

A Case Study on Employee Attrition at Amara Raja Batteries Limited, Tirupathi



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Organizations at present are facing many issues with the employees from starting to the exit of the employee. Normally organizations keep employees in probation period to know the employee's related information and to learn the organization environment. Employee attrition was the serious problem in the present scenario. The manufacturing companies like ARBL were facing the situation. Employees of Amara Raja Batteries Limited (ARBL) were kept under probation for two years to evaluate their performance but unfortunately employees are leaving the organization without any intimation within the probation period. This has turned in to a challenge and burning issue for HR personnel at Amara Raja Batteries Limited. Hence a study has been conducted on employee attrition in Amara Raja Batteries Ltd to find out the reasons why the employees are leaving the organization without any intimation Primary data was collected from both personal interview method and by distributing structured questionnaire to the automotive battery division of Amara raja batteries limited employee's with a sample size of 100. The study uses the Karl Pearson's correlation method and weighted average method for data analysis. The findings of the study reveal that an Amara raja battery limited is facing an attrition rate.

1. Introduction

Organizations success in the 21st century can be majorly attributed to the employee's concern. Organizations are realizing that employees are the valuable assets. So HR manager's role in the present era was prominent (Tandon, April 2006). Employees in this era are more often eager to jump from one to another because of some many reasons. Hence employee attrition has become a major factor in estimating the organization efficiency. Attrition is a major concern for organizations because functioning of the organization is entirely depends on the pool of employees. Attrition rate defines the organization's image. Higher the attrition rate the organization's has to face some incurred costs to recruit, induct, placement and train the employee. This study was undertaken to identify the employee dissatisfaction factors and the reasons for leaving the organization. Employee attrition rate can be defined with mathematical expression as shown in below formulae. Employee attrition and employee retention were considered to be joint words because one's impact is inversely proportional to the others. Hence lower the attrition rate says that the organization's retention strategies were good. Hence an identical organization has to maintain the low attrition rate and higher retention of the employees. There are many reasons for employees to leave to the organizations. These factors differ from one organization to another, one department to another, one country to another, considered sample to other and from employee to employee. Hence some of the previous researcher's say that salary was the dominant factor for employee attrition but there are many others. Based on many factors like organization size, location, policies, procedures also have an impact on the employee attrition but its indirect form. The below flowchart explains the employee attrition factors and the employee retention (Harries, Vol 3; Iss 2 Feb 2003).

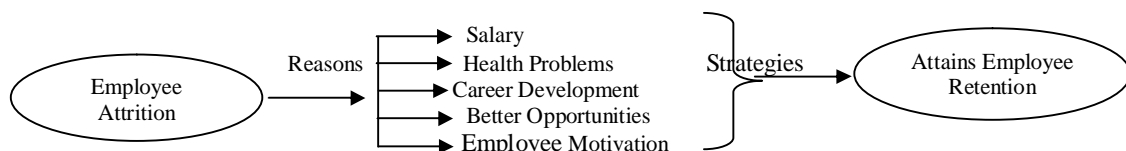


Figure 1.1 Framework of Employee Attrition Factors at ARBL

2. Review of literature

The meaning of employee attrition in a work environment refers to a reduction or decrease of employees or a gradual reduction of labour cuttings other than the firing of the employees. For a human resource management people these attrition rates increases the HR department budgets. Employee attrition can be affected by many factors based on the organization size and type. The study conducted by Indian IT industries says that 23% in 2011. According to the study by Indian Inc 33% was identified the attrition rate which is 10% increased compared to the earlier. The reasons for employee turnover may vary from external environmental factors such as economy that influence the business that in turn affects the employment levels (Pettman 1975; Mobley, 1982, Schervish, 1983; Terborg and Lee, 1984) to Organizational variables such as type of industry, occupational category, Organization size, payment, supervisory level, location, selection process, work environment, work assignments, benefits, promotions and (Mobley, 1982; Arthur, 2001). The other factors that influence employee turnover in Organizations include the individual work variables like demographic variables, integrative variables like job

satisfaction, pay, promotion and working condition (Pettman, 1975; Mobley 1982; Arthur 2001) and the individual nonworking variables such as family related variables (Pettman, 1975; Mobley, 1982;). High rates of voluntary turnover of such employees are often found to be harmful or disruptive to firm's performance (Glebbeck & Bax, 2004). When poor performers, choose to leave the Organization, it is good for the Organization (Abelson & Baysinger, 1984), thus it is important to differentiate between functional and dysfunctional turnover and accordingly encourage or discourage employee turnover. Demographic factors cannot be ignored as age, tenure, level of education, level of income, job category, gender have influenced employee retention and have been found to have stable relationship with turnover intention. Of the above demographic factors, age, tenure and income level was found to be negatively related to turnover intention (Arnold & Feldman, 1982; Cotton & Tuttle, 1986; Gerhart, 1990; Mobley et. Al, 1979; Price & Mueller, 1986; Wai & Robinson, 1998; Weil & Kimball, 1995); level of education is positively associated with turnover, the more educated the employees there is a tendency to quit (Berg, 1991; Cotton & Tuttle, 1986); With respect to job category, Wai & Robinson, 1998 and Price and Mueller, 1986 found that non-managerial employees are more likely to quit than managerial employees. The top reason for traditional organizations is the higher salaries. Dr. Parker says that there many others as supervisor, job satisfaction, career growth and others. Hiltrop, Jean Marie and John showed that the impact of organization culture on the employee retention. These researchers have also explained the strategies for employee retention in the organizations. In a article by Gagan Deep Sharma that the experience, age and education qualifications play an important role of employee attrition (Gagan Deep Sharma). Rossano (1985) defined that in his article as salary as a basic component for employee attrition (Panchanatham, Vol 1 Issue 1 May 2010). In her article 80% of the respondents in the Chennai based call centre say that salary as a prominent role in defining the employee attrition (Panchanatham, Vol 1 Issue 1 May 2010). In an article salary, career development and other as identified as prominent factors in employee attrition (Saner, Vol. 2, Issue 1 January, 2014). According to the Investopedia attrition means that number of employees that were left within a specific period of time. Attrition rate is also called as churn rate which means that the rate of number of employees that were left the organization within in a specific period of time and is follows below.

$$\text{Attrition Rate} = \frac{\text{Number of Attritions} * 100}{\text{Actual employees} + \text{New Joined}} * 100$$

3. Objectives

- To study the organization culture at Automotive Battery Division (ARBL).
- To calculate employee attrition rate at ARBL.
- To analyze the reason for attrition at ARBL.
- To bring out appropriate retention strategies that can be applied at ARBL.

4. Hypothesis Testing

H₀: There is no relation between induction classes and satisfaction with training period.

H₁: There is a relation between induction classes and satisfaction with training period.

H₀: There is no significance relationship between experience and employee satisfaction.

H₁: There is significance relationship between experience and employee satisfaction.

5. Organization Profile

A first generation entrepreneur, Dr. Ramachandra Naidu Galla is the founder of Amara Raja Group Of Companies in 1985. The Amara Raja Group is an Indian Conglomerate Company with its corporate office at Anna Salai, Chennai. The group has presence in packaged foods and beverages, electronics products manufacturing, infrastructure sector, power system production and fabrication of sheet metal products and fasteners. The Amara Raja Group is better known for its automotive battery brand "Amaron" which is the second largest selling automotive battery brand in India today. Amara Raja Group employs a work force of over 7000 employees. Amara Raja Batteries made it to Asia's 'Best under a Billion' 2010 list of companies compiled by Forbes magazine. Amara Raja Batteries Limited was incorporated as a private limited Company on 13th February & converted into a public limited Company on 6th September 1990. The Comp. manufacture sealed maintenance free lead acid batteries. The organization structure of ARBL was given below in Fig 1.1

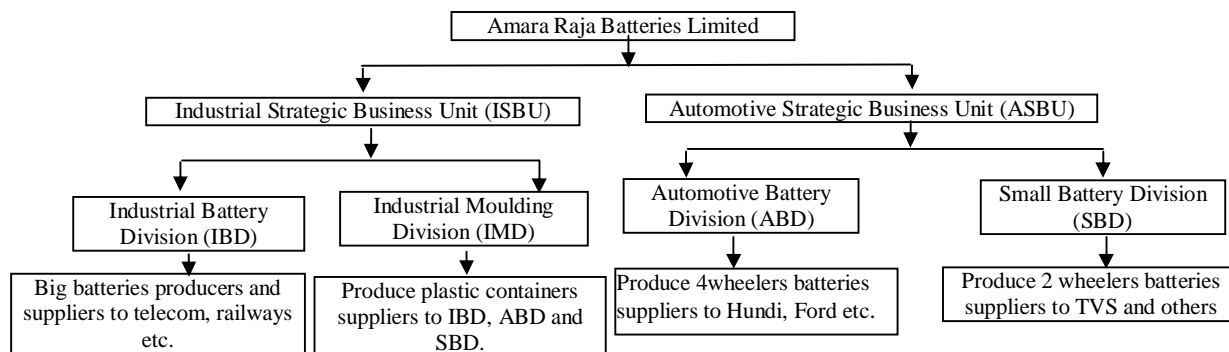


Figure 5.1 ARBL Organization Structure

ARBL has inaugurated its Automotive Strategic Business Unit (ASBU) plant at Karakambadi in Tirupati on September 24th 2001 this plant is part of the most completely integrated battery manufacturing facility in India with all critical components, including plastics sourced in house from existing facilities in site. In this project Amara Raja strategic alliance partners Johnson controls, USA have closely worked with their Indian components required for automotive batteries. The production capacity is 750000 units of automotive batteries. This is the first phase in the enhancement of Amara Raja production which the company has invested Rs.75 Crores in Green field project. In the next phase at an additional cost of Rs.25 Crores. Production capacity will increase to 5 million units estimated to complete around 1 year. After that ARBL will become the single largest facility for battery manufacture in Asia. The organization has divides the employees into 3 grades depending on their education qualification, experience, performance and their behavior.

1. Management Grade - (M01- M09)
2. Staff Grade - (S01- S05)
3. Workmen Grade - (W1 – W5)

6. Research Methodology

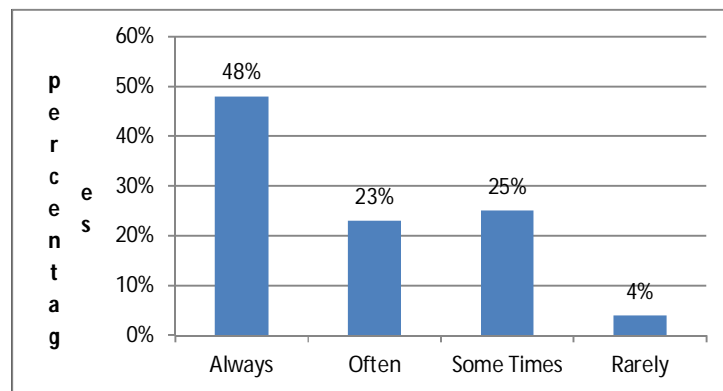
This paper takes empirical type of data from the ABD employees with simple random sampling method by using interview and structured questionnaire method. The sample size was 100 employees. The research was carried for limited period of time and the due to the busy schedule of the employees the sample size was confined to 100 employees.

7. Analysis

7.1 Analysis Based on Support from Superiors

Table 7.1

Category	No of respondents	Percentage
Always	48	48%
Often	23	23%
Some Times	25	25%
Rarely	4	04%
TOTAL	100	100%

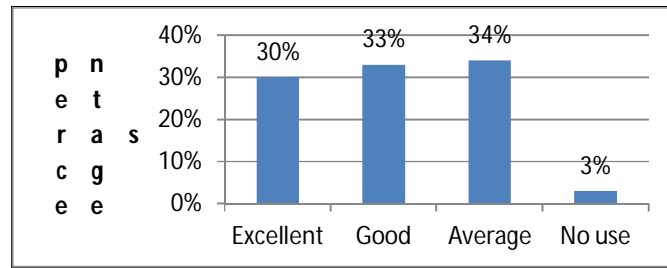


Interpretation: From the above chart, 48% of employees believe that they get support always from the superiors, 25% of employees are said that sometimes, 23% are said that often, and only 4% are said that rarely.

7.2 Analysis based on Opinion on Medical Facilities

Table 7.2

Category	No of respondents	Percentage
Excellent	30	30%
Good	33	33%
Average	34	34%
No use	03	03%
TOTAL	100	100%



Interpretation: From the above chart, 34% of employees stated that medical facilities are satisfactory at ARBL, 33% of employee stated that good, 30% are said that excellent, and 3% are said that no use.

7.3 Analysis based on Safety Measures Provided at ARBL

Table: 7.3

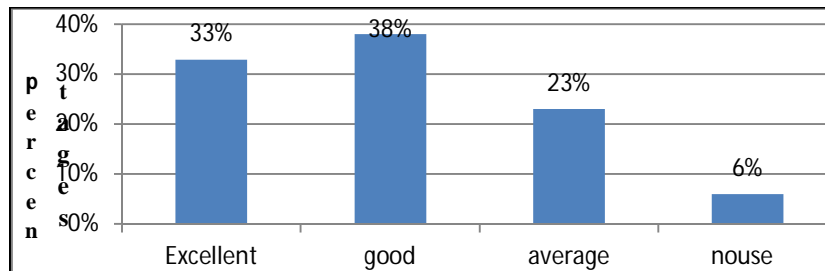
Category	No of respondents	Percentage
YES	87	87%
NO	13%	13%
Total	100	100%

Interpretation: From the above chart, 87% of employees are stated that safety measures are provided at ARBL, only 13% are said that not provided.

7.4 7.4 Analysis based on environmental facilities at ARBL

Table 7.4

Category	No of respondents	Percentage
Excellent	33	33%
Good	38	38%
average	23	23%
nouse	06	06%
TOTAL	100	100%

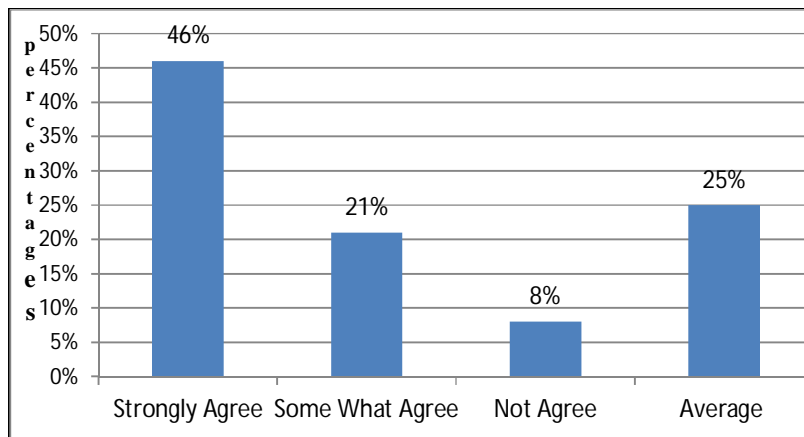


Interpretation: From the above chart, 38% of employees stated as environmental facilities are good at ARBL, 33% of employees stated as excellent, 23% are said that average, and 6% are said that no use.

7.5 Analysis based on Communication among Staff Is Effective

Table 7.5

Category	No of respondents	Percentage
Strongly Agree	46	46%
Some What Agree	21	21%
Not Agree	08	08%
Average	25	25%
Total	100	100%

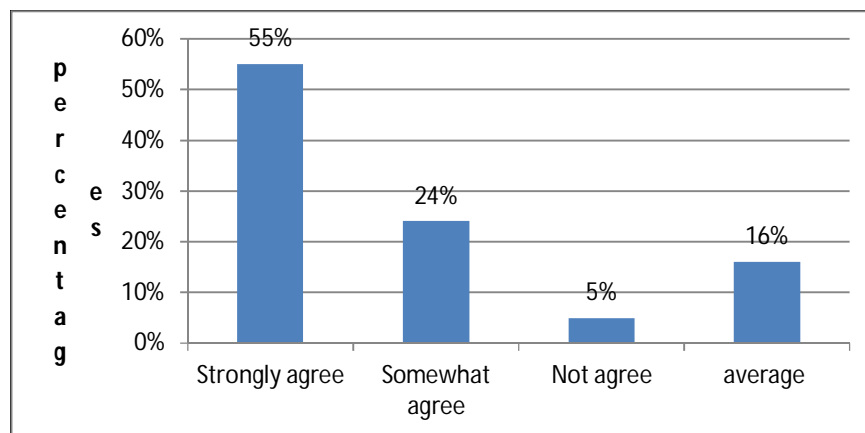


Interpretation: From the above chart, 46% of employees are strongly agreed that there is effective communication among staff, 25% of employees stated as average, 21% are said that somewhat agree, 8% are said that not agree.

7.6 Analysis based on spirit of cooperation among staff

Table 7.6

Category	No of respondents	Percentage
Strongly agree	55	55%
Somewhat agree	24	24%
Not agree	05	05%
average	16	16%
TOTAL	100	100%

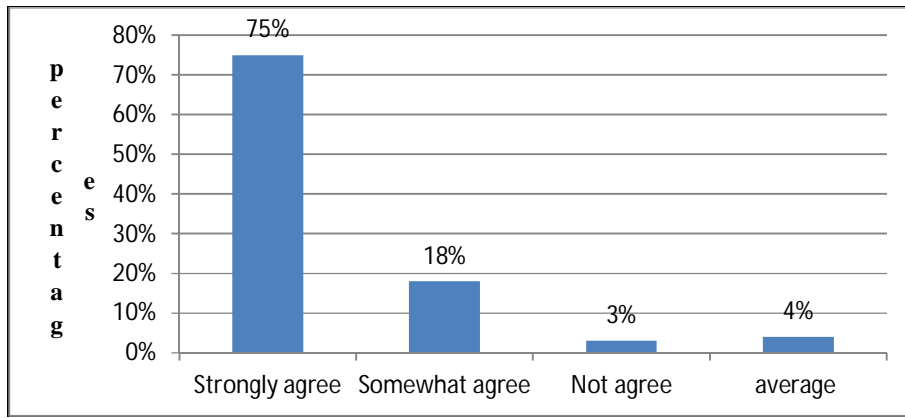


Interpretation: From the above chart, 55% of employees strongly agree that there is cooperation among staff. 24% of employees said somewhat agreed 16% are said that average, 5% are said that not agree.

7.7 Analysis based on awareness of policy standards of the company\

Table 7.7

Category	No of respondents	Percentage
Strongly agree	75	75%
Somewhat agree	18	18%
Not agree	03	03%
average	04	04%
TOTAL	100	100%

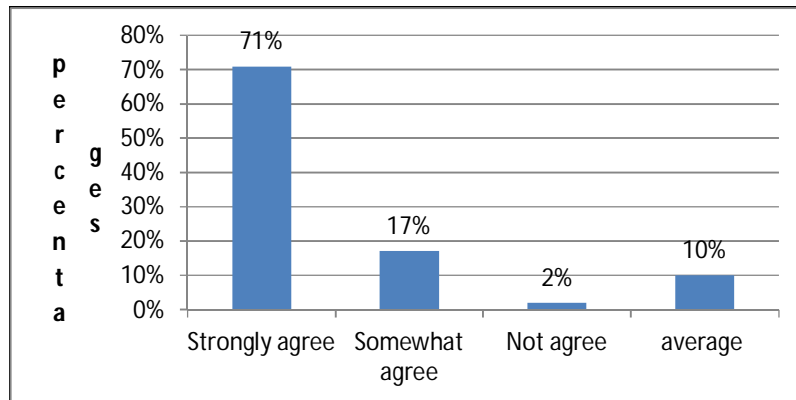


Interpretation: From the above chart, 75% of employees are aware of policy standards of the company, 18% are said that somewhat agree, 4% are said average, 3% are said that not agree.

7.8 Analysis based on Regular Staff Meetings at Work Place

Table 7.8

Category	No of respondents	Percentage
Strongly agree	71	71%
Somewhat agree	17	17%
Not agree	02	02%
average	10	10%
TOTAL	100	100%

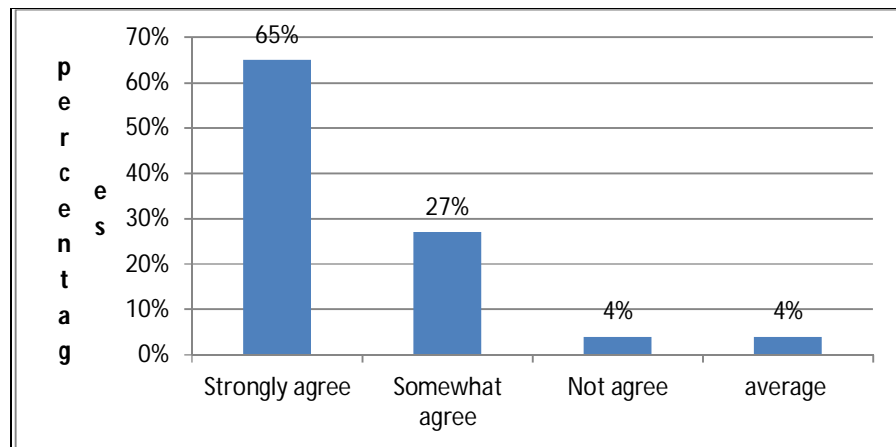


Interpretation: From the above chart, 71% of employees are strongly agreed that the staff meetings are happening regularly, 17% are said that somewhat agree, 10% are said that average, 2% are said that not agree.

7.9 Analysis based on induction classes at the time of joining

Table 7.9

Category	No of respondents	Percentage
Strongly agree	65	65%
Somewhat agree	27	27%
Not agree	04	04%
average	04	04%
TOTAL	100	100%

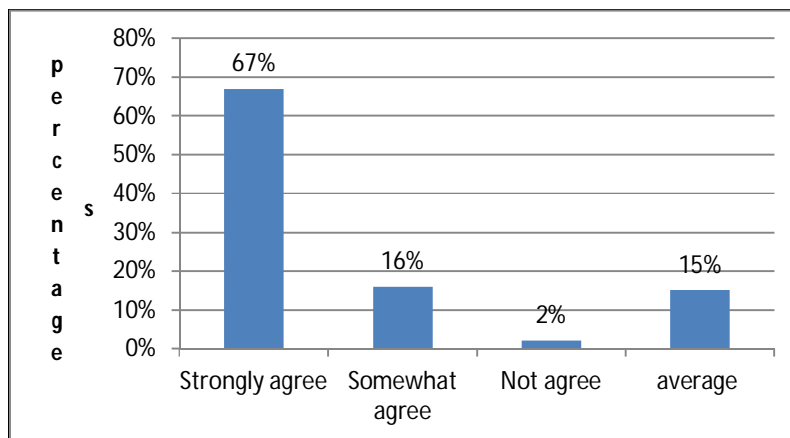


Interpretation: From the above chart, 65% of employees strongly agreed that induction classes provided thoroughly, 27% are said that somewhat agree, 4% are said that not agree, and 4% are said that average.

7.10 Analysis based on satisfaction with the job

Table 7.10

Category	No of respondents	Percentage
Strongly agree	67	67%
Somewhat agree	16	16%
Not agree	02	02%
average	15	15%
TOTAL	100	100%

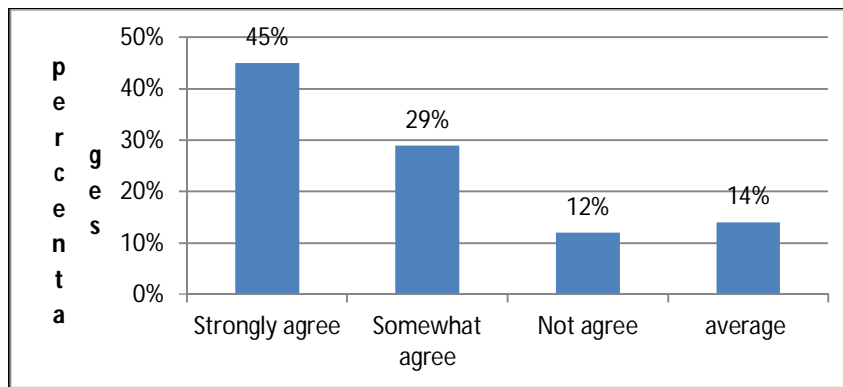


Interpretation: From the above chart, 67% of employees are strongly agreed about satisfaction about their job, 16% are said that somewhat agree, 15% are said that average, 2% are said that not agree.

7.11 Analysis based on awareness of how the job performance is measured

Table 7.11

Category	No of respondents	Percentage
Strongly agree	45	45%
Somewhat agree	29	29%
Not agree	12	12%
average	14	14%
TOTAL	100	100%

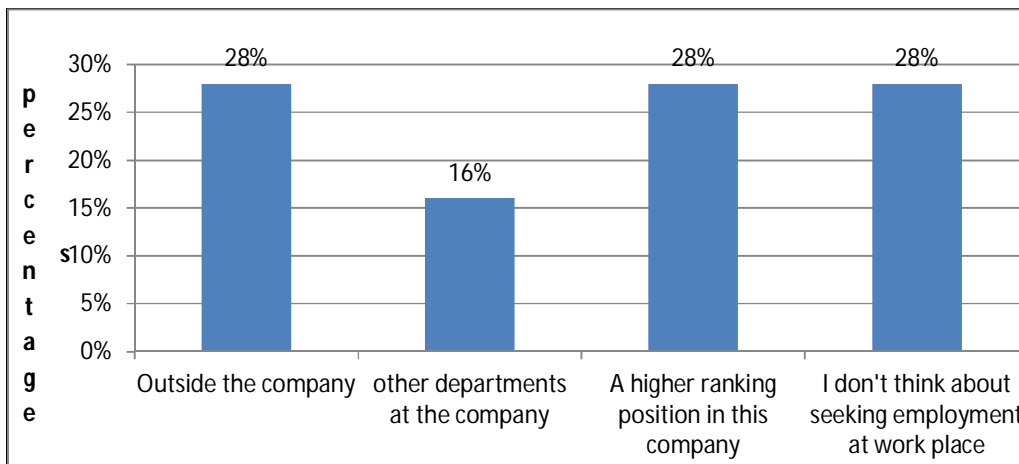


Interpretation: From the above chart, 45% of the employees are strongly agreed that they are aware of how the job performance is measured, 29% are said that somewhat agree, 14% are said that average, 12% are said that not agree.

7.12 Analysis based on seeking employment else where

Table 7.12

Category	No of respondents	Percentage
Outside the company	28	28%
other departments at the company	16	16%
A higher ranking position in this company	28	28%
I don't think about seeking employment at work place	28	28%
TOTAL	100	100%

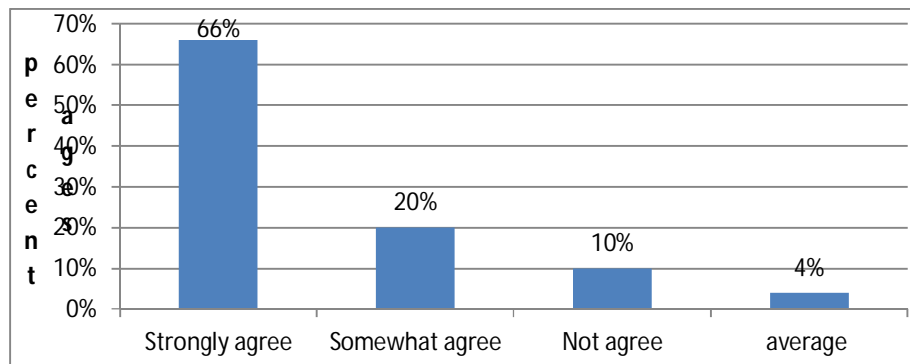


Interpretation: From the above chart, 28% of the employees stated that seeking employment to outside the company, 28% are stated a higher ranking position in this company, 28% are said that I don't think about seeking employment at work place, 16% are said that other department at the company.

7.13 Analysis based on work load and expected completion times are reasonable

Table 7.13

Category	No of respondents	Percentage
Strongly agree	66	66%
Somewhat agree	20	20%
Not agree	10	10%
average	04	04%
TOTAL	100	100%



Interpretation: From the above chart, 66% of employees are strongly agreed that the workload and expected completion times are reasonable, 20% are said that somewhat agree, 10% said that not agree, and 4% are said that average.

8. Testing of Hypothesis

Karl Pearson Correlation Method: The correlation between induction classes and satisfaction with training period. X = Induction classes, Y = Satisfaction with training period.

H₀: There is no relation between Induction classes and satisfaction with training period.

H₁: There is relation between Induction classes and satisfaction with training period.

Table 8.1

X	Y	XY	X ²	Y ²
65	52	3380	4225	2704
27	24	648	729	576
04	06	24	16	36
04	17	68	16	289
ΣX = 100	ΣY = 100	ΣXY = 4120	ΣX² = 4986	ΣY² = 3605

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[N\sum x^2 - (\sum x)^2][N\sum y^2 - (\sum y)^2]}}$$

$$r = \frac{4\sum 4120 - (100)(100)}{\sqrt{([4*4986 - (100)^2][4*3605 - (100)^2])}}$$

$$r = \frac{6480}{\sqrt{43952480}}$$

$$r = 0.97$$

Interpretation: it is inferred that the correlation is highly positive as the value (x, y) lies between 0 & 1. from the result, there is a strong positive correlation between induction classes and satisfaction with training period. So **H₀ is rejected.**

T-Test

For testing the significance of Karl Pearson rank coefficient we have to do t-test. If the resulted value is greater than 2 then the value of 'r' is significant. If not then there is no significance of rank correlation.

$$t = \frac{r \sqrt{N - 1}}{\sqrt{(1 - r^2)}}$$

Where, r = Karl Pearson Rank Coefficient N = Sample size

$$t = \frac{0.97 \sqrt{100 - 1}}{\sqrt{(1 - (0.97 * 0.97))}}$$

$$t = \frac{9.6514}{0.2431}$$

$$t = 39.70$$

Interpretation

Here 't' value is greater than 2 hence there is significant between the variables induction classes and satisfaction with training period.

Weighted Average: employees' feedback on the various aspects of the training programme

Table 8.2

Description	Strongly Agree	Some what Agree	Not agree	average
satisfaction with training period	52	24	06	18
Communication Among Staff Is Effective	46	21	08	25
Spirit Of Cooperation Among Staff	55	24	05	16
Induction Classes At The Time Of Joining	65	27	04	04
Awareness Of Job Performance	45	29	12	14

Strongly Agree = 4
 Somewhat Agree = 3
 Not agree = 2
 Average = 1

Calculation

1. Satisfaction with training period = [(52*4) + (24*3) + (06*2) + (18*1)] / 10 = 31
2. Communication Among Staff Is Effective = [(46*4) + (21*3) + (08*2) + (25*1)] / 10 = 28.8
3. Spirit Of Cooperation Among Staff = [(55*4) + (24*3) + (05*2) + (16*1)] / 10 = 31.8
4. Induction Classes At The Time Of Joining = [(65*4) + (27*3) + (04*2) + (04*1)] / 10 = 34.4
5. Awareness of Job Performance = [(45*4) + (29*3) + (12*2) + (14*1)] / 10 = 30.5

Table 8.3

Description	Weighted Average	Rank
Satisfaction with training period	31	3
Communication Among Staff Is Effective	28.8	5
Spirit Of Cooperation Among Staff	31.8	2
Induction Classes At The Time Of Joining	34.4	1
Awareness Of Job Performance	30.5	4

Interpretation: From the above weighted averaged table it has been inferred that the majority of the respondents have given first preference to the Induction Classes at the Time of Joining, the second preference is given to Spirit of Cooperation among Staff, whereas the third preference is given to Satisfaction with training period.

Chi Square Test:

H₀: There is no significant relationship between experience and employees satisfaction.

H₁: There is significant relationship between experience and employees satisfaction.

Table 8.4

Experience/Job satisfaction	Highly satisfied	Satisfied	Dissatisfied	Total
Below 5 months	5	7	3	15
5-12 months	11	50	10	71
13-24 months	7	4	3	14
Total	23	61	16	100

Calculation

The formula for calculating the ψ^2 value is

$$\psi^2 = \sum((O-E)^2/E)$$

Where, O is the observed value. E is the expected value.

Table 8.5

Oij	Eij	Oij-Eij	(Oij-Eij) ² /Eij
5	3.45 (23*15/100)	1.55	0.69
11	9.15 (23*71/100)	1.85	0.37
7	2.4 (23*14/100)	4.6	8.816
7	16.33 (61*15/100)	9.33	5.33
50	43.31 (61*71/100)	6.69	1.033
4	11.36 (61*14/100)	7.36	4.767
3	3.22 (16*15/100)	0.22	0.0149
10	8.54 (16*71/100)	1.46	0.249
3	2.24 (16*14/100)	0.76	0.257
Total =21.5269			

Degrees of Freedom: Degree of freedom in distribution is number of observation or values that are independent of each other and cannot be detected from each other.

At 5% level of significance

Tabular Value = 9.49

Degrees of Freedom=(r-1) (c-1)

$$= (3-1) (3-1)$$

$$= 4$$

Result: Since the calculated value is greater than tabulated value we accept alternative hypothesis. We reject H₀. i.e. H₁ so there is significant relationship between the experience and satisfaction level of training program conducted in ARBL.

Attrition Rate of ARBL

Attrition Rate = (Number of Attritions * 100 / Actual employees + New Joined) / 100

Percentage of Attrition Rate of ARBL = ((48*100)/(750+26))

$$= (4800/776)$$

$$= 6.1\%$$

Result: It is observed that the attrition rate of ARBL is 6.1%, which is high.

9. Findings

- Most of the employees are satisfied with the training that provided by the company. Training is not the cause for employee attrition.
- 48% of employees stated as they are getting support from their superiors always.
- 38% of the employees are stated as the medical facilities provided at ARBL are Excellent.
- 87% of employees are stated that safety measures are provided at ARBL.
- The environmental facilities that provided in ARBL are excellent which was stated by 92% of employees.
- 48% of employees strongly agreed that there is a effective communication among staff.
- 75% of employees are aware of policy standards of the company.
- 71% of employees are strongly agreed that the staff meetings are happening regularly.
- 65% of employees strongly agreed that induction classes provided thoroughly.
- 67% of employees are strongly agreed about satisfaction about their job.
- 45% of the employees are strongly agreed that they are aware of how the job performance is measured.
- 28% of employees are seeking employment on the following three categories
- Outside the company,
- A higher ranking position in this company,
- No idea about seeking employment else anywhere.
- 66% of employees are strongly agreed that the workload and expected completion times are reasonable.

10. Scope for Future Research

The study was done for the specific sample of data so it can be further prolonged to the entire employees of ARBL. We can also find the employee attrition rate particularly to specific industry of manufacturing or service. We can also compare the employee attrition rates between the companies. We can also calculate the employee attrition rate of Indian manufacturing and service industries.

11. Conclusion

Organizations can reduce the employee attrition rate to some extent only but can't eradicate completely due to the employee individual needs. Employees of ARBL responses these identified factors for their attrition as a dissatisfaction with the salary packages, employee benefits, employee motivation, family reasons and some health issues. The company has to reduce the rate by reducing the dissatisfaction faced by the employees. The company has to modify the salary packages majorly because it was the major reason for employee attrition.

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