liked and preferred by all and be likely to move in unison with different individual's interests¹⁵.

Conscientious people are having the ability to get involved more striving for dedication and absorption both¹⁶. Individuals who are goal orientated and more likely to achieve are Conscientiousness¹⁷. Conscientiousness moderately predicts work engagement, the reason being a few may be more responsible at personal front.

Limitations of the study: Since purposive sampling was used, the respondents selected does not fully represent the general population. Also the respondents were picked up from variety of occupations. Effects which are occupational, organizational or sector specific may have an outcome as biasness in the result interpretation. Longitudinal or time series data collection approach can add information in the relations between personality dimensions and work engagement.

Scope of the study: Earlier researches have shown that Big Five personality dimensions are related to work engagement, especially Extraversion and Conscientiousness predict work engagement in various occupations^{18,19}. These researches are being done in different context in different countries .In India; especially in Indore, psychometric tests are not used by all companies or for all types of vacancies. Hence the skills derived after selection may not be the representative for the task

allocated and hence skill shortage may exists. Hence research regarding the impact of personality dimensions on work engagement is therefore necessary.

Alternatively recruitment costs can be minimized by using Psychometric tests during selection process. These tests can lead to filtration of eligible candidates and selecting the best candidate becomes easy. Also the right person with the right skills are available to managers for recruitment.

These tests can be used to assess the personality dimensions which predict work engagement.

The present study has been done to study the predictors of work engagement in working women. A comparative study can be done between married and unmarried working women. It can be further done on a comparison between Working Men and Women. The impact of Personality can be studied on Work Engagement of various Demographic variables. The results of this study can be used by both public and private sector organizations facing problems related to employee engagement.

References

1. Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
2. Bakker, A. B., Schaufeli, W. B., Leiter, M. P. and Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work and Stress*, 22(3), 187-200.
3. Bakker, A. B., Albrecht, S. L., and Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20, 4-28.
4. Goldberg, L., (1990). An alternative description of personality: The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229.
5. Hogan, R., Hogan, J. and Roberts, B.W. (1996). Personality measurement and employment decisions: Questions and Answers. *American Psychologist*, 51, 469-477.
6. McCrae, R. and Costa, P., (1997). Personality trait structure as a human universal. *American Psychologist*, 52, 509-516.
7. Jang, K.L., Livesley, W.J. and Vernon, P.A. (1996). Heritability of the big five personality dimensions and their facets: A twin study. *Journal of Personality*, 64, 577-591.
8. Digman J.M. (1989). Five robust trait dimensions: Development, stability, and utility. *J. Pers.*, 57(1), 195-214.
9. John, O. P. and Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin and O. P. John (Eds.), *Handbook of personality: Theory and research*. New York: Guilford Press. pp. 102-138.

10. Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American psychologist*, 48(1), 26.
11. Nunnally, J. C., and Bernstein, I. H. (1994). Psychometric theory. New York, NY: McGraw-Hill.
12. Cattell, R. B. (1946). Description and measurement of personality. Oxford, England: World Book Company.
13. Langelaan, S., Bakker, A. B., Van Doornen, L. J. and Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference?. *Personality and Individual Differences*, 40(3), 521-532.
14. Barrick, M. R., and Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personal Psychology*, 44(1), 1e26.
15. Graziano, W. G., and Tobin, R. M. (2009). Agreeableness. In M. R. Leary and R. H. Hoyle (Eds.). *Handbook of Individual Differences in Social Behavior*. New York: Guilford Press.
16. Mostert, K. and Rothmann, S. (2006). Work-related well-being in the South African Police Service. *Journal of Criminal Justice*, 34(5), 479-491.
17. Barrick, M. R., Mount, M. K., and Strauss, J. P. (1993). Conscientiousness and performance of sales representatives - test of the mediating effects of goal-setting. *Journal of Applied Psychology*, 78, 715-722.
18. Schneider, M.H. (1999). The relationship of personality and job settings to job satisfaction. *Dissertation Abstracts International: Section B: Science and Engineering*, 59, 6103.
19. Vinchur, A.J., Schippmann, J.S., Switzer, F.S. and Roth, P.L. (1998). A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology*, 83, 586-597.