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|  | RESEARCH ARTICLE |

Evaluating the Factors Affecting Employee Retention Strategy In Pharmaceutical Companies

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# ABSTRACT

Employee retention is an emerging concept in branches of Human Resource Management (HRM). The employee retention concept seems to be expensive, and it is not globally adopted by all pharmaceutical companies. These companies need to be aware of the value of efficient employees and their contribution to the economic growth of their companies. The primary aim of management should be employee retention which will enable companies to reap benefits in the long run. As found in various government and association medical representatives’ reports, employee attrition rates in pharmaceutical companies are high when compared to various other sectors. This creates high level of mismatch between employee demand and supply for medical representatives.

The objective of the research study is to identify the various factors that are influencing employee retention and also examine the various inter-relationships that exists among those factors. An empirical study was performed to collect data from 128 medical representatives in Salem, Tamilnadu, India through a self-administered questionnaire method. Convenience sampling technique was adopted. The research involved quantitative analysis using the IBM SPSS (version 23) software package and also determined percentage analysis and factor analysis. Structural equation modelling is used to analyse factors such as Monetary Rewards, Work Pressure and Performance and other perquisites which influences employee retention for pharmaceutical companies. The outcome of the study reveals that there exists a high level of inter-relationship amongst these factors which have significant impact on employee retention.

## keywords

employee retention, monetary rewards, pharmaceutical companies, performance, work pressure

# 1. INTRODUCTION

**1.1 Background of the study**

Pharmaceutical companies are playing a vital role in maintaining the public health of people in society. These companies are manufacturing drugs which safeguard LIVES [1]. The production and marketing of medicines is a meticulous task that involves complex processes. Innovation and production are expensive which adds risk implications to these companies. The pharmaceutical companies will be prone to non-recurring expenditure due

to the amount of resources invested in the research and DEVELOPMENT [2]. The human population requires medicine either to cure or control disease.

Pharmaceutical companies have huge responsibility in the manufacturing of novel medicines to cure the new forms of diseases that emerges all over the world [3]. Pharmaceutical companies also face many challenges such as competition, generic medicines and non-recoverable costs from failed approaches. These challenges continue until the drugs reach prospective patients. There are several drug substitution products on the market [4]. The complimentary and substitute goods are higher for medicinal products when compared to the fast-moving consumer goods. These challenges are faced by these companies after huge capital investments in the pharmaceutical sector [5]. Companies also faces the challenges in the marketing of products which are performed by the representatives of the respective organization.

The survival of the medicines into the market is finally in the employees’ hands of the organization and these personnel are technically called medical representatives [6]. These people have the responsibility of explaining the usage and benefits of the medicine and in differentiating the specialties from complimentary and substitute drugs. The efforts of medical representatives play a vital role in the marketing of the medicines for appropriate needs [7]. There are various efforts taken by companies and marketers to bring success for the innovated medicines. The efforts of the medical representatives are vital in making the company’s medicine to be marketed and available at the required centres [8].

## 1.2 Problem identification

The marketing of pharmaceutical products is a tedious task when compared to the other consumer products in the market [9]. The marketing of general consumer products has direct connection with the consumers whereas medical representatives do not have such direct connectivity with patients. This field requires some technical knowledge regarding pharmaceutical products. Conceptual knowledge is required while marketing medicinal products. The medical representatives are subjected to numerous problems in the marketing process. The problems of availability of complementariness will genuinely tax the skills of medical representatives.

Field-oriented problems such as concurrent meeting of doctors, nature of monotonous job, target fulfilment, complete knowledge of medicines has an impact on the psychological level of the medical representatives [10]. The medical representatives are subjected to various psychological pressures in the workplace. These factors are required to be examined from the perception of medical representatives. The problems faced by medical representatives can be resolved through motivation as well as in compensation packages offered by pharmaceutical companies. The actions taken by the pharmaceutical companies in order to retain the employees efficiently will act as a model for other sectors.

## 1.3 Significance of the study

Various investigators [11] have highlighted the significance of employee retention in the pharmaceutical industries. Pharmaceutical companies play a significant role in the economic growth of the country. The GDP contribution of these companies has elevated to 12% according to the previous financial year [12]. The pharmaceutical sector provides an enormous amount of direct, as well as indirect, employment opportunities. Alternatively, it also reports higher attrition rates due to the challenges encountered by the medical representatives. This will lead to numerous problems in the long run when the companies cannot retain their efficient employees. These companies are also facing tough situations in identifying appropriate personnel for medical representative work. Those efficient employees need to be retained by their companies to achieve a positive growth in the sector among their competitors. The attrition rates of the sector are alarming, and that has to be addressed to minimise impact.

Pharmaceutical companies should motivate employees with appropriate compensation and rewards for employee retention. The process of retaining employees might seem to be expensive when compared to companies those who are not following reward processes. The retention of efficient employees will play a major role in economic growth of companies over a period of time [13]. These companies have to plan accordingly and focus on the attributes of employee retention. Efficient employees are significantly contributing towards the progress of pharmaceutical companies. These companies have to focus on strong retention policies to have reduced attrition rates and enhanced efficient employees. Finally, this research paper examines the various aspects of employee retention that has to be adopted by the pharmaceutical companies.

## 1.4 Research objectives

The present study focuses on estimating the factors influencing employee retention strategy in pharmaceutical companies in Salem. The main objectives of this study are to:

1. investigate the demographic characteristics of medical representative in Salem, India.
2. analyse the factors affecting the employee retention strategy in pharmaceutical companies of Salem, India.
3. recommend an exclusive model for medical representative retention factor in the pharmaceutical industry.

## 1.5 Research Hypothesis

The research hypotheses developed are as follows,

### Hypothesis 1

**H1:** Demographic characteristics have influence on employee retention strategy in pharmaceutical industry.

* H1.0: Demographic characteristic does not have influence on employee retention strategy in pharmaceutical industry.

### Hypothesis 2

**H2:** Monetary reward has significant impact on the employee retention strategy.

* H2.0: Monetary reward does not have significant impact on the employee retention strategy.

### Hypothesis 3

**H3**: Work pressure affect the employee retention strategy.

* H3.0: Work pressure does not affect the employee retention strategy.

### Hypothesis 4

**H4:** Performance and other perquisites contribute to the employment retention strategy.

* H4.0: Performance and other perquisites does not contribute to the employment retention strategy.

## 1.6 Paper organization

The paper is organized in the following manner in which Section 1 provides an elaborated introduction about the role of medical representative in pharmaceutical companies of India. Also, the introduction section depicts the significance of the research. The existing research scholarly works associated to the present study are reviewed in Section 2. The current study research methodology is elucidated in Section 3 and the analysis result is presented in Section 4. The discussion and the limitation of the study are set out in Section 5. Finally, the Section 6 provides a conclusion and future recommendation from this study.

# 2. Literature Review

Employee turnover is a major problem faced by organizations around the world. The main aim of the existing study [14] is to understand the reason for employee turnover as well as retention strategies in a firm. The research findings indicate that the employees have numerous reasons to leave their workplaces. These factors are job satisfaction, job stress, motivation, work environment, rewards and wages. Employee turnover has significant impact on the organization due to costs associated with the employee turnover and also has negative impact on the sustainability, productivity, competitiveness as well as profitability of a firm. Hence, organizations should focus on the requirement of employees and adopt specific strategies to enhance the employee performance as well as minimize the employee turnover.

The commitments owned by an individual working in an organization depends up on the commitment of one’s psychology with the firm. The compensation as well as job satisfaction provided by the firm is closely associated with the commitment of medical representative and organization. The main aim of the existing study [15] is to analyse the impact of compensation on the organisational commitment. It also examines whether job satisfaction acts as a mediating role among compensation and organisational commitment. Data were gathered from 100 medical representative in Medan city, North Sumatra, Indonesia. This study utilizes data analysis along with the pathway analysis. The outcome of the existing study concludes that compensation has significant positive effect on the organisational commitment as well as job satisfaction of employees. Additionally, it also reveals the job satisfaction has positive effect on the organisational commitment. Moreover, job satisfaction plays a mediating role among organisational commitment and compensation. Therefore, pharmaceutical companies should provide compensation to their medical representatives in accordance with their work. The company should also enable job satisfaction to the pharmaceutical representative to achieve the performance targets provided by the company. This in turn minimizes the employee turnover in the firm.

In the developing countries, only a few research projects were performed with path analysis for job satisfaction, perceived organisational support as well as turnover intention on sales representative of the pharmaceutical industries. The main objective of the existing study [16] is to derive the relationship among the factors and to provide path analysis. Random sampling technique has been performed. A cross sectional study in the form of a self-administered questionnaire to sales representative in Nigeria has been utilised [16]. The IBM AMOS software tool is utilized for data analysis. The outcome of the analysis reveals the existence of positive association among job satisfaction, turnover intention and perceived organisational support. It also recommends the firm should frame employee centered policies to enhance the job satisfaction, job motivation and minimizes the turnover intention.

## 2.1 Research Gap

There are several studies [14] focusing on employee retention in various organisation. But the concept in pharmaceutical industry is less understood. The existing study [15] failed to observe the human behaviour of the pharmaceutical sector. The present study relates human psychology with the employee retention in the pharmaceutical industries.

# 3. Research Methodology

## 3.1 Research Design

A quantitative method approach is adopted in this research. The quantitative research describes the occurrence by gathering numerical unchangeable detailed data which is being estimated by using mathematical related methods. This in turn provide statistics related to questions of what, when, where, how, how many and how much. It involves the logic, number and objective stance [17]. The quantitative research analysis is innovative research through which an investigator interrogates a particular question, gathers quantifiable data from respondents and it estimates those numbers by utilizing statistics and performs the inquiry in an objective and unbiased manner [18]. The quantitative research uses survey and questionnaire method for the collection of primary data [19].

The research uses the quantitative data which is gathered by means of questionnaires. The research instrument used in this study is questionnaire and it helps to capture the data regarding the employee retention strategies among pharmaceutical companies in Salem, Tamil Nadu. The survey is conducted among the medical representatives in Salem. The structured questionnaire utilised is framed on the basis of variables of research. The questionnaire facilitation and management is managed by means of research assistant.

## 3.2 Study area

The research is conducted amongst medical representatives in pharmaceutical companies, Salem located in Tamil Nadu, India who are willing to respond to survey. This is in turn aids for successful completion of this research. The survey is conducted by the researchers. The participants surveyed for this study are from within the pharmaceutical companies of Salem. Therefore, this makes the data collection process easier.

## 3.3 Sample size and population

A sampling strategy is essential since, it is not always easy to gather data from each and every unit of a population [20]. Hence, the process of choosing the appropriate sample size must involve a decision of the number of observations to incorporate in the statistical sample. In addition, the sample size is the main characteristic for any empirical study and its main objective is to create an inference regarding the populace from the sample [21]. The sample size is described as the number of study units and participants that needs to be incorporated and is vital to encounter the research questions of study. A very large sample is sometimes will incur wastage of cost, resources and time. Meanwhile, a small sample size will not be adequate of producing reliable and conclusive outcomes [22]. Hence, it is vital for investigator to assess appropriate sample size to create reliable outcomes with the aid of statistical procedure [23]. Convenience sampling strategy are used in several situations such as exploratory research or when resources and time are limited. Also, certain groups may be overrepresented or underrepresented in the sample because participants are selected depending on convenience. This may produce incorrect findings and conclusions. Nonetheless, it is cost effective and doesn’t need lot of time, investment or resources. Therefore, the present study pursues the use of a convenience sampling strategy that encompasses the sample size of 128 medical representatives in Salem (which is neither smaller or larger in order to attain the research purpose in an effective manner). The targeted population comprises medical representatives in Salem, India. This particular group of people are selected due to the nature of study and also these people contribute to a greater extent to the research purpose.

## 3.4 Ethical considerations

Prior to the survey, the personal details of the respondents were gathered. The personal details include information of residency, full name and description of job and these personal data will not be revealed in order to guarantee the confidentiality to each and every respondent.

All submitted articles reporting studies involving human/or animal subjects should indicate in the text were in accordance with National Health and Medical Research Council ethical standards and national ethics committee.

## 3.5 Data analysis

An appropriate quantitative data analysis technique is applied for analysing data that are collected using structured questionnaire from the sample respondents. The data are recorded using Microsoft Excel spreadsheet for obtaining study variables. Software tools such as SPSS and AMOS are used to analyse the study variables in Excel spreadsheet. The results are calculated using five evaluation methods such as percentage and factor analysis, KMO and Bartlett test, rotated component matrix and SEM modelling.

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Figure 1. Research Design



The data is collected from the medical representatives of Salem, India. Descriptive statistics indicates the collection, formation and representation of data. It is implemented for evaluating the characteristics of datasets. Frequency distributions are visually displayed for frequency counts. The research process is illustrated in Figure 1.

The use of SPSS software in this research makes the results effective and consistent in counting the values. The data estimation comprises three levels, namely, Microsoft Excel is used to incline the demographic variables, and the design of frequency distribution has been completed. Data is analysed by the use of statistics to predict the median range and the mean and standard deviation of several variables in this research. SPSS software is employed in this research. AMOS software is utilised to prove the hypothesis in the study.

# 4. Results

## 4.1 Demographic data distribution of respondents

The present study focuses on the perception of employees towards employee retention in pharmaceutical industry. A

total number of 128 medical representatives are considered as participants of the study. The demographic details of the respondents are displayed below in form of tables and graphs.

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Table 1 Demographic patternS of respondents

|  |  |  |  |
| --- | --- | --- | --- |
| **Demographics** | **Group**  | **Frequency (f)** | **Percentage (%)** |
| **Gender** | Male | 108 | 84.40 |
| Female | 20 | 15.60 |
| **Total** | **128** | **100.00** |
| **Age** | Below 23 Years | 16 | 12.50 |
| 24 Years – 27 years | 50 | 39.10 |
| 28 Years – 31 Years | 34 | 26.60 |
| Above 31 Years | 28 | 21.90 |
| **Total** | **128** | **100.00** |
| **Educational Qualifications** | D. Pharm | 34 | 26.60 |
| B. Pharm | 28 | 21.90 |
| Under-Graduation | 42 | 32.80 |
| Post-Graduation | 18 | 14.10 |
| Others | 6 | 4.70 |
| **Total** | **128** | **100.00** |
| **Monthly** **Income****(Indian Rupees)** | Below Rs. 10,000 | 58 | 45.30 |
| Rs. 15,001 – Rs. 20,000 | 30 | 23.40 |
| Rs. 20,001- Rs. 25,000 | 18 | 14.10 |
| Above Rs. 25,000 | 22 | 17.20 |
| **Total**  | **128** | **100.00** |
| **Marital Status** | Married | 70 | 54.70 |
| Unmarried | 58 | 45.30 |
| **Total** | **128** | **100.00** |
| **Number of Family Members** | > 2 Members | 22 | 17.20 |
| 3-5 Members | 88 | 68.80 |
| 6-8 Members | 8 | 6.30 |
| < 9 Members | 10 | 7.80 |
| **Total** | **128** | **100.00** |
| **Family Structure** | Nuclear Family | 52 | 40.60 |
| Joint Family | 76 | 59.40 |
| **Total** | **128** | **100.00** |
| **Religion** | Hindu | 110 | 85.90 |
| Muslim | 6 | 4.70 |
| Christian | 12 | 9.40 |
| **Total** | **128** | **100.00** |
| **Experience** | >2 Years | 28 | 21.90 |
| 2 Years – 5 Years | 50 | 39.10 |
| 6 Years – 10 Years | 14 | 10.90 |
| < 10 Years | 36 | 28.10 |
| **Total** | **128** | **100.00** |
| **Reasons to become Medical Representatives** | Financial Motivation | 44 | 34.40 |
| Job Discipline | 32 | 25.00 |
| Social Status | 14 | 10.90 |
| Interest | 32 | 25.00 |
| Others | 6 | 4.70 |
| **Total** | **128** | **100.00** |
| **Working Hours Per Day** | 8- 9 Hours | 46 | 35.90 |
| 9-10 Hours | 30 | 23.40 |
| 10-11 Hours | 24 | 18.80 |
| 11-12 Hours | 28 | 21.90 |
| **Total** | **128** | **100.00** |

The demographic features of the sample are necessary in-order to relate the perception to socio -economic status of the medical representatives. Opinions may differ based on the socio-economic status and it is essential to examine those factors before identifying objective oriented results. The differences in the inferences may be due to the various classes of socio-economic status.

From Table 1, on analysing the gender distribution of the medical representatives it reveals that majority of the respondents are male and they contribute to 84.40% of the total respondents. The number male employees are high because in the pharmaceutical industry women are promoted less frequently than males. As male employees are higher in number, the percentage of male respondents is higher which provides accurate information. Most of the respondents belong to the younger population. The majority of participants belonging to the category of 24 years to 27 years which convey by the 39.10% of the medical representatives. The educational qualification of the respondents reveals that the employees are educated amongst all categories with under-graduates being the dominant category (32.80%). The analysis of monthly income of the respondents reveals that they are having only a meagre salary when compared to the nature of work they perform. Most of the respondents (45.30%) earn salary of below Rs. 10,000. The marital status of the employees is seen as married as 54.70% on the distribution. 68.80% of medical representative set out that they belong to the 3-5 family members. 59.40% of the medical representatives are living in a joint family structure which is the major adopted family structure. The distribution for religion identifies that the majority are Hindus (85.90%).

The experience levels of the medical representatives seem to be much lower which relates with the age group of the employees. The younger and less experienced medical representatives are involved in the study. There are 39.10% of the employees in the category of 2 to 5 years’ experience. Medical representatives prefer this job due to the financial motivation provided by the job. The majority of medical representatives involved in the study revealed that the main reason for joining this job is for financial benefits (34.40%). The working hours per day distribution analysis reveals the majority of the respondents (35.90%) work 8-9 hours per day.

The demographic characteristics such as age, gender, experience, marital status, religion, working hours and monthly income affect employee retention factors in the pharmaceutical industry.

Hence, the hypothesis, H1 is proved.

**H1:** Demographic characteristics have influence on employee retention strategy in pharmaceutical industry is proved from the above analysis.

Thus, null hypothesis H10 has been rejected from the above analysis.

## 4.2 Factor Analysis

There are several factors affecting the employee retention in the pharmaceutical industries. This has been evaluated through factor analysis. The variables are divided into three main categories. Three header variables comprised of twenty-one variables evaluate the factors to enhance the employee retention in the pharmaceutical industries.

### KMO and Bartlett’s Test

Factor analysis is a technique to reduce the various study variables into limited study variables [24]. This is also a reason for referring factor analysis as ‘dimension reduction’. To evaluate these aspects, factor analysis was utilized in the current study. However, before utilizing factor analysis, the current study used Kaiser-Meyer-Olkin (KMO) to evaluate the difference in the variables. Along with KMO, the current study also utilized Bartlett’s test for evaluating the study samples in order to have equal difference.

Table 2. KMO and Bartlett’s Test (BT)

|  |  |
| --- | --- |
| **KMO degree of sample acceptability** | **0.654** |
| BT of Sphericity |  | Chi-Square | 1692.778 |
|  | df | 210 |
|  | Significant (S) | **<0.001\*\*** |

\*\* indicates significant at 0.01 level

### Principal component Analysis (PCA)

Table 2 illustrates the outcome of the KMO and Bartlett’s test for analyzing sampling’s adequacy and also association between variables of study respectively. The KMO value of 0.654 reveals the moderate significance in sampling adequacy. For Bartlett’s test, the value should be below 0.05 in order to illustrate the association between variables of the study. The current study’s Bartlett’s test outcome is less than 0.001 which demonstrates that there is association between the study variables. It explains the distribution of variables normalized in the present study. **[Do not delete section break]**

Table 3 illustrates the formation of variance factors and each category of variance exist from one facto to another. The variance depicts the significance of the factor constructed on the basis of analysis. The table explains the variances of the variables existed in the present study. It also highlights the various factors constructed on the basis of variances existed among them.

Table 3. Total variances [RIGHT CLICK > SLIDE OBJECT > OPEN TO EDIT]

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Eigenvalues (Initial)** | **SOS Loadings** | **Rotation SOS Loadings** |
| **Total** | **% of Var.** | **C %** | **Total** | **% of Var.** | **C%** | **Total** | **% of Var.** | **C %** |
| 1 | 5.147 | 24.511 | 24.511 | 5.147 | 24.511 | 24.511 | 4.708 | 22.417 | 22.417 |
| 2 | 3.535 | 16.832 | 41.343 | 3.535 | 16.832 | 41.343 | 3.277 | 15.604 | 38.021 |
| 3 | 2.512 | 11.961 | 53.304 | 2.512 | 11.961 | 53.304 | 3.209 | 15.283 | 53.304 |
| 4 | 1.809 | 8.616 | 61.920 |  |  |  |  |  |  |
| 5 | 1.506 | 7.174 | 69.094 |  |  |  |  |  |  |
| 6 | 1.203 | 5.729 | 74.823 |  |  |  |  |  |  |
| 7 | 0.811 | 3.861 | 78.684 |  |  |  |  |  |  |
| 8 | 0.736 | 3.504 | 82.188 |  |  |  |  |  |  |
| 9 | 0.721 | 3.433 | 85.621 |  |  |  |  |  |  |
| 10 | 0.495 | 2.357 | 87.978 |  |  |  |  |  |  |
| 11 | 0.444 | 2.113 | 90.092 |  |  |  |  |  |  |
| 12 | 0.359 | 1.707 | 91.799 |  |  |  |  |  |  |
| 13 | 0.329 | 1.568 | 93.368 |  |  |  |  |  |  |
| 14 | 0.281 | 1.338 | 94.706 |  |  |  |  |  |  |
| 15 | 0.224 | 1.065 | 95.771 |  |  |  |  |  |  |
| 16 | 0.213 | 1.012 | 96.784 |  |  |  |  |  |  |
| 17 | 0.205 | .976 | 97.760 |  |  |  |  |  |  |
| 18 | 0.171 | .813 | 98.573 |  |  |  |  |  |  |
| 19 | 0.127 | .604 | 99.177 |  |  |  |  |  |  |
| 20 | 0.112 | .532 | 99.709 |  |  |  |  |  |  |
| 21 | 0.061 | .291 | 100.000 |  |  |  |  |  |  |
| Extraction Method: PCA. |

### Rotated Component Matrix (RCM)

Table 4. RCM

|  |  |
| --- | --- |
|  | **Component** |
| **1** | **2** | **3** |
| Incentives for Performance | 0.886 |  |  |
| Rating | 0.814 |  |  |
| Recognition of Efforts | 0.805 |  |  |
| Foreign Trips and Tours | 0.802 |  |  |
| Promotion | 0.775 |  |  |
| Service awards | 0.756 |  |  |
| Annual incentives | 0.710 |  |  |
| Lack of Support from doctor |  | 0.819 |  |
| Excessive competition |  | 0.752 |  |
| Excessive Workloads |  | 0.749 |  |
| Target |  | 0.713 |  |
| Conflicting demands |  |  |  |
| Lack of support from Organisation |  |  |  |
|  |  |  |  |
| Not having enough Control over job related decision |  |  |  |
| Performance |  |  | 0.842 |
| Medical Facilities |  |  | 0.762 |
| Salaries are at par |  |  |  |
| Travelling & Dearness |  |  |  |
| Leave Travel Allowance |  |  |  |
| Bonus |  |  |  |
| PF |  |  |  |

The rotated component table depicts the number of factors and variables that are contributed for the formation of the factors. Table 4 explains formation of three factors from the analysis, only thirteen variables are playing a significant part among the twenty-one variables involved in the study. The factors formed are explained below.

### Factor – I: Monetary Rewards

The first factor was formed with the variables of Incentives for Performance (0.886), Rating (0.814), Recognition of Efforts (0.805), Foreign Trips and Tours (0.802), Promotion (0.775), Service awards (0.756) and Annual Incentives (0.710). These seven variables were having the nature of rewards and recognition for the medical representatives. The medical representatives are influenced by these variables and based on the nature of the variables the factor is named to be “Monetary Rewards”.

### Factor – II: Work Pressure

The second factor is constructed with the four variables described in the study. The variables are Lack of Support from doctor (0.819), Excessive competition (0.752), Excessive Workloads (0.749) and Target (0.713). These variables are related to the challenges faced during work and hence factor is termed as “Work Pressure”.

### Factor – III: Performance and Other Perquisites

The performance and other perquisites are formed with the variables of Performance (0.842) and Medical Facilities (0.762). The variables characteristics entangled in the factor formation seems to perquisites. Therefore, factor was termed as “Performance and other perquisites”.

### Structural Equation Modelling (SEM)-Pathway Analysis

##### Structural relationship among dimension of employee retention in pharmaceutical industries

The factor analysis has been provided to outline various factors that are influencing the employees to be retained in the companies based on the opinions of medical representatives. SEM is used to identify the structural relationship among the various dimensions of the employee retention. The inputs given to the SEM are as follows.

**Factor – I - Monetary Rewards**

**Factor – II – Work Pressure**

**Factor - III- Performance and Other Perquisites**

The variables under each factor is coded as below.

**Factor – I - Monetary Rewards**

Incentives for Performance - MR1

Rating - MR2

Recognition of Efforts - MR3

Foreign Trips and Tours - MR4

Promotion - MR5

Service awards - MR6

Annual incentives - MR7

**Factor – II – Work Pressure**

Lack of Support from doctor - WP1

Excessive competition - WP2

Excessive Workloads - WP3

Target - WP4

**Factor - III- Performance and Other Perquisites**

Performance - PMF1

Medical Facilities - PMF2

Table 5 Variable definition

|  |  |  |
| --- | --- | --- |
| **S.No** |  **Counts of variables**  | **No.(Number)** |
| 1. | No. of Variables in the Model | 27 |
| 2. | No. of Observed Variables | 11 |
| 3. | No. of Unobserved Variables | 16 |
| 4. | No. of Exogenous Variables  | 14 |
| 5. | No. of Endogenous Variables  | 13 |

Table 5 provides the summary of the count of variables involved in the SEM. It also explains the nature of the variables used in the modelling. The tables provide an account number of variables under each category which is utilised for further analysis.

Table 6 Maximum likelihood Estimates- Regression Weights

| **Association** | **Estimate** | **S.E.** | **C.R.** | **P** |
| --- | --- | --- | --- | --- |
| Work Pressure | <--- | Monetary Rewards | -0.045 | 0.105 | -0.427 | 0.670 |
| Perform | <--- | Monetary Rewards | 0.198 | 0.123 | 1.609 | 0.108 |
| Perform | <--- | Work Pressure | -0.144 | 0.121 | -1.188 | 0.235 |
| MR1 | <--- | Monetary Rewards | 1.000 |  |  |  |
| **MR2** | **<---** | **Monetary Rewards** | **1.032** | 0.091 | 11.355 | **\*\*\*** |
| **MR3** | **<---** | **Monetary Rewards** | **0.738** | 0.079 | 9.377 | **\*\*\*** |
| **MR4** | **<---** | **Monetary Rewards** | **1.141** | 0.104 | 10.980 | **\*\*\*** |
| **MR6** | **<---** | **Monetary Rewards** | **0.843** | 0.089 | 9.501 | **\*\*\*** |
| **WP4** | **<---** | **Work Pressure** | **1.000** |  |  |  |
| **WP3** | **<---** | **Work Pressure** | **0.827** | 0.091 | 9.137 | **\*\*\*** |
| **WP2** | **<---** | **Work Pressure** | **0.756** | 0.095 | 8.001 | **\*\*\*** |
| **WP1** | **<---** | **Work Pressure** | **0.528** | 0.077 | 6.885 | **\*\*\*** |
| PMF2 | <--- | Perform | 1.000 |  |  |  |
| PMF1 | <--- | Perform | 0.702 | 0.408 | 1.720 | 0.085 |

 (\*\*\*reveals significance at 0.01 level and \*\* reveals significance at 0.05 level)

Table 6 describes the association which reveals the cause as well as effect relationship among the variables and also factors involved in the modelling. The estimates give the genuine relationship among the variables and negative symbol before the estimate values reflect negative impact on the dependent variables. Moreover, it describes seven pairs of significant relationship that exists among the various variables and factors involved in the model.

Figure 2 Path analysis using latent variables (Exclusive Model)



The diagrammatic model explains the association among the factors and variables in an exclusive way (Figure 2). The multiple cause as well as effect relationship between the factors is represented with the support of regression estimates. The relationship exists among the co-variances of the model are briefly discussed. The concept of employee retention among pharmaceutical employees is evaluated through the aspects of Monetary Rewards, Work Pressure and Performance and other perquisites. These three factors exhibit cause and effect relationship among them which is proved through SEM. The employee retention among pharmaceutical employees is determined on the basis of beta estimates. These relationships are evaluated through the other factors which impact the employee retention. Therefore, the results of the path analysis are highly reliable.

From the above analysis, hypothesis 2-4 are proved.

**H2:** Monetary reward has significant impact on the employee retention strategy.

**H3:** Work pressure affect the employee retention strategy.

**H4:** Performance and other perquisites contribute to the employment retention strategy.

Therefore, the three main factors monetary reward, work pressure and performance and other perquisites have significant impact on the employee retention strategy. The null hypothesis is rejected from the above analysis.

### Goodness of Fit (GFI)

Table 7 GFI Analysis

|  |  |  |
| --- | --- | --- |
| **Indices** | **Actual Value** | **Suggested value** |
| **Chi-square/Df(CMIN)** | **1.857** | < 5.00 ( Hair et al., 1998) |
| **GFI** | **0.904** | > 0.80 (Joreskog and Sorbom, 1981)  |
| **AGFI** | **0.833** | > 0.80 (Joreskog and Sorbom, 1981)  |
| **NFI** | **0.897** | > 0.80 (Joreskog and Sorbom, 1981) |
| **CFI** | **0.948** | > 0.90 (Daire et al., 2008)  |
| **RMR** | **0.058** | < 0.08 ( Hair et al. 2006) |
| **RMSEA** | **0.082** | < 0.09 ( Hair et al. 2006) |

(GFI – Goodness of Fit, AGFI –Adjusted Goodness of Fit, NFI- Normed-Fit Index, CFI – Comparative Fit Index, RMR – Root Mean Squared Residual, RMSEA – Standardised Root Mean Squared Residual)

**[Do not delete section break]**

Table 7 evaluates the GFI that validates the reliability as well as fit of the model. It is constructed using the Analysis of Movement Structure (AMOS). The employee retention factors do have mutual relationship among them. It is depicted by the significant values of the various factors like GFI (1.857), AGFI (0.904), NFI (0.833), CFI (0.948), RMR (0.058) and RMSEA (0.082). These indices reveal the validity and reliability of the model constructed from the factors of employee retention in pharmaceutical industries.

# 5. Discussion

From the analysis of gathered data from respondents of study inferences for the study are made. The existing study [25] focuses on the factors contributing to the retainment of talent sales force in the pharmaceutical industries. The factors such as employee engagement, dedication and effort recognition by the senior managers are contributing to the employee retention strategy in pharmaceutical companies. The present study also acknowledges it, since the monetary rewards includes the factors such as effort recognition, promotion and incentive for performance. Therefore, these factors elevate employee engagement towards the organisation which in turn increases the employee retention.

Similarly, the existing study [26] analyses the effect of job stress on the employee retention factor. From the descriptive analysis, it proves there exists a significant association among job stress and performance of the employee. It also recommends the organisation to provide incentive benefits such as bonus, counselling and mediation programs which improves the performance of employee in the long run. The present study also reveals the job stress has negative impact on the employee retention strategy.

In addition to it, the existing work [27] investigates the determinants of employee retention strategies in pharmaceutical industries. Benefits, work relationship, job condition, motivation, organisational culture and finally leadership are the six main determinants that have positive impact on the employee retention factor. Long-term employee retention will lead to elevate organisational performance. The present study articulates that monetary rewards, work condition and performance have significant impact on the employee turnover in the pharmaceutical companies.

## Limitations

Every study has its own limitation, so does the present study. The main limitation of the study is that the participants of the research are from Salem, Tamil Nadu, India. Hence, the results might lack in generalizability. Moreover, the present study focuses on the pharmaceutical industries which is restricted to the particular sector. The current study did not include other significant components such as leadership, culture that have impact on the employee retention strategies. However, the implication provided by the research can be useful to improve the quality of education in the upcoming years across the world.

# 6. Conclusion

The present research study performed a detailed analysis regarding the demographic characteristics, factor affecting the employee retention in pharmaceutical companies. Moreover, the model has been constructed to describe the inter relationship among the factors that are contributing for the employee retention. The factors are monetary rewards, work pressure and performance and other perquisites. Those factors play a significant role in the employee retention on the basis of employee perception. The inter-relationship is illustrated by the model and the modification that one factor has direct impact on another factor. The study recommends the pharmaceutical companies take necessary actions by enhancing the various factors involved in the employee retention. Monetary rewards improve employee engagement in the organisation which in turn enhance the employee retention over a long period of time. This will enhance the organisational performance economically. The present study also highlights the innovative exclusive model which depicts the interrelationship among the factors involved in the retention strategy.

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