

# INFLUENCE OF BEHAVIOURAL FACTORS ON ADOPTION OF HR ANALYTICS IN SELECTED INDUSTRIES AT CHENNAI

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## Abstract

In today's era HR analytics is a great tool for improvement for organizations. It is seen as a source of core advantage and uses current information to enable future ROI. The research tries to identify influence of behavioural factors on adoption of HR analytics in selected industries at Chennai. The data was collected from 50 HR managers/Executives through snowball sampling technique. It is found that the general self-efficacy and quantitative self-efficacy of behavioural factors significantly influences organizational performance. The analysis identified that the general self-efficacy and quantitative self-efficacy of behavioural factors significantly influences adoption of HR analytics. Finally, the research discovered that there is influence of adoption of HR analytics on organizational performance in selected industries at Chennai. Hence, it is concluded that organizations should create a positive work culture and improve the level of employee engagement. It is suggested that organizational performance levels can be improved using HR Analytics.

**Keywords:** General Self-Efficacy, Quantitative Self-Efficacy, Behavioural Factors, Adoption of HR Analytics and Organizational Performance

## INTRODUCTION

Companies are experiencing growth with good turnover in all their business activities. Also, HR is not independent of digital technology. Digitization of HR is a software tool to gain fundamental insights, metrics and adoption of HR analytics for real-time and advanced decision making. Also, many studies have found that HR analytics can be a game-changer when implemented in HR. It helps companies to retain employee, develop skills and overcome competitiveness with other companies. In today's era HR analytics is a great tool for improvement for organizations. It is seen as a source of core advantage and uses current information to enable future ROI. Many studies have found that HR analytics has helped in improving management and decision making among other functions. Despite the many benefits of HR analytics, adoption of HRA among HR professionals remains sluggish due to barriers to awareness and adoption of technology.

Several studies have found that the influence of behavioral factors (general self-efficacy, quantitative self-efficacy, effort expectancy and performance expectancy) on the adoption of HR analytics is high. All the studies related to this have been done worldwide. There are few studies at Indian level. This study is conducted to identify the impact of behavioral factors such as general self-efficacy and quantitative self-efficacy on adoption of HR analytics.

## REVIEW OF LITERATURE

Shahzad, et al. (2023) discovered that job productivity was influenced by motivational and behavioral factors. Tahir Hussain, et al. (2023) organisational performance was influenced by organizational environmental factors such as organizational culture, working conditions, political factors, human resource management, economic factors, organizational structure and leadership.

Steven McCartney and Na Fu (2022); Zeidan, et al. (2020); Lakshmi and Pratap (2016) identified that organizational performance was influenced by HR analytics. Tanya Nagpal, et al. (2022) discovered that SMEs performance was influenced by HR Analytics.

Susmita Ekka and Punam Singh (2022) have discovered that behavioral intention to use HRA was influenced by performance expectancy and effort expectancy. The research also discovered that organization culture negatively moderates the relationship between HRA adoption behavior and adoption intention.

Rimsha Ameer and Pratibha Garg (2022) discovered that there is positive significant impact of effort expectancy, performance expectancy, facilitating condition and social influence on behavioral intention to use HR analytics.

Hassan Fehan and Osaro Aigbogun (2022) discovered that performance of construction firms was influenced by both institutional pressures and external environmental factors. Ezenekwe Chikaodili (2020); Nnamani meka and Ajagu Helen Eyuche (2014) discovered that firms' productivity was influenced by technological environment and economic environment.

HR analytics has established to be a game-changer, to develop decision-making skills, improve employee skills and managing other tasks (Van der Togt & Rasmussen, 2017; Mohammed & Quddus, 2019; Wandhe, 2020).

Alamelu, et al. (2017) discovered that the overall HRA adoptability was not influenced by self efficacy, social influence, quantitative efficacy and performance outcome & effort.

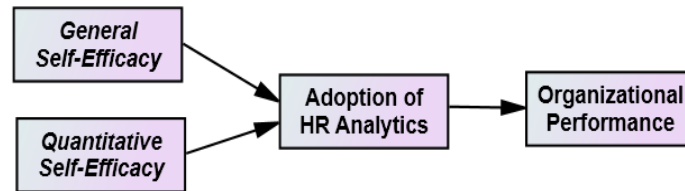
Kabra, et al. (2017); Venkatesh, et al. (2000) discovered that behavioural intention and adoption of HRA was strongly influenced by performance expectancy for acceptance of new technology. Adeoye, et al. (2012) discovered that organisational performance was influenced by the external business environment.

Job performance was influenced by performance expectancy (Venkatesh, et al. 2003). Performance expectancy communicates to the individual's observation, i.e., HR professionals utilizing HRA will improve their employees' work performance.

### Research Gap

There has been a lot of research done on the adoption of HR analytics and behavioural factors in worldwide, but very few researches have been done in the Indian context. Similarly, the behavioural factors and adoption of HR analytics has not been addressed in selected industries in Chennai.

## FRAMEWORK



**Figure 1: Conceptual framework**

## Need For the Study

The findings of this study will help industries and policy makers. This study will help identify the influence of behavioural factors on adoption of HR analytics in selected industries at Chennai. Findings from this study can help policy makers' adoption of HR analytics, increase their organizational performance. Findings from this study will help industries to adopt policies and processes to enable transparent, quick and efficient decision making for providing a better work environment with strong focus on performance to enhance employees' job satisfaction and reduced turnover intention.

## Objectives

- To discover the influence of behavioural factors on adoption of HR analytics.
- To assess the influence of adoption of HR analytics on organizational performance.

## Hypotheses

- There is no influence of behavioural factors on adoption of HR analytics.
- There is no influence of adoption of HR analytics on organizational performance.

## Materials and Methods

In order to explore the influence of behavioural factors on adoption of HR analytics a descriptive research design is employed by the researcher. Data is collected from HR managers/Professionals in selected industries at Chennai through a standardized questionnaire. This descriptive research design is employed to explore the relationship between behavioural factors, adoption of HR analytics and organizational performance.

## Questionnaire Design

**Table 1: Questionnaire Construction**

| S. No. | Variable                   | Items | Author                      |
|--------|----------------------------|-------|-----------------------------|
| 1      | Demographic Profile        | 11    | ---                         |
| 2      | Behavioural factors        | 18    | Developed by the Researcher |
| 3      | Adoption of HR Analytics   | 29    |                             |
| 4      | Organizational Performance | 25    |                             |

Data is collected from HR managers/Professionals in selected industries at Chennai through a well-designed questionnaire. The questionnaire construction for this study is divided into four parts. The first part of the questionnaire is arranged in such a way to know the demographics profile of the HR managers/Professionals, the second part is behavioural factors, the third part is adoption of HR analytics and the fourth part is organizational performance. Except first part, all the four sections are constructed with multiple choice questions. The first part is set up as a category and the other three as a measuring scaling technique.

### Reliability

Pilot study was done to confirm that the results of this study questionnaire are reliable. The questionnaires are verified by involving fifty HR managers/Professionals in selected industries at Chennai. Based on the HR managers/Professionals' opinion, some changes are made in the questionnaire as suggested by the HR managers/Professionals. Cronbach's alpha tool is employed to test the reliability of the research variables. All the variables of this questionnaire are above 0.70 which shows that it is reliable. This means that the set of questionnaire has a high reliability value. Based on this result, it is statistically recommended that the questionnaire set can be implemented for final analysis.

**Table 2: Reliability of the research**

| S. No. | Variable                   | Items | Cronbach's Alpha |
|--------|----------------------------|-------|------------------|
| 1      | Behavioural factors        | 18    | 0.84             |
| 2      | Adoption of HR Analytics   | 29    | 0.91             |
| 3      | Organizational Performance | 25    | 0.89             |

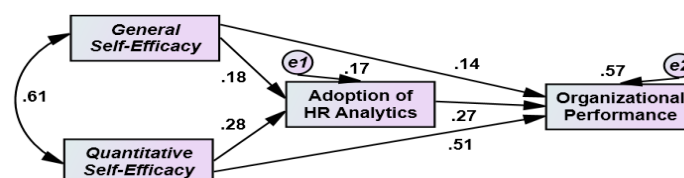
### Sampling Technique

In this study, random sampling technique has been applied to collect the primary data from HR managers/Professionals in selected industries at Chennai. In this way 50 HR managers/Professionals are approached to collect the primary data in Chennai.

### Statistical Tools

Path analysis is used to estimate model by probing the relationship between behavioural factors, adoption of HR analytics and organizational performance. The researcher has employed the path analysis for impact of behavioural factors on organizational performance with respect to adoption of HR analytics.

## RESULTS AND DISCUSSION



**Figure 2: Influence of behavioural factors on adoption of HR analytics**

**Table 3: Model Fit Indication**

| S. No. | Model Fit Indicators | Calculated Values in the Analysis | Recommended Values (Premapriya, et al. 2016) |
|--------|----------------------|-----------------------------------|--|
| 1      | Chi-Square           | 8.384                             | ---  |
| 2      | p                    | 0.058                             | > 0.050                                      |
| 3      | GFI                  | 0.987                             | > 0.90                                       |
| 4      | AGFI                 | 0.932                             |  |
| 5      | CFI                  | 0.983                             |  |
| 6      | NFI                  | 0.983                             |  |
| 7      | RMS                  | 0.040                             | < 0.080                                      |
| 8      | RMSEA                | 0.022                             |  |

Source: Primary data

The table 3 presents the mode summary of influence of behavioural factors on adoption of HR analytics. The path model presented, along with mode summary to verify the model fitness. The Chi-square statistic is 8.384 with  $p > 0.05$ . The table illustrates the model fit statistics such as RMSEA, RMR, NFI, CFI, AGFI and GFI. RMR and RMSEA are within than the recommended limit i.e., RMR and RMSEA is less than 0.08 (Indra, Balaji and Velaudham, 2020; Velaudham and Baskar, 2016). NFI, CFI, AGFI and GFI are within than the recommended limit i.e., NFI, CFI, AGFI and GFI is greater than 0.90 (Kantiah Alias Deepak and Velaudham, 2019; Velaudham and Baskar, 2015). All the model fit statistics imply a better model fit (Premapriya, et al. 2016; Victor and Velaudham, 2020).

**Table 4: Regression Weights**

| DV                         |      | IV                         | Estimate | S.E.  | C.R.   | Beta  | p     |
|----------------------------|------|----------------------------|----------|-------|--------|-------|-------|
| Adoption of HR Analytics   | <--- | General Self-Efficacy      | 0.150    | 0.036 | 4.134  | 0.176 | 0.001 |
| Adoption of HR Analytics   | <--- | Quantitative Self-Efficacy | 0.253    | 0.038 | 6.597  | 0.281 | 0.001 |
| Organizational Performance | <--- | Quantitative Self-Efficacy | 0.842    | 0.052 | 16.198 | 0.512 | 0.001 |
| Organizational Performance | <--- | General Self-Efficacy      | 0.215    | 0.048 | 4.432  | 0.138 | 0.001 |
| Organizational Performance | <--- | Adoption of HR Analytics   | 0.486    | 0.049 | 9.966  | 0.266 | 0.001 |

Source: primary data

**H<sub>1</sub>:** General self-efficacy of behavioural factors significantly influences adoption of HR analytics.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 4.134;  $\beta$  value is 0.176 and p value is significant. The result shows that adoption of HR analytics was influenced by general self-efficacy of behavioural factors at 17.6 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the general self-efficacy of behavioural factors significantly influences adoption of HR analytics. Kabra, et al. (2017); Adeoye, et al. (2012); Venkatesh, et al. (2000) have discovered similar result.

**H<sub>2</sub>:** Quantitative self-efficacy of behavioural factors significantly influences adoption of HR analytics.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 6.597;  $\beta$  value is 0.281 and p value is significant. The result shows that adoption of HR analytics was influenced by quantitative self-efficacy of behavioural factors at 28.1 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the quantitative self-efficacy of behavioural factors significantly influences adoption of HR analytics. Kabra, et al. (2017); Adeoye, et al. (2012); Venkatesh, et al. (2000) have discovered similar result.

**H<sub>3</sub>:** Quantitative self-efficacy of behavioural factors significantly influences organizational performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 16.198;  $\beta$  value is 0.512 and p value is significant. The result shows that organizational performance was influenced by quantitative self-efficacy of behavioural factors at 51.2 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the quantitative self-efficacy of behavioural factors significantly influences organizational performance. Kabra, et al. (2017); Venkatesh, et al. (2003); Venkatesh, et al. (2000) have discovered similar result.

**H<sub>4</sub>:** General self-efficacy of behavioural factors significantly influences organizational performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 4.432;  $\beta$  value is 0.138 and p value is significant. The result shows that organizational performance was influenced by general self-efficacy of behavioural factors at 13.8 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the general self-efficacy of behavioural factors significantly influences organizational performance. Kabra, et al. (2017); Venkatesh, et al. (2003); Venkatesh, et al. (2000) have discovered similar result.

**H<sub>5</sub>:** Adoption of HR analytics significantly influences organizational performance.

The hypothesis was tested in path model. The finding of the analysis demonstrates that the C.R. value is 9.966;  $\beta$  value is 0.266 and p value is significant. The result shows that organizational performance was influenced by adoption of HR analytics at 26.6 percent. Therefore, the hypothesis is accepted. Hence, the result demonstrates that the adoption of HR analytics significantly influences organizational performance. Tanya Nagpal, et al. (2022); Steven McCartney and Na Fu (2022); Zeidan, et al. (2020); Lakshmi and Pratap (2016) have discovered that organizational performance was influenced by HR analytics.

## Findings

- It is found that the general self-efficacy and quantitative self-efficacy of behavioural factors significantly influences organizational performance. Kabra, et al. (2017); Venkatesh, et al. (2003); Venkatesh, et al. (2000) have discovered similar result.
- The analysis identified that the general self-efficacy and quantitative self-efficacy of



behavioural factors significantly influences adoption of HR analytics. Kabra, et al. (2017); Adeoye, et al. (2012); Venkatesh, et al. (2000) have discovered similar result.

- Finally, the research discovered that there is influence of adoption of HR analytics on organizational performance in selected industries in Chennai at Tamilnadu. Tanya Nagpal, et al. (2022); Steven McCartney and Na Fu (2022); Zeidan, et al. (2020); Lakshmi and Pratap (2016) have discovered that organizational performance was influenced by HR analytics.

### Recommendation

- Organizations need to move away from fundamentals and build predictive models with statistical power, analytical and visualization capabilities.
- It is recommended that organizations should focus on all the demographic factors mentioned in the analysis if they want to make the HR analytics implemented in their organization more acceptable and successful.
- Organizations should create a positive work culture and improve the level of employee engagement. It is suggested that organizational performance levels can be improved using HR Analytics.

### CONCLUSION

The research tries to identify influence of behavioural factors on adoption of HR analytics in selected industries at Chennai. The data was collected from 50 HR managers/Executives through snowball sampling technique. It is found that the general self-efficacy and quantitative self-efficacy of behavioural factors significantly influences organizational performance. The analysis identified that the general self-efficacy and quantitative self-efficacy of behavioural factors significantly influences adoption of HR analytics. Finally, the research discovered that there is influence of adoption of HR analytics on organizational performance in selected industries at Chennai. Hence, it is concluded that organizations should create a positive work culture and improve the level of employee engagement. It is suggested that organizational performance levels can be improved using HR Analytics.

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