

STUDY OF ATTRITION RATE IN PHARMACEUTICAL SECTOR

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Abstract:

Attrition is the gradual declining of the size of a workforce , it may be due to retirement , resignation or death. The pharmaceutical industry is growing exponentially; there is a constant requirement for the best and the brightest of employees. The attrition patterns of major pharmaceutical companies like Ranbaxy, Sun Pharma, Mylan, Piramal, Cipla etc are discussed. The causes of attrition like salary system, superior subordinate relationship, growth opportunities , rewards and recognition, facilities etc are discussed.

For this paper a sample size of 60 was collected from various pharmaceutical industries. Data was subjected to regression analysis keeping “Gender” as the independent variable and the value of R^2 was obtained to be 0.567 indicating good level of prediction. This paper has shown that the level of attrition rate is high in pharmaceutical sector and need to have a control over it.

Key Words: Attrition rate, pharmaceutical industries, regression analysis, monkey survey.

Introduction:

The definition of Attrition suggests that the number of employees leaving the organization including both voluntary and involuntary turnover.

The employee gradually reduces his/her ties with the company than crib about the underlying factors causing attrition. Attrition rates vary from sector and industry wise. Except the unavoidable causes like resignation, death, retirement, or disability, there are so many causes. These may according to the nature of business , the level of the employees and the responsibility given to them. The common and main reasons are the ‘ergonomic discomfort’ experienced by the employee and the ‘functional incompatibility’ between the corporate management and the employees. An employee finds himself among colleagues and superiors unable to adjust with. Or he finds himself completely not related with his functions or with the employee’s functional requirements, unable to rise to the employer’s expectations. One more important reason is that the employee’s remuneration is

not enough to bear the brunt and cushion the concussions of his family and social life.

Attrition rate of any organization reflects its image in the market, increasing attrition represents poorly on an organization's ability to hold on to its employee. High attrition rate not only has an impact on the business but also to the morale of employee and productivity.

Attrition leads to other problems like bulk cost associated with each employee leaving, important data leak, spoils image of organization, decrease in stock price, decreased customer confidence and employee morale. High attrition impacts the productivity of team work negatively, particularly results in not monetary satisfied over times, the tension and stress caused by turnover and as a result, a decline in morale of other employees.

Literature Review:

- Raychaudhuri (2003), concluded in his white paper that the main approach to preventing attrition should be grooming leaders, rather than just treating employees the

way it is normally done. In fact, the organizations with good retention programs should address all the areas like training and development programmes, organized career counseling, a mix of job assignments, flextime and other lifestyle benefits, the organization of small groups and teams, peer group and mentoring programs, including on-site day care, fitness clubs and sponsored charity work and internal marketing and communication with employees. But in case nothing works, the best way is to predict it and act accordingly. Thus prediction becomes important.

- A survey (dated 5 mar, 2009) by Associated Chambers of Commerce and Industry of India (ASSOCHAM) has given some interesting figures regarding the attrition rates in India Inc. The survey concentrated on the attrition problem in growing economy and said that the maximum attrition is taking place in the age group of 26 to 30 years. The study also revealed that most stable chunk of employees is found to be in age 39 to 45 years as they find themselves to be unsettled in their jobs and companies that they have been associated. Attrition trend also reveals that female employees are less prone to frequent job changing than their male employees. For every 10 males switching the job, there was only 2 females crossing over.

Increased attrition is a multi-faceted problem in the sense that not only does it contribute to the brain drain from a company, but it also results in increased costs for administration, recruitment

and selection, induction of new employees and costs incurred for the vacancy period for a position. Research shows that the cost to replace a frontline employee is 40% of the salary and that for a top management employee is 150 to 200%. Apart from this, delays in project timelines, client relationships may be adversely affected, and searching for the best skills for the job again may demand lots of time and effort.

- Dr.Paul Carr and Dr.Michael Hartsfield (2008), both associate professors at Regent University, USA, in their article “Attrition as an HR Challenge” concluded that organizations planning for the future should be given close attention to why attrition is occurring in the present. To avoid why people are leaving the organization is to avoid the organization’s greatest asset-its people.

- Ms. Deepti Sinha(2013), on her study of attrition in Pharma sector has stressed on employee retention and how it should be the strategic focus and compelling necessity of businesses today. Thus, avoiding the problem of high attrition level can have devastating consequences for the business. Organizations can afford to avoid the problem at their own level.

- Meaghan, S.(2002) pointed out that controlling attrition is important phenomenon and the value of employees to an organization is a very crucial element in the success of the organization.

- According to a survey done by interlink marketing consultancy the pharmaceutical industry is grappling with the highest attrition rate after IT industry the fast growing knowledge based sector have annual attrition rate around 30-35%.

- According to a survey done by pharma express (2006) Pharmaceutical industry is fastest growing industry and are taking a big leap from survival strategy to competitive strategy hence, high thirst for best and brightest skills causing heavy attrition.

Beena Handa, Vice President HRM, Claris Life sciences “ Major pharmaceutical industries in India are age old and established, having their own culture and work practice and therefore, employee turnover will be a common phenomenon in such industries.”

Research Objectives:

- To study various factors influencing attrition in the pharmaceutical sector.
- To analyze attrition among employee levels and age group in pharmaceutical sector.

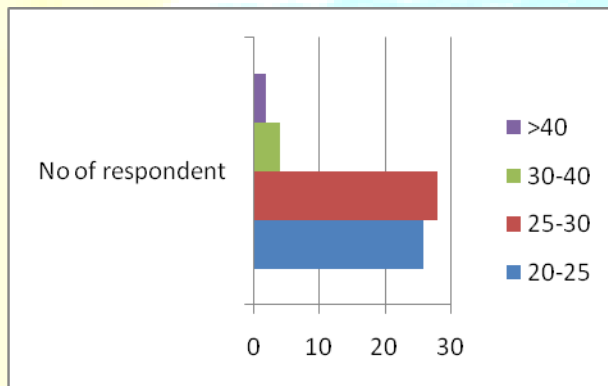
- To find out the ways to reduce attrition rate in pharmaceutical sector.
- To determine the male and female psychology in their perception towards the attrition in pharmaceutical sectors

Research Methodology:-

Data Sources: The data for the research work is collected from the both primary and secondary sources. The primary data is collected from the questionnaire filled by the respondents electronically on monkeysurvey.com. The secondary data is collected from the websites, journals, magazines etc.

Demographic Details:

Age Vs number of respondent



Sampling Plan: The sampling plan consists of three things:-

Sampling Unit: To study the perception of individuals towards attrition in pharmaceutical sector, and to study its impact on both male and female psychology. The research consists of all the individual who work in an organization.

Sampling Size: The sampling size taken for the research is of 60 people including both male and female of various pharmaceutical industries.

Sampling Procedure: In the research we have selected simple random sampling procedure. Every individual is chosen randomly and entirely by chance, such that each individual has an equal probability of being chosen at any stage during the sampling process.

Data collection Tool: In the research we have used the questionnaire as data collection tool. The questionnaire used in this report is close ended questionnaire which is generated electronically on monkeysurvey.com and analyzed with the help of LIKERT SCALE to know the impact of gender psychology towards attrition rate in pharmaceuticals.

The psychometric response scale primarily used in questionnaire to obtain individual perception or the degree of agreement with statement or set standard.

Data Analysis Tool: In the research SPSS 20.0(Statistical package for social science) is used to analyze the data. Frequency of answers and personal information of respondent (name, gender, education qualification etc..) is calculated to know the perception on different factor.

Principle Component Multiple regression Analysis with the SPSS version 20.0:

Multiple regression is an extended form of Simple linear regression. Multiple regression is used whenever we want to predict (know in advance) the value of a variable, based on the value of some other variables. The variable that we are trying to predict is called the "dependent variable" (also known as, the outcome, target or criterion variables). Variables , used for predicting the value of dependent variable are called the "independent variables" (also known as, the predictor, explanatory or regressor variables).

With the help of Multiple regression also one can determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained.

Limitations of Study:

- Research conducted was limited only to pharmaceutical sector.
- Research was conducted in Indore city or nearby places.

FINDING AND ANALYSIS-

Output of Multiple Regression Analysis:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.753 ^a	.567	.392	.42662

a. Predictors: (Constant), VAR00020, VAR00008, VAR00017, VAR00015, VAR00013, VAR00010, VAR00011, VAR00014, VAR00006, VAR00007, VAR00018, VAR00016, VAR00004, VAR00012, VAR00019, VAR00009, VAR00005

b. Dependent Variable: Gender

In the above table, the "R" is called as the multiple correlation coefficient. R is used to measure the quality of the prediction of the dependent variable; in this case, Gender. The value of R is 0.753, in the stated example, represents a good level of prediction. The "R Square" also called as the coefficient of determination, also the proportion of variance in the dependent variable. This can be expressed by the independent variables (It is the proportion of variation accounted for by the regression model above and beyond the mean model). The adjusted R value obtained from our data is 0.392 shows that our independent variables explain 39.2% of the variability of our dependent variable i.e. Gender.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.006	17	.589	3.234	.001 ^b
	Residual	7.644	42	.182		
	Total	17.650	59			

a. Dependent Variable: Gender

b. Predictors: (Constant), VAR00020, VAR00008, VAR00017, VAR00015, VAR00013, VAR00010, VAR00011, VAR00014, VAR00006, VAR00007, VAR00018, VAR00016, VAR00004, VAR00012, VAR00019, VAR00009, VAR00005

The F-ratio in the ANOVA table tests that the overall regression model is a good fit for the data or not. The above table expresses that the independent variables statistically predict the dependent variable, F test value is 3.234, p = .001 so p < .0005 (i.e., the regression model is a good fit of the data).

Linear Regression Equation:

$$y = ax + b$$

Where,

- y = dependent variable
- x = independent variable
- a = slope
- b = intercept

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.227	.321		3.822	.000
	VAR00004	-.105	.097	-.213	-1.078	.287
	VAR00005	-.130	.134	-.219	-.968	.338
	VAR00006	.018	.080	.035	.223	.824
	VAR00007	-.248	.155	-.338	-1.597	.118
	VAR00008	-.028	.107	-.040	-.257	.798
	VAR00009	-.043	.111	-.079	-.385	.702
	VAR00010	.095	.091	.139	1.040	.304
	VAR00011	-.194	.118	-.240	-1.650	.106
	VAR00012	-.009	.093	-.017	-.095	.925
	VAR00013	.300	.115	.445	2.616	.012
	VAR00014	.264	.095	.454	2.791	.008
	VAR00015	.029	.095	.045	.309	.759
	VAR00016	-.230	.098	-.380	-2.341	.024
	VAR00017	.136	.087	.210	1.553	.128
	VAR00018	-.145	.110	-.223	-1.322	.193
	VAR00019	.309	.114	.515	2.718	.010
	VAR00020	.057	.093	.092	.611	.545

a. Dependent Variable: Gender

VAR00004	RESPONDENT AGE	0.287
VAR00005	MALE/FEMALE	0.338
VAR00006	EQ	0.824

Variables responsible attrition in pharmaceutical sector:

- In the above table the significance value of all the variables i.e. $p > 0.05$, so null hypothesis is **accepted** and this shows that all the variables are having impact over attrition in pharmaceutical sector.
- Standard multiple regression is used to evaluate the gender opinion on the attrition in pharmaceutical industry. Here gender is the independent variable on which other variables depend. The result shows that the regression is best for our analysis.
- Multiple R and R^2 measure the strength of the relationship between the set of independent variables and the dependent variable. An F test is used to find out whether the relationship can be generalized to the population represented by the sample.
- While a t test is used to assess the individual relationship between each independent variable and the dependent variable.

VAR00007	SALARY SYSTEM	0.118
VAR00008	PERFORMANCE BONUS	0.798
VAR00009	SALARY DIFFERENCE	0.702
VAR00010	RELATIONSHIP WITH SUBORDINATE	0.304
VAR00011	RECOGNITION	0.106
VAR00012	SUPERIOR EXPECTATION	0.925
VAR00013	ACCESSIBILITY OF SUPERIOR	0.012
VAR00014	GROWTH OPPORTUNITY	0.008
VAR00015	PROMOTION	0.759
VAR00016	BENEFITS AND WELFARE FACILITY	0.024
VAR00017	WORKING CONDITION	0.128
VAR00018	POLICIES AND PROCEDURES	0.193
VAR00019	REWARDS	0.010
VAR00020	MONETARY AND NON MONETARY REWARDS	0.545

Conclusion:

The research is done in order to determine the level of attrition among the employees of pharmaceutical industries. Here psychological responses of male and female is obtained through survey conducted. From all this it is found that attrition rate was around 39.2% which is quite high and management should take strict action in order to curb it. From the demographic Details it is found that maximum attrition is among the age group of 25-30 yrs and minimum attrition is among the age group of employees who are >40 yrs. This shows that stability level is high among higher age group employees. Various reasons of attrition were salary system, growth opportunities, relationship, facilities etc. Management should work on approaches to reduce the attrition rate. These approaches will include ample opportunities must be provided to all employees for their growth in better future, training and development must be provided for maintaining healthy relationship, reward and recognition policies to be revised in favour of employees, proper facilities should be provided to retain employee in the organization.

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