

# Efficacy of Hiring Strategies for Mechanical Engineers in Manufacturing sector: Work Engagement, Job Satisfaction, and Turnover Intention

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**Abstract** - The study aims to investigate the relationship of work-related variables (work engagement, job satisfaction, and turnover intention) among internally and externally hired employees of Manufacturing sector. Utrecht work engagement scale has been used to measure work engagement, Warr-cook-Wall scale has been used for measuring job satisfaction, and for the calculation of turnover intention Boshoff and Allen scale is used. The study is analyzed using a statistical package of social science (SPSS 21.0). The reliability of the individual items was measured using Cronbach's alpha. Factor analyses are used (maximum likelihood factoring with varimax rotation). The findings reveal that there is a moderate significant association between the work-related variable and the internally hired employee who is more engaged at their work, more satisfied in their job, and have less intention to leave their organization as compared to externally hired employees.

**Index Terms** - work engagement, job satisfaction, turnover intention, internal and external hiring, Manufacturing.

## INTRODUCTION

Employees are the human resources of the organization. They are considered as an asset of the organization who set a competitive advantage for the company. The challenge in the current time is that organizations are facing a high attrition rate. To reduce the attrition rate, organizations are focusing on work-related behavior such as job embeddedness, work engagement, job satisfaction, organizational culture, employee loyalty, and many more, to engage employees at the workplace and also to generate the sense of commitment and sense of belongingness at the workplace. This study focuses on work engagement, job

satisfaction, and turnover intention. Work engagement is the level at which the employee is engaged at their work and like their work. Work engagement leads to creativity, task performance, and satisfaction [6]. Job satisfaction is the extent to which the employee is satisfied with their work. It includes various aspects to analyze the job satisfaction such as current position with the roles and responsibility, support from the peer at the workplace, environment, and many more as identified by many researchers. Turnover intention is the intention of the employee to quit the organization. We can identify this among employees who are continuously thinking to leave the organization and exploring possibilities to do so. It is an important process of HR to hire the right person to fill up vacancies in the organization. The process of recruitment does not only mean attracting an adequate pool of applicants for the position to be hired but also analyzing which sources will be most fruitful which leads to important decisions relating to internal and external hiring. The aim of this study is to explore the influence of the method of hiring position (internal vs external hiring) on the work-related variables: work engagement, job satisfaction, and turnover intention.

## LITERATURE REVIEW

Hiring employees externally or internally has been an important topic of debate [9] among HR strategists and academicians. Internal promotion is the motivation for employees to work hard [10] as it provides an incentive to move up the hierarchy [11]. This is also challenging for internal candidates as it requires adaptation to a new job which may lead to a drop in their performance [1]. When hiring externally, this adaptation period decreases for high-performing candidates. Organizations hire such employees

from competitors in hope that their skills will enhance the performance of the organization [21]. On the other hand, internal candidates have knowledge gained in the same working environment which gives them an edge over external candidates [4]. Work engagement interplays with job satisfaction and employee loyalty and also work engagement strongly predicts employee loyalty and significantly predicts job satisfaction [28]. A high level of work engagement and support of co-worker's results in high job satisfaction and reduces employee turnover [17]. Work engagement and compensation fairness have an inverse relationship with the intent to leave the organization. Job satisfaction is the mediating effect and age plays no role in identifying the turnover intent [8]. There is a linkage between work engagement and its inference with the personal life but work interference does not disturb the turnover intention [27]. There is an inverse relationship between work engagement and turnover intention [16]. The level of job embeddedness helps to predict the work engagement of the employee towards their job in the organization [22]. The employees must be engaged in their work but should not be workaholics [3] as it will lead to stress and thereby create an intense environment to work [25]. The related concept of work engagement is job involvement, job performance, psychological state, organizational commitment, challenging work, positive environment, and outcome [26]. However, there is no direct relationship between job satisfaction and turnover intention [14]. The problem of work engagement can be minimized through efficient strategies implementation such as compensation system, job rotation, training, and development [20]. The important predictor of engagement is the job and personal resources which will make the employee more willing to put their extra efforts, be more innovative and more efficient, and effective [7]. A satisfactory work environment, career growth opportunities, and job enrichment are the prime factors behind employee engagement as this will help the employer to retain its employees [13]. Usually, there is a generalized relationship across the organization at the business unit level in terms of the work engagement and performance of the organization [12]. There is no significant difference in the organizational performance and organizational commitment whether the employees are externally hired or internally hired [13]. The result shows that the performance of the external is lower than the internal hired employees [8]. However, there is no such difference in the job satisfaction of the employees across the level but in the case of work engagement and turnover intention [2] [3], line managers have lower work engagement and higher turnover intention [15]. The millennial has a higher intention to leave the organization as compared to the older generation and also millennials feel a lack of vigor and mental health deterioration at the workplace. Further, millennials quickly lose the enthusiasm, sense of significance, and challenges at the workplace in comparison to baby boomers [19].

## MATERIAL AND METHODS

### OBJECTIVE

- To study the relationship between work engagement, job satisfaction and turnover intention among manufacturing sector employees.
- To study the impact of the method of hiring position on work engagement among manufacturing sector employees.
- To study the impact of the method of hiring on job satisfaction among manufacturing sector employees.
- To study the impact of the method of hiring position on turnover intention among manufacturing sector employees.

### SAMPLE AND PROCEDURE

Employees working in manufacturing sector, in national capital region, were considered for the study. The response was collected from 88 employees. A convenient sampling method has been adopted. Respondents comprised of 51% are male and 49% female out of which 43% were internally hired and 57% were externally hired, employees.

### INSTRUMENTS

Work engagement: the valid questionnaire developed is named the UWES (Utrecht work engagement Scale). It consists of 17 items in total which have three dimensions- vigor (6 items), dedication (5 items), and absorption (6 items). An example for vigor is like "At work, I feel like bursting with energy"; for dedication is like "My job inspires me" and for absorption is like "time flies when I am at work" at % point Likert scale.

Job Satisfaction: The 10-item scale of the Warr-cook-Wall questionnaire is used to measure the job satisfaction of the employees. Example "Are you happy with the working hours" at 5-point-Likert scale.

Turnover Intention: The three-item scale from Boshoff and Allen is used to measure turnover intention. Example "How often do you think to quit the job" at 5 points Likert scale.

Table 1: Scale used for the study

| Part of scale | Construct Measure  | No. of Item | Reference                    |
|---------------|--------------------|-------------|------------------------------|
| Part A        | Work engagement    | 17          | Utrechtwork engagement Scale |
| Part B        | Job satisfaction   | 10          | Warr-cook-Wall               |
| Part C        | Turnover intention | 3           | Boshoff and Allen scale      |

### Data Analysis

The data was first entered in the statistical package of social science (SPSS 21.0). Descriptive analysis was done. The reliability of the individual items was done using Cronbach's alpha. Then factor was applied (maximum likelihood factoring with varimax rotation).

### Reliability

Alpha (Cronbach) reliability of the analysis is 0.952 which indicates the high internal consistency, based on

average inter-item correlation (Table 2). The item-wise reliability is shown in Tables 3 and 4.

**Table 2: Overall Reliability of Instruments**

|                  |             |
|------------------|-------------|
| Cronbach's Alpha | No of Items |
| 0.952            | 30          |

**Table 3: Reliability Statistic of Individual Item**

| Item-Total Statistics  |                            |                                |                                  |                                  |
|--|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|  | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| At my work, I feel bursting with energy.                                 | 96.3864                    | 418.309                        | 0.65                             | 0.95                             |
| I find the work that I do full of meaning and purpose.                   | 96.2045                    | 413.406                        | 0.735                            | 0.949                            |
| Time flies when I am working.  | 96.25                      | 413.385                        | 0.734                            | 0.949                            |
| At my job, I feel strong and vigorous                                    | 96.3864                    | 409.757                        | 0.79                             | 0.949                            |
| I am enthusiastic about my job.  | 96.1364                    | 410.694                        | 0.788                            | 0.949                            |
| When I am working, I forget everything else around me.                   | 96.7614                    | 416.506                        | 0.647                            | 0.95                             |
| My job inspires me.  | 96.3636                    | 411.108                        | 0.744                            | 0.949                            |
| When I get up in the morning, I feel like going to work.                 | 96.625                     | 416.766                        | 0.606                            | 0.95                             |
| I feel happy when I am working intensely.                                | 96.0682                    | 413.903                        | 0.762                            | 0.949                            |
| I am proud of the work that I do.  | 96.1591                    | 411.009                        | 0.704                            | 0.949                            |
| I am immersed in my work.  | 96.3864                    | 414.286                        | 0.708                            | 0.949                            |
| I can continue working for very long periods at a time                   | 96.3182                    | 415.3                          | 0.696                            | 0.95                             |
| To me, my job is challenging.  | 96.3068                    | 418.284                        | 0.62                             | 0.95                             |
| I get carried away when I am working.                                    | 96.7159                    | 418.16                         | 0.644                            | 0.95                             |
| At my job, I am very resilient, mentally.                                | 96.2841                    | 417.102                        | 0.776                            | 0.949                            |
| It is difficult to detach myself from my job                             | 96.6023                    | 418.058                        | 0.696                            | 0.95                             |
| At my work, I always persevere, even when things do not go well          | 96.4773                    | 418.16                         | 0.686                            | 0.95                             |
| Working hours are convenient for me                                      | 96.2159                    | 420.079                        | 0.551                            | 0.951                            |
| Freedom at workplace is given to me                                      | 96.2614                    | 418.954                        | 0.598                            | 0.95                             |
| The lighting and other arrangements in the office are satisfactory       | 96.1023                    | 417.334                        | 0.658                            | 0.95                             |
| I feel I have too much work to do  | 96.4091                    | 419.509                        | 0.609                            | 0.95                             |
| I feel I'm being paid a fair amount for the work I do                    | 96.7273                    | 421.35                         | 0.553                            | 0.951                            |
| Opportunity to use my ability is given in the organization               | 96.3636                    | 421.338                        | 0.569                            | 0.951                            |
| I feel responsible at work   | 96.4773                    | 422.505                        | 0.515                            | 0.951                            |
| I'm recognized for my work   | 96.375                     | 415.272                        | 0.678                            | 0.95                             |
| Colleagues and fellow workers motivate me to achieve organizational goal | 96.4091                    | 414.29                         | 0.717                            | 0.949                            |
| I'm overall satisfied with the job                                       | 96.25                      | 412.282                        | 0.776                            | 0.949                            |
| I often think about quitting my present job                              | 97.2841                    | 439.723                        | 0.148                            | 0.954                            |
| I will probably look for a new job in the next year                      | 97.0455                    | 438.113                        | 0.147                            | 0.955                            |
| As soon as possible, I will leave the organization                       | 97.3864                    | 441.895                        | 0.084                            | 0.955                            |

**Table 5: Factor Analysis**

| FACTOR NAME  | ROTATED FACTOR MATRIX  |         |   |   |   | EIGEN VALUES | % OF VARIANCE |   |
|--|--|---------|---|---|---|--------------|---------------|---|
|  | ITEMS  | FACTORS |   |   |   |              |               |   |
|  |  | 1       | 2 | 3 | 4 |              |               | 5 |
| WORK ENGAGEMENT  | At my work, I feel bursting with energy.                                 | 0.714   |   |   |   |              |               |   |
|  | I find the work that I do full of meaning and purpose.                   | 0.671   |   |   |   | 7.863        | 26.209        |   |
|  | Time flies when I am working   | 0.748   |   |   |   |              |               |   |
|  | At my job, I feel strong and vigorous                                    | 0.666   |   |   |   |              |               |   |
|  | I am enthusiastic about my job.  | 0.75    |   |   |   |              |               |   |
|  | When I get up in the morning, I feel like going to work.                 | 0.558   |   |   |   |              |               |   |
|  | I feel happy when I am working intensely.                                | 0.781   |   |   |   |              |               |   |
|  | I can continue working for very long periods at a time                   | 0.58    |   |   |   |              |               |   |
|  | I get carried away when I am working.                                    | 0.423   |   |   |   |              |               |   |
|  | At my job, I am very resilient, mentally                                 | 0.631   |   |   |   |              |               |   |
|  | At my job, I am very resilient, mentally                                 | 0.696   |   |   |   |              |               |   |
|  | At my work, I always persevere, even when things do not go well          | 0.611   |   |   |   |              |               |   |
|  | The lighting and other arrangements in the office are satisfactory       | 0.629   |   |   |   |              |               |   |
| When I am working, I forget everything else around me. | 0.636  |         |   |   |   |              |               |   |
| ATTITUDE TOWARDS JOB                                   | My job inspires me.  | 0.419   |   |   |   | 4.715        | 15.717        |   |
|  | I am proud of the work that I do.  | 0.775   |   |   |   |              |               |   |
|  | I am immersed in my work   | 0.767   |   |   |   |              |               |   |
|  | To me, my job is challenging   | 0.747   |   |   |   |              |               |   |
|  | I feel I have too much work to do  | 0.762   |   |   |   |              |               |   |
| REWARDS & FACILITIES                                   | Working hours are convenient for me                                      | 0.535   |   |   |   |              |               |   |
|  | Freedom at work place is given to me                                     | 0.41    |   |   |   | 3.082        | 10.274        |   |
|  | I feel I'm being paid a fair amount for the work I do                    | 0.749   |   |   |   |              |               |   |
|  | Opportunity to use my ability is given in the organization               | 0.673   |   |   |   |              |               |   |
|  | I feel responsible at work   | 0.869   |   |   |   |              |               |   |
| ORGANIZATION SUPPORT                                   | I'm recognized for my work   | 0.427   |   |   |   |              |               |   |
|  | Colleagues and fellow workers motivate me to achieve organizational goal | 0.779   |   |   |   |              |               |   |
| INTENTION TO LEAVE                                     | I'm overall satisfied with the job                                       | 0.488   |   |   |   | 2.643        | 8.809         |   |
|  | I often think about quitting my present job                              | 0.835   |   |   |   |              |               |   |
|  | I will probably look for a new job in the next year                      | 0.849   |   |   |   | 2.336        | 7.786         |   |
|  | As soon as possible, I will leave the organization                       | 0.867   |   |   |   |              |               |   |

**Table 4**

| KMO and Bartlett's Test                          |                    |          |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | 0.826    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 2595.263 |
|  | Df                 | 435      |
|  | Sig.               | 0        |

**Table 6**

| Model Summary |                   |          |                   |                            |                   |          |     |     |               |
|---------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|               |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1             | .213 <sup>a</sup> | 0.045    | -0.001            | 2.55278                    | 0.045             | 0.983    | 4   | 83  | 0.422         |

**Table 7**

| ANOVA |            |                |    |             |       |                   |
|-------|------------|----------------|----|-------------|-------|-------------------|
| Model |            | Sum of Squares | df | Mean Square | F     | Sig.              |
| 1     | Regression | 25.613         | 4  | 6.403       | 0.983 | .422 <sup>b</sup> |
|       | Residual   | 540.885        | 83 | 6.517       |       |                   |
|       | Total      | 566.498        | 87 |             |       |                   |

a. Dependent Variable: TI

b. Predictors: (Constant), OS, RF, ATW, WE

**Table 8**

| Coefficients                |            |                           |       |      |                         |       |  |
|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|--|
| Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. | Collinearity Statistics |       |  |
| B                           | Std. Error | Beta                      |       |      | Tolerance               | VIF   |  |
| 5.58                        | 1.265      |                           | 4.41  | 0    |                         |       |  |
| 0.053                       | 0.071      | 0.145                     | 0.747 | 0.46 | 0.305                   | 3.283 |  |
| 0.137                       | 0.104      | 0.206                     | 1.321 | 0.19 | 0.471                   | 2.124 |  |
| -0.007                      | 0.113      | -0.009                    | -0.07 | 0.95 | 0.577                   | 1.732 |  |
| -0.562                      | 0.346      | -0.284                    | -1.62 | 0.11 | 0.375                   | 2.667 |  |

a. Dependent Variable: TI



**Discussion**

The study aimed to find out the significant relationship between work engagement, job satisfaction, and turnover intention. According to the result, there is no significant relationship that can be observed of turnover intention with

work engagement and job satisfaction. This is contrary to the literature and may be because of the pandemic situation, where employees are having high risks of losing their jobs. Thus, the behavior which is exhibited by them is less rational or expected. Employees may have low intention to leave their job even though work engagement and satisfaction are less. However, there is a positive relationship between work engagement and job satisfaction. The employees who are internally hired are more engaged at work, satisfied with their job, and have fewer intentions to leave the organization. However, the employee who is externally hired are also well engaged with their work but less satisfied and also more intend to leave the organization comparative to externally hired employees.

**Conclusion**

The organization should focus on the internal hiring policies in the organization as their priority. The employees who are internally hired are more engaged, satisfied, and less intent to leave the organization as compared to externally hired employees. As nowadays the employee seeks career growth and if they don't see any aspect of their career growth, they tend to leave the organization. They want to grow with the organization and contribute to it. In the recent trend, every organization wants to become a high-performance organization. So right people to be placed at the right time at the right position. And also, for the externally hired employee's internal growth they must be taken care of to enhance loyalty and organization commitment. Hence, the career aspect is an important phenomenon to reduce turnover intention.

**Limitation and Future Scope**

This study is limited to the Delhi NCR region and convenient sampling is adopted. A larger population with variations in age, gender, cultural background can make the research more interesting. For the future scope, the same research can be conducted with the larger variable. the scholar can also conduct the comparison of internal and external hired employees with other work-related variables such as employee loyalty, organization commitment, job involvement, etc. Also, further research on work engagement, job satisfaction, and turnover intention can be studied in comparison with other aspects such as traditional v/s online recruited employees or different levels of employees, and many more.

**REFERENCES**

[1] Acosta, P. (2010). Promotion dynamics the Peter Principle: Incumbents vs. external hires. *Labour Economics*, 17(6), 975-986.

[2] Agoi, L. F. (2015). 'Effect Of Work Engagement on Employee Turnover Intention in Public Sector, Kenya'. *International Journal of Economics, Commerce and Management*, United Kingdom Vol. III, Issue 12.

[3] Ahmed, I. & Khan, M. K., (2015). 'Predicting Work Motivation Through Job Satisfaction and Turnover Intentions: The Explanatory Role of Heavy Work Investment'. The Lahore Journal of Business.

[4] Buckman, D. G., & Tran, H. (2018). Internal and External Elementary Principal Hiring and Minimal Student Achievement: A 5-Year Cohort Model. International Journal of Educational Leadership Preparation, 13(1), 82-99.

[5] Bakker, B. A. & Demerouti, E., (2008). 'Towards a model of work engagement'. Career Development International Vol. 13 No. 3.

[6] Bakker, A.B. (2017), "Strategic and proactive approaches to work engagement", Organizational Dynamics, Vol. 46, pp. 67-75

[7] Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. Journal of educational psychology, 99(2), 274.

[8] Berry, L. M., (2010). 'Predicting Turnover Intent: Examining the Effects of Employee Engagement, Compensation Fairness, Job Satisfaction, and Age'.

[8] Bidwell, M., (2010). 'Paying More to Get Less: The Effects of External Hiring Versus Internal Mobility'.

[9] Bidwell, M. (2017). Managing talent flows through internal and external labor markets. The Oxford handbook of talent management, 283-300.

[10] DeVaro, J. (2006). Strategic promotion tournaments and worker performance. Strategic Management Journal, 27(8), 721-740.

[11] DeVaro, J. (2020). Internal hiring or external recruitment? IZA World of Labor.

[12] Harter, J. K., Schmidt, F. L., Agrawal, S. & Plowman, S. K., (2012). 'The Relationship Between Engagement At Work And Organizational Outcomes'. Meta-Analysis 2012.

[13] Imam, A. & Muhammad Shafique, M., (2014). 'Impact of Employee Engagement in Retaining Employees Through Mediating Effect of Job Satisfaction and Organizational Commitment and Moderating Effect of Job Stress'. Journal of Applied Environmental and Biological Sciences

[14] Lee, L. L., Huang, S. H. & Zhao, C. Y., (). 'A Study On Factors Affecting Turnover Intention Of Hotel Employees'. Asian Economic and Financial Review 2(7).

[15] Lu, L., Lu, A. C. C., Gursoy, D. & Neale, N. R., (2016) Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees'. International Journal of Contemporary Hospitality Management, Vol. 28

[16] Ndayiziveyi Takawira, N., Melinde Coetzee, M. & Schreuder, D. (2014). 'Job embeddedness, work engagement and turnover intention of staff in a higher education institution: An exploratory study'. SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur.

[17] Orgambidez-Ramos, A., & de Almeida, H. (2017). Work engagement, social support, and job satisfaction in Portuguese nursing staff: A winning combination. Applied Nursing Research, 36, 37-41.

[18] Pandey, P. & David, S. (2013). 'A Study of Engagement at Work: What drives Employee Engagement?'. European Journal of Commerce and Management Research (EJCMR).

[19] Park, J., & Gursoy, D. (2011). Generation effect on the relationship between work engagement, satisfaction, and turnover intention among US hotel employees.

[20] R.Umamheswari, R. & Swarnalatha, (2015). 'Impact Of Work Engagement On Work Satisfaction: A Study On Higher Education Faculties'. IJARIE-ISSN(O)-2395-4396

[21] Rao, H., & Drazin, R. 2002. Overcoming resource constraints on product innovation by recruiting talent from rivals: A study of the mutual fund industry, 1986-94. Academy of Management Journal, 45: 491-507.

[22] Ringl, R. W., (2013). 'The Relationship between Job Embeddedness and Work Engagement'.

[23] Roach, K. and Dixon, M.A. (2006), "Hiring internal employees: a view from the field", Journal of Sport Management, Vol. 20 No. 2, pp. 137-158

[24] Pandey, S., & David, S. (2013). A study of engagement at work: What drives employee engagement?

[25] Salahudin, S. N., Alwi, M. N. R., Baharuddin, S. S. B., Santhasaran, Y. & Balasubramaniam, Vishalni, (2016). 'The Relationship between Occupational Stress, Employee

Engagement and Turnover Intention'. 3rd International Conference on Business and Economics.

[26] Schaufeli, W. B. & Bakker A. B., (nd.). 'Defining and measuring engagement: Bringing clarity to concept'.

[27] Schilling, K., (2014). 'The Relationship Between Job Engagement, Work Interference With Personal Life, And Turnover Intentions'.

[28] Vokić, N. P. & Tomislav Hernaus, T., (2015). 'The triad of job satisfaction, work engagement and employee loyalty –The interplay among the concepts'. The Jubilee 5th South-East European (SEE) Meeting & Scientific Conference of Management Departments 'Entrepreneurial Society: Current Trends and Future Prospects in Entrepreneurship, Organization and Management.