

Employee Attrition and Employee Satisfaction: A Study of H.R., Performance Appraisal & Training Practices in Defence PSUs in India.

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Abstract: The purpose of this study is to examine the impact of H.R. practices on the Employee Attrition in Defence PSUs in India. Basically, Hiring Practices and Performance Appraisal & Training Practices are the two major aspects of the H.R. Practices that have been researched upon in this paper. The Indian Government has recently allowed Private Sector participation in the Defence Industry. This decision led to the entry of the private companies to Defence Sector and it also proved to be an end of monopoly of Public Sector Undertakings (PSUs). Now, the DPSUs are very much concerned about the employee switch over to the private companies - their competitors. The major research question was who is more likely to switch over, Junior / Middle Level Executives or Senior Level Executives? Hence, it became a compulsion for the researcher to conduct a comparative research on attrition in DPSUs from the perception of Junior / Middle Level and Senior Level Executives. The research concentrated on the relationship between Designation Level and the Hiring Practices as well as Performance Appraisal & Training Practices. Researcher also investigated the correlations among Hiring Practices, Performance Appraisal & Training Practices, Satisfaction Level of the executives and Reasons of Attrition.

Keywords: Attrition, Employee Satisfaction, Hiring Practices, Performance Appraisal & Training Practices.

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I. Introduction

1.1. Overview

The Department of Defence Production in India was set up in 1962, to create an indigenous defence production base which is self-reliant and self-sufficient. Department of Defence Supplies was created to forge linkages between the civil industries and defence production units. The two departments were merged in December, 1984 to form the Department of Defence Production and Supplies. Presently, 39 Ordnance Factories and 8 Defence Public Sector Undertakings (DPSUs) are engaged in the task of manufacture of equipment and stores for Defence Services.

India maintains an extensive defence industrial base principally owned by the government. India's defence industrial capacity lies in three main classes of enterprises:

- The Ordnance Factories (OF),
- The Defence Public Sector Undertakings (DPSUs), and,
- The Civilian Public and Private Sector manufacturing establishments.

The main organizations under the Department of Defence Production are as follows:

- Ordnance Factory Board (OFB)
- Hindustan Aeronautics Limited (HAL)
- Bharat Electronics Limited (BEL)
- Bharat Dynamics Limited (BDL)
- BEML Limited (BEML)
- Mishra Dhatu Nigam Limited (MIDHANI)
- Mazagaon Dock Shipbuilders Limited (MDL)
- Garden Reach Shipbuilders & Engineers Limited (GRSE)
- Goa Shipyard Limited (GSL)
- Hindustan Shipyard Limited (HSL)
- Directorate General of Quality Assurance (DGQA)
- Directorate General of Aeronautical Quality Assurance (DGAQA)

- Directorate of Standardisation (DOS)
- Directorate of Planning & Coordination (Dte. of P&C)
- Defence Exhibition Organisation (DEO), and
- National Institute for Research & Development in Defence Shipbuilding (NIRDESH).

The government is also trying to promote greater Civil Sector participation in the armament process. The Government has recently allowed Private Sector participation in the defence industry up to 100 per cent and with Foreign Direct Investment permissible upto 49 per cent both subject to licensing, for manufacture of all types of defence equipment within the country. The FDI beyond 49 per cent will be allowed in state of art defence equipment manufacturing, with technology transfer under Indian control and management. Technically, this means 100% FDI is allowed. This is expected to add to the investment already made in the Public Sector.

The human capital base for defence industrial segment to expand in the proportion desired and anticipated requires severe augmentation. Traditionally, the sources of engineering talent for Defence and Aerospace in India were few and the skills imparted to students were far from required. Over the past few years, there has been a sudden increase in the number of institutions offering specialised engineering degree programmes, however the demand continues to far outstrip the supply. Apart from volume, the quality of Defence and Aerospace engineering talent from institutions has to be upgraded significantly, which is not happening unfortunately.

The entry of private companies will end PSU monopoly and bring in both positive and not some negative impacts. This besides increasing competition will force to go commercial and response to market discipline. Integration of World Trade Organisations will bring in transparency, reduce procedural difficulties and more disciplined work force. Galloping costs of Govt. intervention will be mitigated by disinvestment. The HR concern is that the sudden turmoil has created a great disturbance in Human resource capital in defence industrial segment and worst hit are defense PSUs.

1.2. Justifications and Significance of the Research

Despite the rising turnover rate in DPSUs in India in recent years, there are limited studies related to this phenomenon of attrition. Employee attrition rate is a major topic of concern for the HR personnel and higher authorities of DPSUs. If this problem is not properly addressed and researched upon right now, government sector is surely going to suffer in the coming years. There is a need to study more about the reasons of attrition, employee satisfaction, present hiring practices and performance appraisal & training practices. This research is useful in understanding reasons of rate of attrition from the perspectives of Junior / Middle Level as well as Senior Level Executives. Concerned stakeholders may use the findings and the results of this research to further research upon on this topic or modify their present employee retention strategies in order to reduce the rate of attrition.

1.3. Research Hypotheses & Objectives

Following research hypotheses & research objectives are developed to address the research problem.

Research Objective-1: To study the association between Designation Level (Junior / Middle Level Executives or Senior Level Executives) and Hiring Practices in DPSUs in India.

Alternate Hypothesis-1 (H1): There is a significant association between the Designation Level (Junior / Middle Level Executives or Senior Level Executives) and Hiring Practices in DPSUs in India.

Null Hypothesis-2 (H0): There is no significant association between the Designation Level (Junior / Middle Level Executives or Senior Level Executives) and Hiring Practices in DPSUs in India.

Research Objective-2: To study the association between Designation Level (Junior / Middle Level Executives or Senior Level Executives) and Performance Appraisal & Training Practices in DPSUs in India.

Alternate Hypothesis-1 (H1): There is a significant association between Designation Level (Junior / Middle Level Executives or Senior Level Executives) and Performance Appraisal & Training Practices in DPSUs in India.

Null Hypothesis-2 (H0): There is no significant association between Designation Level (Junior / Middle Level Executives or Senior Level Executives) and Performance Appraisal & Training Practices in DPSUs in India.

Research Objective-3: To study the correlations among the Hiring Practices, Performance Appraisal & Training Practices, Satisfaction Level of the Executives and Reasons of Attrition.

Alternate Hypothesis-1 (H1): There is correlation among the Hiring Practices, Performance Appraisal & Training Practices, Satisfaction Level of the Executives and Reasons of Attrition in DPSUs in India.

Null Hypothesis-2 (H1): There is no correlation among the Hiring Practices, Performance Appraisal & Training Practices, Satisfaction Level of the Executives and Reasons of Attrition in DPSUs in India.

II. Literature Review

2.1. Attrition

Following are the ways to describe the definitions and the meaning of attrition and its rate.

- ‘A reduction in the number of employees through retirement, resignation or death.’
- ‘Attrition is, the number of employees a company must replace in a given time period to the average number of total employees.’
- Attrition rate can be defined as ‘the rate of shrinkage in size or number.’

A reduction in the number of employees through retirement, resignation or death refers to attrition. In the perfect environment of the corporate world, employees are highly motivated to do their jobs, have good relations with others in the organisation, work hard to achieve the organisational goals, get paid well for their work, have great chances for the career growth, and the flexible schedules so they could attend to personal or family needs, as and when, necessary. But then there’s the real world in which employees do leave the jobs due to several reasons, that may be justified or may not be. Attrition results in the loss of revenue, unhealthy organisational environment, and it may also encourage others to leave the job for the similar or the other reasons.

Attrition is a phenomenon affecting any business organization in the industry. Over the past few years, organizations have taken an increased interest in aligning their HR practices to their business goals. Managing a highly discerning and independent workforce has thrown up exciting challenges. Attrition is a dynamic that impacts business performance in more ways than the usually perceived Human Resource Development angle. It is an issue which gives rise to questions like organizational health, morale and motivation and leads up to very tangible aspects such as shareholder return and value. Low perceived value stands out as the most significant factor for attrition. Increased dissatisfaction leads to reduced motivation, which in turn results in lowered efficiency. When the efficiency is lowered, employees are not able to deliver their expected output which results in their leaving the job. When employees quit, the perceived value is further lowered.

2.2. Review of the Previous Researches

Despite several studies carried out on employee attrition and employee retention, the researchers in the field of strategic human resource management are still investigating the causal mechanisms between HR practices and employee attrition rate and employee retention.

According to **Boswell, Boudreau and Tichy (2005)**, ‘the decision of leaving the Organization is not easy for an individual employee as well as significant energy is spent on finding new jobs, adjusting to new situations, giving up known routines and interpersonal connection and is so stressful.’ Therefore if timely and proper measures are taken by the Organizations, some of the voluntary turnover in the Organization can be prevented.

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 which are described by **Mobley, 1982; Arthur, (2001)** are as following-

- Type of industry,
- Occupational category,
- Organization size,
- Payment,
- Supervisory level,
- Location,
- Selection process,
- Work environment,
- Work assignments,
- Benefits,
- Promotions

The other factors as explained by **Pettman, (1975); Mobley (1982); Arthur (2001)**, that influence employee turnover in Organizations are the individual work variables such as demographic variables,

integrative variables like-

- Job satisfaction,
- Pay,
- Promotion and
- Working condition

And the individual non-working variables such as family related variables (**Pettman, 1975; Mobley, 1982;**).

Trevor, (2001), in his research found that employees who perform better and are intelligent enough have more external employment opportunities available compared to average or poor performance employees and thus they are more likely to leave.

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**).

Further voluntary turnover of critical work force is to be differentiated into avoidable and unavoidable turnover (**Barrick & Zimmerman, 2005**).

Hinkin & Tracey, (2000), Estimates of the losses for each employee vary from a few thousand dollars to more than two times the person's salary depending on the industry, the content of the job, the availability of replacements and other factors. In some industries chronic shortage of qualified employees has driven up the costs of turnover. Therefore the acquisition, development and retention of talent form the basis for developing competitive advantage in many industries and countries (**Pfeffer, 1994, 2005**).

According to **Rappaport, Bancroft, & Okum, (2003)**, organizations failing to retain high performers will be left with an under staffed, less qualified workforce that ultimately hinders their ability to remain competitive.

Three studies incorporated attitudinal and/or behavioural changes over time to better predict turnover. Sturman and Trevor (2001) found that quitters' performance over time did not significantly change while stays' performance slope was positive. 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. Relationship between gender and turnover showed mixed result. Cotton and Tuttle (1986) and Weisberg and Kirshenbaum (1993) found females more likely to leave than males. Miller and Wheeler (1992) and Wai and Robinson (1998) reported no relationship between gender and turnover. However the reasons for employee turnover vary from one Organization to the other and from one person to another as they are not getting what they expect from the Organization (Ongori, 2007). Mobley (1982) and Dickter, Roznowski and Harrison (1996) also called for more research and theory pertaining to how the turnover process occurs over time.

III. Research Design

This chapter defines the research design, population samples, data collection procedures and the techniques of data analysis for examining the factors of **Hiring Practices and performance appraisal and training practices** that affect the satisfaction level of the employee working in **Defence PSUs in India**. This research is exploratory in nature. A survey was designed to measure the perceptions of employees for **Hiring Practices and performance appraisal and training practices** of **Defence PSUs in India**. It also analyses the correlations among the satisfaction level, reasons of employee attrition and **Hiring Practices and performance appraisal and training practices**.

A survey was done with the help of the questionnaires and schedules using five point Likert scale such as strongly agree-1, agree-2, neutral-3, disagree-4, and strongly disagree-5.

To collect information / data for the research purpose, *quota sampling* was used. The target population, to which researcher would like to draw inferences, comprises the **Junior & Middle Level Executives and Senior Level Executives** working in **Defence PSUs in India**; which can be said as the **universe** of the study. We know that the population is heterogeneous in nature which is an advantage for the sampling, as it reduced the biasness of the data. This research study is comparative in nature, so the data of **Junior & Middle Level Executives and Senior Level Executives**, both were used. The survey was conducted of the employees to collect the data. The total Sample size was of 600 employees out of which 472 employees were **Junior & Middle Level Executives** and 128 employees were **Senior Level Executives** working in **Defence PSUs in**

India. For the analysis of the data, IBM SPSS STATISTICS 21 version software was used to perform **Frequency Analysis, Chi Square Analysis, and Correlations Analysis.**

This study aimed to examine the association between designation level and the factors that affect **Hiring Practices & Performance Appraisal and Training Practices of Defence PSUs in India.**

IV. Data Analysis, Interpretation & Findings

4.1. Demographic Analysis

Table-1: Age

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	60	10.0	10.0	10.0
	31-40	304	50.7	50.7	60.7
	41-50	152	25.3	25.3	86.0
	51-60	84	14.0	14.0	100.0
	Total	600	100.0	100.0	

Interpretation & Findings

From the above table it can be seen that, out of total number of 600 respondents (Junior & Middle Level Executives and Senior Level Executives), 10% respondents belong to 20-30 age group, 50.7% respondents belong to 31-40 age group, 25.3% respondents belong to 41-50 age group and 14.0% respondents belong to 51-60 age group.

Table-2: Gender

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	520	86.7	86.7	86.7
	Female	80	13.3	13.3	100.0
	Total	600	100.0	100.0	

Interpretation & Findings

From the above table it can be seen that, out of total number of 600 respondents (Junior & Middle Level Executives and Senior Level Executives), majority of 86.7% respondents were male and 13.3% respondents were females.

Table-3: Marital Status

Marital Status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	524	87.3	87.3	87.3
	Unmarried	76	12.7	12.7	100.0
	Total	600	100.0	100.0	

Interpretation & Findings

From the above table it can be seen that, out of total number of 600 respondents (Junior & Middle Level Executives and Senior Level Executives), majority of 87.3% respondents were married and 12.7% respondents were unmarried.

Table-4: Educational Qualification

Educational Qualification		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PhD	16	2.7	2.7	2.7
	Post-Graduation	224	37.3	37.3	40.0
	Graduation	272	45.3	45.3	85.3
	Other	88	14.7	14.7	100.0
	Total	600	100.0	100.0	

Interpretation & Findings

From the above table it can be seen that, out of total number of 600 (Junior & Middle Level Executives and Senior Level Executives), 2.7% respondents had PhD, 37.3% respondents were post graduates, 45.3% respondents were graduates and 14.7% respondents had other qualification.

Table-5: Professional / Technical Qualification

Professional / Technical Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	28	4.7	4.7	4.7
	Yes	572	95.3	95.3	100.0
	Total	600	100.0	100.0	

From the above table it can be seen that, out of total number of 600 respondents (Junior & Middle Level Executives and Senior Level Executives), 4.7% respondents said that they don't have any professional or technical qualification and 95.3% respondents said that they have professional and technical qualification.

Table-6: Salary

Salary					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40000-60000	256	42.7	42.7	42.7
	61001-80000	224	37.3	37.3	80.0
	80001-100000	64	10.7	10.7	90.7
	More than 100000	56	9.3	9.3	100.0
	Total	600	100.0	100.0	

Interpretation & Findings

From the above table it can be seen that, out of total number of 600 respondents (Junior and Middle Level Executives & Senior Level Executives), 42.7% respondents belong to 40000-60000 income group, 37.3% respondents belong to 61001-80000 income group, 10.7% respondents belong to 80001-100000 income group and 9.3% respondents belong to more than 100000 income group.

Table-7: Designation Level

Designation Level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior and Middle Executives Level	472	78.7	78.7	78.7
	Senior Executives Level	128	21.3	21.3	100.0
	Total	600	100.0	100.0	

Interpretation & Findings

From the above table it can be seen that, out of total number of 600 respondents (Junior & Middle Level Executives and Senior Level Executives), 78.7% respondents belong to Junior and Middle Executives Level and 21.3% respondents belong to Senior Executives Level.

4.2. CHI SQUARE ANALYSIS: ANALYSIS OF THE ASSOCIATION BETWEEN DESIGNATION LEVEL-(JUNIOR & MIDDLE LEVEL EXECUTIVES AND SENIOR LEVEL EXECUTIVES) (DEPENDENT VARIABLE) AND FACTORS TO BE CONSIDERED FOR HIRING PRACTICES (INDEPENDENT VARIABLES) IN DEFENCE PSUs IN INDIA.

- ❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives) (dependent variable)** and **'Persons' ability to perform the technical and other requirement of the job'**.

Table-8: Persons' ability to perform the technical and other requirement of the job

Crosstab							
		Persons ability to perform the technical and other requirement of the job					Total
		Strongly Disagr	Disagr ee	Neithe r agree nor	Agree	Strongly Agree	

			ree		disagre e			
Designation Level	Junior and Middle Executives Level	Count	4	24	76	248	120	472
		% within Designation Level	0.8%	5.1%	16.1%	52.5%	25.4%	100.0%
	Senior Executives Level	Count	0	8	16	68	36	128
		% within Designation Level	0.0%	6.2%	12.5%	53.1%	28.1%	100.0%
Total		Count	4	32	92	316	156	600
		% within Designation Level	0.7%	5.3%	15.3%	52.7%	26.0%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 26.0% respondents strongly agreed, 52.7% respondents agreed, 15.3% respondents were neutral, 5.3% respondents disagreed and 0.7% respondents strongly disagreed that ‘Persons’ ability to perform the technical and other requirement of the job’ is a factor that is taken into consideration for Hiring Practices.

As far as perception of Junior & Middle Level Executives and Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration for Hiring Practices.

H₀: The two factors are independent.

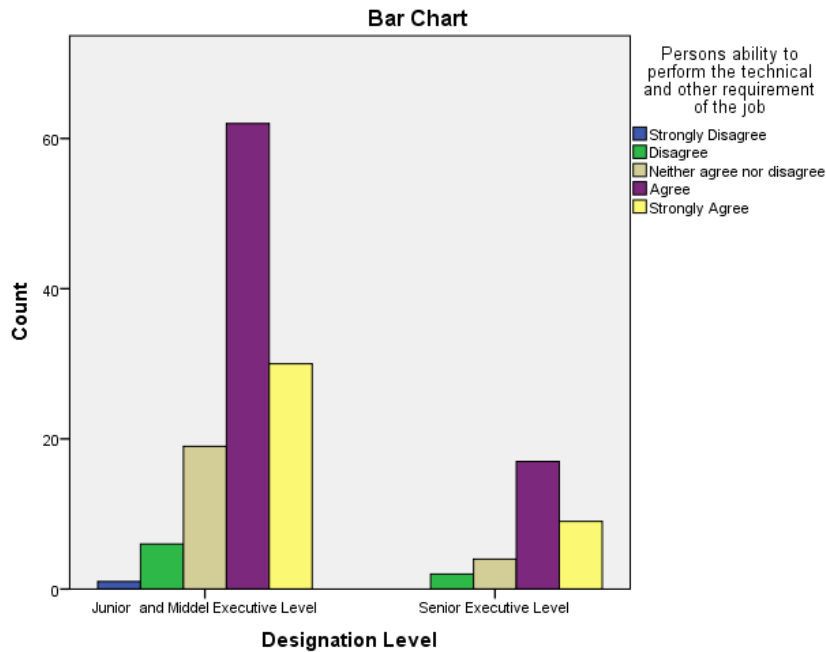
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-9: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.482 ^a	4	.648
Likelihood Ratio	3.344	4	.502
Linear-by-Linear Association	.622	1	.430
N of Valid Cases	600		
a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .85.			
Symmetric Measures			
	Value	Approximate Significance	
Nominal by Nominal	Phi	.064	.648
	Cramer's V	.064	.648
N of Valid Cases	600		
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be 0.648 (more than 0.05) so we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives) (dependent variable)** and **'Proven work experience in a similar job'**.

Table-10: Persons' Proven work experience in a similar job.

Crosstab		Proven work experience in a similar job					Total	
		Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree		
Designation Level	Junior and Middle Executives Level	Count	16	48	164	200	44	472
		% within Designation Level	3.4%	10.2%	34.7%	42.4%	9.3%	100.0%
	Senior Executives Level	Count	8	20	36	56	8	128
		% within Designation Level	6.2%	15.6%	28.1%	43.8%	6.2%	100.0%
Total		Count	24	68	200	256	52	600
		% within Designation Level	4.0%	11.3%	33.3%	42.7%	8.7%	100.0%

Interpretation & Findings: From the above cross tab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 8.7% respondents strongly agreed, 42.7% respondents agreed, 33.3% respondents were neutral, 11.3% respondents disagreed and 4.0% respondents strongly disagreed that 'Proven work experience in a similar job' is a factor that is taken into consideration for Hiring Practices.

As far as perception of Junior & Middle Level Executives and Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration for Hiring Practices.

H₀: The two factors are independent.

H₁: The two factors are not independent (associated).

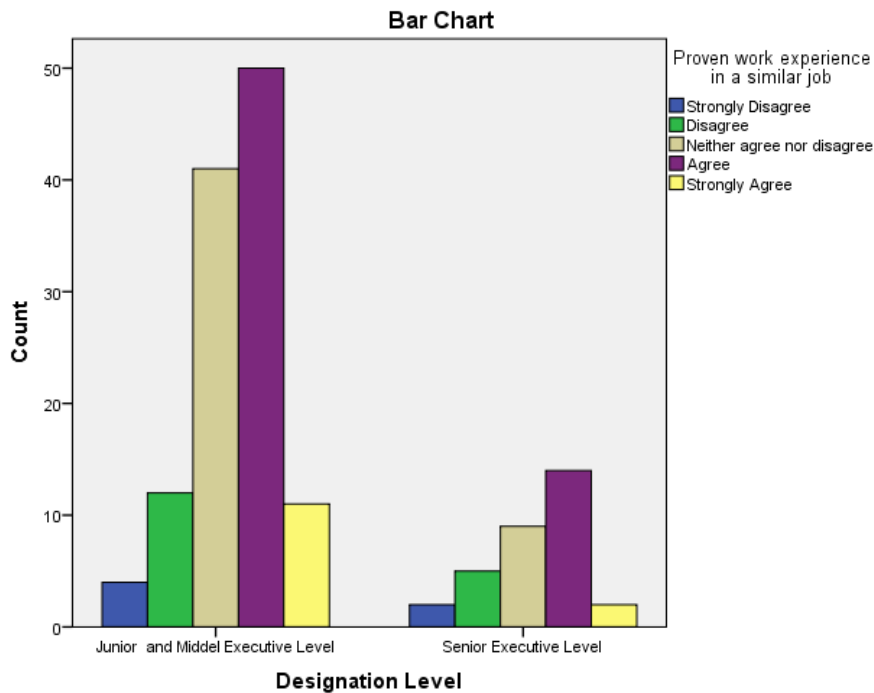
Tool Used: Chi Square Test (Analyze ? Descriptive Statistics ? Crosstabs)

Table-11: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.169 ^a	4	.127
Likelihood Ratio	6.895	4	.142

Linear-by-Linear Association	2.899	1	.089
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.12.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.109	.127
	Cramer's V	.109	.127
N of Valid Cases	600		
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be 0.127 (more than 0.05) so we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and 'Company to have high performance employee'.

Table-12: Company to have high performance employee

Crosstab			Company to have high performance employee					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	4	40	164	208	56	472
		% within Designation Level	0.8%	8.5%	34.7%	44.1%	11.9%	100.0%
	Senior Executives Level	Count	4	12	48	52	12	128
		% within Designation Level	3.1%	9.4%	37.5%	40.6%	9.4%	100.0%
Total		Count	8	52	212	260	68	600
		% within Designation Level	1.3%	8.7%	35.3%	43.3%	11.3%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 11.3% respondents strongly agreed, 43.3% respondents agreed, 35.3% respondents were neutral, 8.7% respondents disagreed and 1.3% respondents strongly disagreed that ‘Company to have high performance employee’ is a factor that is taken into consideration for Hiring Practices.

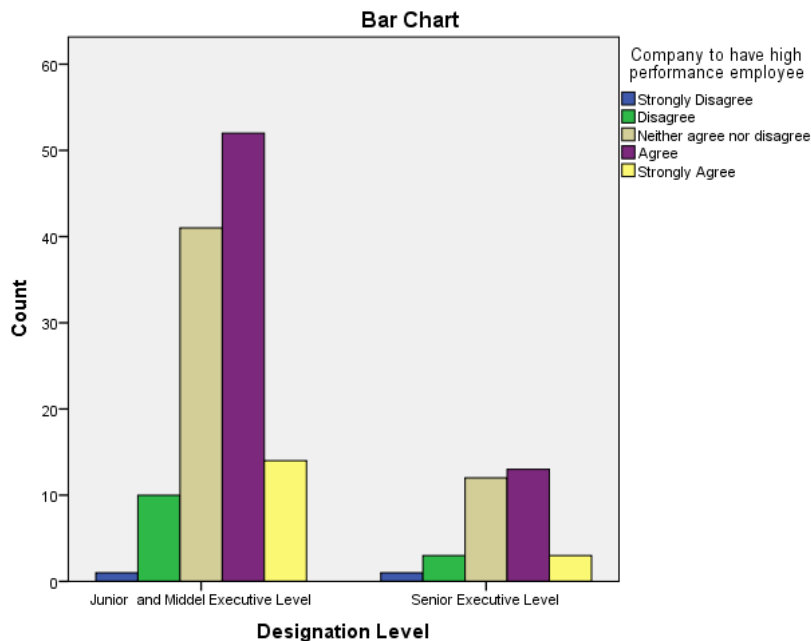
As far as perception of Junior & Middle Level Executives and Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration for Hiring Practices.

H₀: The two factors are independent.
H₁: The two factors are not independent (associated).
Tool Used: Chi Square Test (Analyze Descriptive Statistics Crosstabs)

Table-13: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.054 ^a	4	.282
Likelihood Ratio	4.350	4	.361
Linear-by-Linear Association	2.660	1	.103
N of Valid Cases	600		
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.71.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.092	.282
	Cramer's V	.092	.282
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be more than 0.05, so, we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and ‘Company to have employees who are satisfied with their jobs’.

Table-14: Company to have employees who are satisfied with their jobs

Crosstab			Company to have employees who are satisfied with their jobs					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	24	56	180	176	36	472
		% within Designation Level	5.1%	11.9%	38.1%	37.3%	7.6%	100.0%
	Senior Executives Level	Count	4	16	44	52	12	128
		% within Designation Level	3.1%	12.5%	34.4%	40.6%	9.4%	100.0%
Total		Count	28	72	224	228	48	600
		% within Designation Level	4.7%	12.0%	37.3%	38.0%	8.0%	100.0%

Interpretation & Findings: From the above cross tab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 8.0% respondents strongly agreed, 38.0% respondents agreed, 37.3% respondents were neutral, 12.0% respondents disagreed and 4.7% respondents strongly disagreed that ‘Company to have high performance employee’ is a factor that is taken into consideration for Hiring Practices.

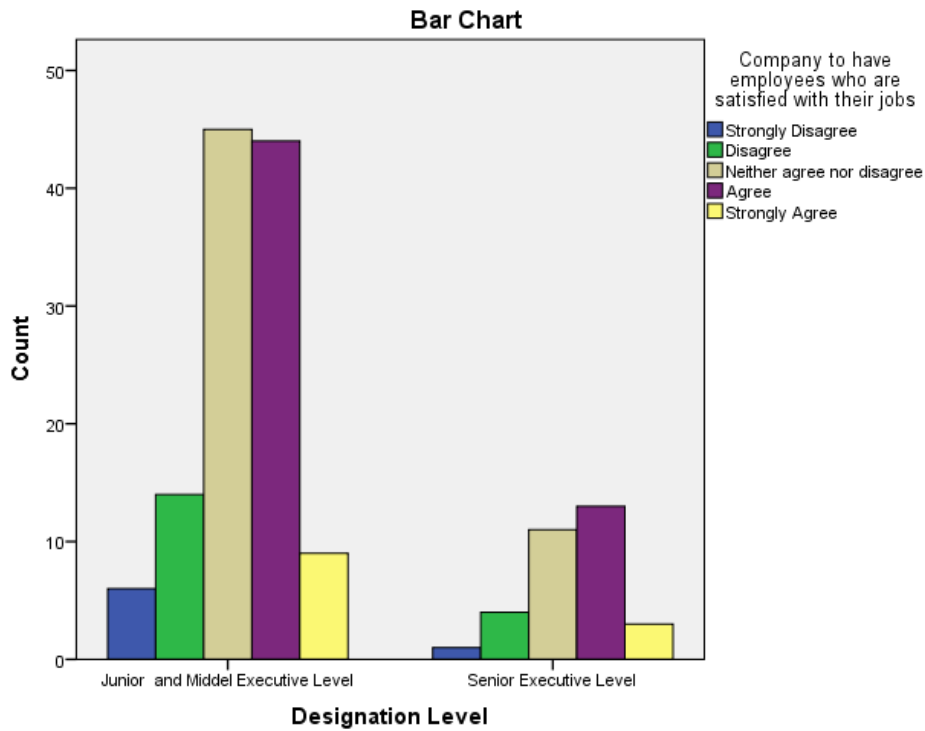
As far as perception of Junior & Middle Level Executives and Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration for Hiring Practices.

H₀: The two factors are independent.
H₁: The two factors are not independent (associated).
Tool Used: Chi Square Test (Analyze Descriptive Statistics Crosstabs)

Table-15: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.924 ^a	4	.750
Likelihood Ratio	1.993	4	.737
Linear-by-Linear Association	1.143	1	.285
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.97.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.057	.750
	Cramer's V	.057	.750
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be more than 0.05, so, we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and ‘**Positive contribution towards overall Effectiveness of the organization**’.

Table-16: Positive contribution towards overall Effectiveness of the organization

Crosstab			Positive contribution towards overall Effectiveness of the organization					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	8	32	128	244	60	472
		% within Designation Level	1.7%	6.8%	27.1%	51.7%	12.7%	100.0%
	Senior Executives Level	Count	0	12	48	52	16	128
		% within Designation Level	0.0%	9.4%	37.5%	40.6%	12.5%	100.0%
Total		Count	8	44	176	296	76	600
		% within Designation Level	1.3%	7.3%	29.3%	49.3%	12.7%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 12.7.0% respondents strongly agreed, 49.3% respondents agreed, 29.3% respondents were neutral, 7.3% respondents disagreed and 1.3% respondents strongly disagreed that ‘Positive contribution towards overall effectiveness of the organization’ is a factor that is taken into consideration for Hiring Practices.

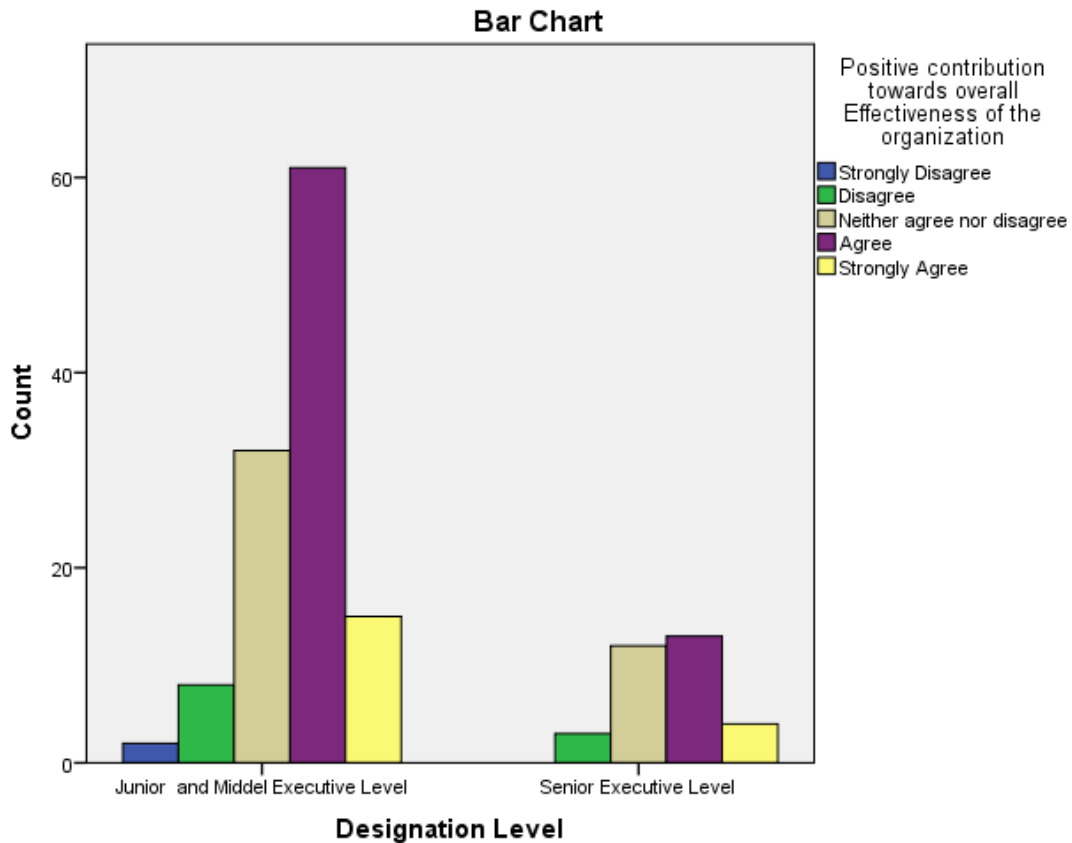
As far as perception of Junior & Middle Level Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration for Hiring Practices.

Table-17: Chi-Square Tests

H₀: The two factors are independent.
H₁: The two factors are not independent (associated).
Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.299 ^a	4	.054
Likelihood Ratio	10.816	4	.029
Linear-by-Linear Association	1.624	1	.203
N of Valid Cases	600		
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.71.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.124	.054
	Cramer's V	.124	.054
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be more than 0.05, so, we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



Hence, we can say that our **Alternate Hypothesis: 1 (H₁)**, is accepted and **Null hypothesis: 1 (H₀)**, is rejected and finally our **Research Objective-1** is fulfilled.

4.3. CHI SQUARE ANALYSIS: ANALYSIS OF THE ASSOCIATION BETWEEN DESIGNATION LEVEL-(JUNIOR / MIDDLE LEVEL & SENIOR LEVEL) (DEPENDENT VARIABLE) AND FACTORS TO BE CONSIDERED AS THE PURPOSE OF PERFORMANCE APPRAISAL AND

TRAINING (INDEPENDENT VARIABLES) OF THE DEFENCE PSUs IN INDIA.

❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and ‘**Identify the potential of employees**’.

Table-18: Identify the potential of employees

Crosstab			Identify the potential of employees					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	28	48	108	208	80	472
		% within Designation Level	5.9%	10.2%	22.9%	44.1%	16.9%	100.0%
	Senior Executives Level	Count	12	8	8	64	36	128
		% within Designation Level	9.4%	6.2%	6.2%	50.0%	28.1%	100.0%
Total		Count	40	56	116	272	116	600
		% within Designation Level	6.7%	9.3%	19.3%	45.3%	19.3%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 19.3% respondents strongly agreed, 45.3% respondents agreed, 19.3% respondents were neutral, 9.3% respondents disagreed and 6.7% respondents strongly disagreed that ‘Identify the potential of employees’, is a factor that is taken into consideration as the purpose of the Performance Appraisal and Training.

As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration as the purpose of the Performance Appraisal and Training.

H₀: The two factors are independent.

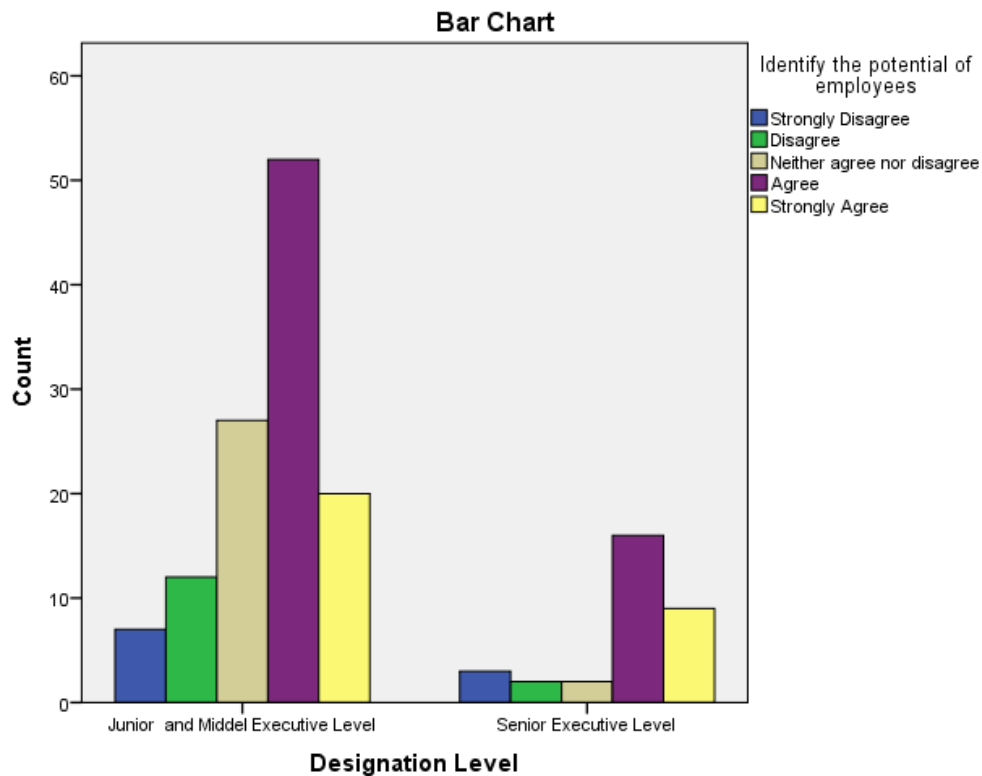
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze Descriptive Statistics Crosstabs)

Table-19: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.141 ^a	4	.000
Likelihood Ratio	28.485	4	.000
Linear-by-Linear Association	5.323	1	.021
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.53.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.205	.000
	Cramer's V	.205	.000
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be less than 0.05, so, we **reject null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (**dependent variable**) and **'Improve the technical & other job abilities of employees'**.

Table-20: Improve the technical & other job abilities of employees

Crosstab			Improve the technical & other job abilities of employees					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	20	56	112	192	92	472
		% within Designation Level	4.2%	11.9%	23.7%	40.7%	19.5%	100.0%
Designation Level	Senior Executives Level	Count	8	8	36	56	20	128
		% within Designation Level	6.2%	6.2%	28.1%	43.8%	15.6%	100.0%
Total		Count	28	64	148	248	112	600
		% within Designation Level	4.7%	10.7%	24.7%	41.3%	18.7%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 18.7% respondents strongly agreed, 41.3% respondents agreed, 24.7% respondents were neutral, 10.7% respondents disagreed and 4.7% respondents strongly disagreed that 'To Improve the technical & other job abilities of employees' is a factor that is taken into consideration for Performance Appraisal and Training.

As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration as the purpose of the Performance Appraisal and Training.

H₀: The two factors are independent.

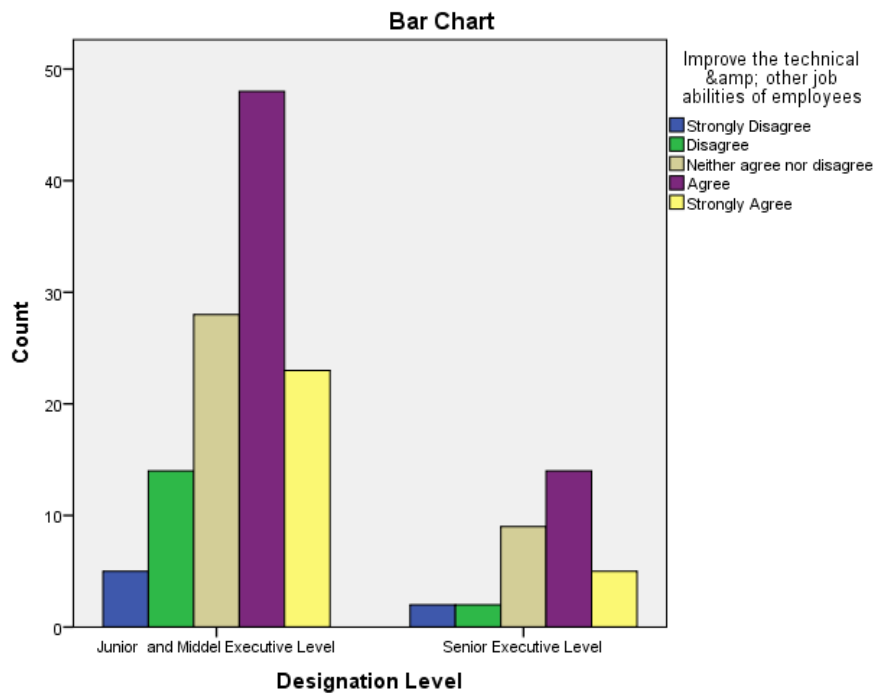
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-21: Chi-Square Tests

Chi-Square Tests				
		Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square		5.675 ^a	4	.225
Likelihood Ratio		6.012	4	.198
Linear-by-Linear Association		.086	1	.770
N of Valid Cases		600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.97.				
Symmetric Measures				
		Value	Approximate Significance	
Nominal by Nominal	Phi	.097	.225	
	Cramer's V	.097	.225	
N of Valid Cases		600		
a. Not assuming the null hypothesis.				
b. Using the asymptotic standard error assuming the null hypothesis.				

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be more than 0.05, so, we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and 'Remedy of employees past poor performance'.

Table-22: Remedy of employees past poor performance

Crosstab			Remedy of employees past poor performance					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	20	96	120	172	64	472
		% within Designation Level	4.2%	20.3%	25.4%	36.4%	13.6%	100.0%
	Senior Executives Level	Count	0	32	56	40	0	128
		% within Designation Level	0.0%	25.0%	43.8%	31.2%	0.0%	100.0%
Total		Count	20	128	176	212	64	600
		% within Designation Level	3.3%	21.3%	29.3%	35.3%	10.7%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 10.7% respondents strongly agreed, 35.3% respondents agreed, 29.3% respondents were neutral, 21.3% respondents disagreed and 3.3% respondents strongly disagreed that ‘Remedy of employees past poor performance’ is a factor that is taken into consideration for Performance Appraisal and Training.

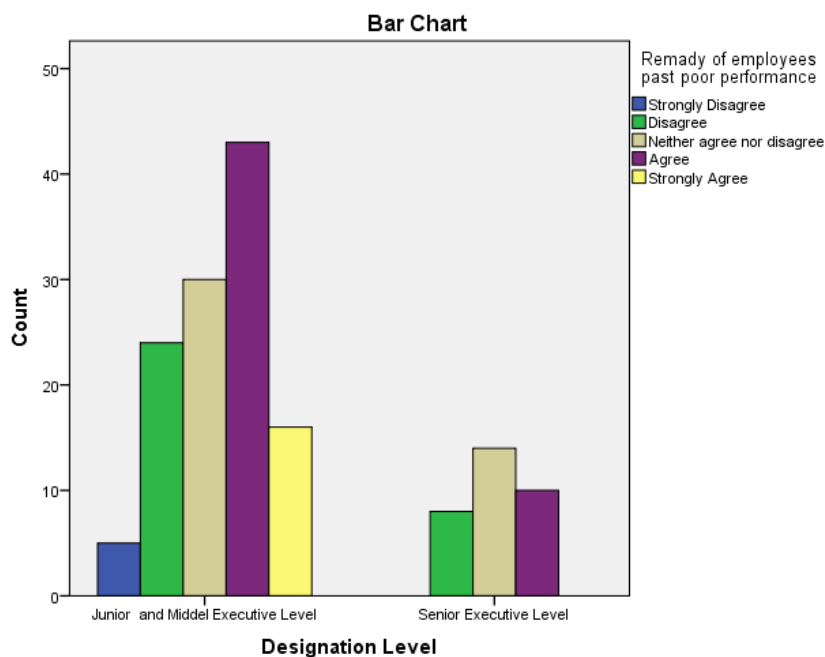
As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration as the purpose of the Performance Appraisal and Training.

H₀: The two factors are independent.
H₁: The two factors are not independent (associated).
Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-22: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	36.102 ^a	4	.000
Likelihood Ratio	52.533	4	.000
Linear-by-Linear Association	7.815	1	.005
N of Valid Cases	600		
a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.27.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.245	.000
	Cramer's V	.245	.000
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be less than 0.05, so, we **reject null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and ‘Prepare employees for future job assignments’.

Table-23: Prepare employees for future job assignment

Crosstab			Prepare employees for future job assignments					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	20	68	88	228	68	472
		% within Designation Level	4.2%	14.4%	18.6%	48.3%	14.4%	100.0%
	Senior Executives Level	Count	4	24	12	68	20	128
		% within Designation Level	3.1%	18.8%	9.4%	53.1%	15.6%	100.0%
Total		Count	24	92	100	296	88	600
		% within Designation Level	4.0%	15.3%	16.7%	49.3%	14.7%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 14.7% respondents strongly agreed, 49.3% respondents agreed, 16.7% respondents were neutral, 15.3% respondents disagreed and 4.0% respondents strongly disagreed that ‘Prepare employees for future job assignment’ is a factor that is taken into consideration for Performance Appraisal and Training.

As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration as the purpose of the Performance Appraisal and Training.

H₀: The two factors are independent.

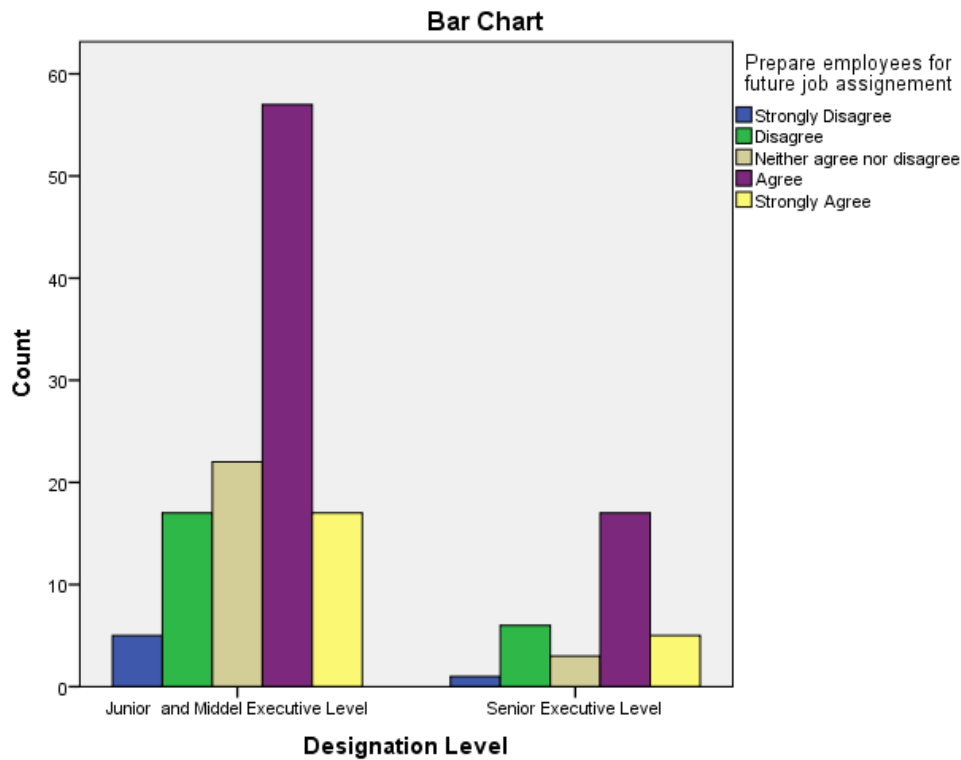
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-24: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.317 ^a	4	.120
Likelihood Ratio	7.999	4	.092
Linear-by-Linear Association	.244	1	.621
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.12.			
Symmetric Measures			
	Value	Approximate Significance	
Nominal by Nominal	Phi	.110	.120
	Cramer's V	.110	.120
N of Valid Cases	600		
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be more than 0.05, so, we **accept null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are not associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and 'Build team work within the company'.

Table-25: Build team work within the company

Crosstab			Build team work within the company					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	24	64	124	192	68	472
		% within Designation Level	5.1%	13.6%	26.3%	40.7%	14.4%	100.0%
	Senior Executives Level	Count	8	32	20	52	16	128
		% within Designation Level	6.2%	25.0%	15.6%	40.6%	12.5%	100.0%
Total		Count	32	96	144	244	84	600
		% within Designation Level	5.3%	16.0%	24.0%	40.7%	14.0%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 14.0% respondents strongly agreed, 40.7% respondents agreed, 24.0% respondents were neutral, 16.0% respondents disagreed and 5.3% respondents strongly disagree that 'to Build team work within the company' is a factor that is taken into consideration for performance appraisal and training.

As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration as the purpose of the Performance Appraisal and Training.

H₀: The two factors are independent.

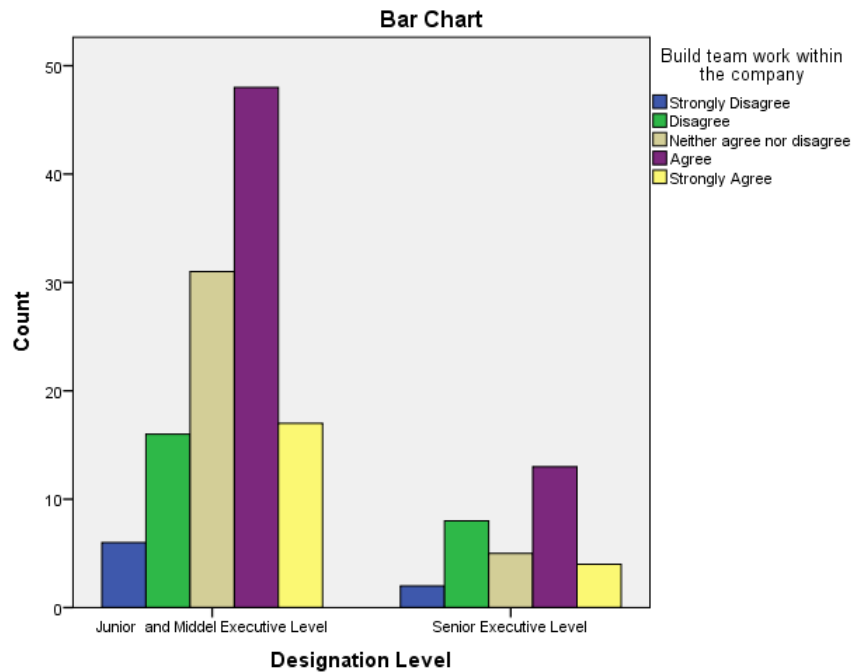
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-26: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.511 ^a	4	.009
Likelihood Ratio	13.149	4	.011
Linear-by-Linear Association	2.688	1	.101
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.83.			
Symmetric Measures			
	Phi	Value	Approximate Significance
Nominal by Nominal	Phi	.150	.009
	Cramer's V	.150	.009
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be less than 0.05, so, we **reject null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives)** (dependent variable) and 'Help employees understand the business, e.g. knowledge of company, New technologies etc'.

Table-27: Help employees understand the business, e.g. knowledge of company, New technologies etc

Crosstab			Help employees understand the business, e.g. knowledge of company, New technologies etc					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Designation Level	Junior and Middle Executives Level	Count	32	72	132	176	60	472
		% within Designation Level	6.8%	15.3%	28.0%	37.3%	12.7%	100.0%
	Senior Executives Level	Count	16	20	40	32	20	128
		% within Designation Level	12.5%	15.6%	31.2%	25.0%	15.6%	100.0%
Total		Count	48	92	172	208	80	600

	% within Designation Level	8.0%	15.3%	28.7%	34.7%	13.3%	100.0%
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Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 13.3% respondents strongly agreed, 34.7% respondents agreed, 28.7% respondents were neutral, 15.3% respondents disagreed and 8.0% respondents strongly disagreed that ‘Help employees understand the business, e.g. knowledge of company, New technologies etc’ is a factor that is taken into consideration for Performance Appraisal and Training.

As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have agreed and strongly agreed that this factor is taken into consideration as the purpose of the performance appraisal and training.

H₀: The two factors are independent.

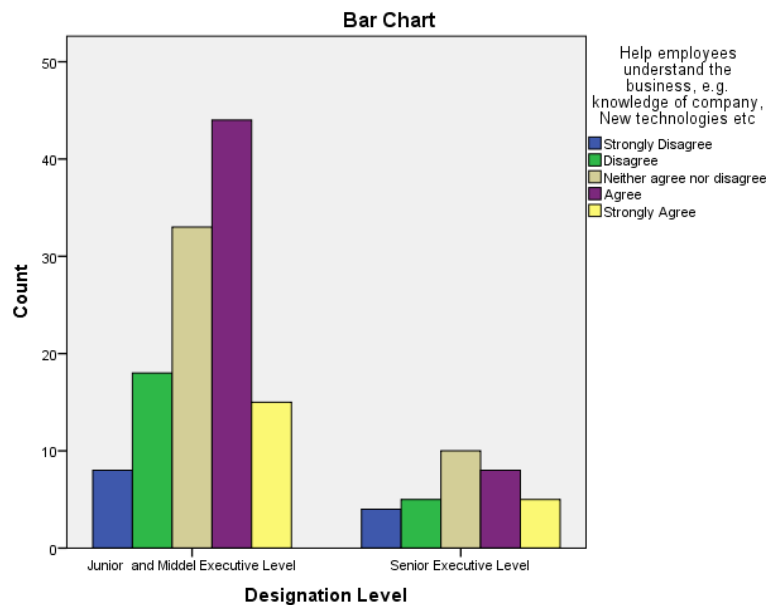
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-28: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.533 ^a	4	.049
Likelihood Ratio	9.422	4	.051
Linear-by-Linear Association	2.657	1	.103
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.24.			
Symmetric Measures			
	Value	Approximate Significance	
Nominal by Nominal	Phi	.126	.049
	Cramer's V	.126	.049
N of Valid Cases	600		
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be less than 0.05, so, we **reject null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are associated**.



Hence, we can say that our **Alternate Hypothesis: 2 (H₁)**, is accepted and **Null hypothesis: 2 (H₀)**, is rejected and finally our **Research Objective-2** is fulfilled.

- ❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives) (dependent variable)** and **'It tends to follow the Human Resource Practices (e.g. in hiring pay, innovative practices etc.) used by other firms in our industry.**

Table-29: It tends to follow the Human Resource Practices (e.g. in hiring pay, innovative practices etc.) used by other firms in our industry

Crosstab			It tends to follow the Human Resource Practices (e.g. in hiring pay, innovative practices etc.) used by other firms in our industry					Total
Designation Level	Junior and Middle Executives Level	Count	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	1
			% within Designation Level	56	96	156	140	
Senior Executives Level	Senior Executives Level	Count	12	32	32	52	0	128
		% within Designation Level	9.4%	25.0%	25.0%	40.6%	0.0%	100.0%
Total		Count	68	128	188	192	24	600
		% within Designation Level	11.3%	21.3%	31.3%	32.0%	4.0%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 4.0% respondents strongly agreed, 32.0% respondents agreed, 31.3% respondents were neutral, 21.3% respondents disagreed and 11.3% respondents strongly disagreed that 'H.R. Department or Personnel Department tends to follow the Human Resource Practices (e.g. in hiring pay, innovative practices etc.).

As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the Senior Level Executives have more agreed and more strongly agreed than the Junior & Middle Level Executives that this factor is taken into consideration for H.R. practices.

H₀: The two factors are independent.

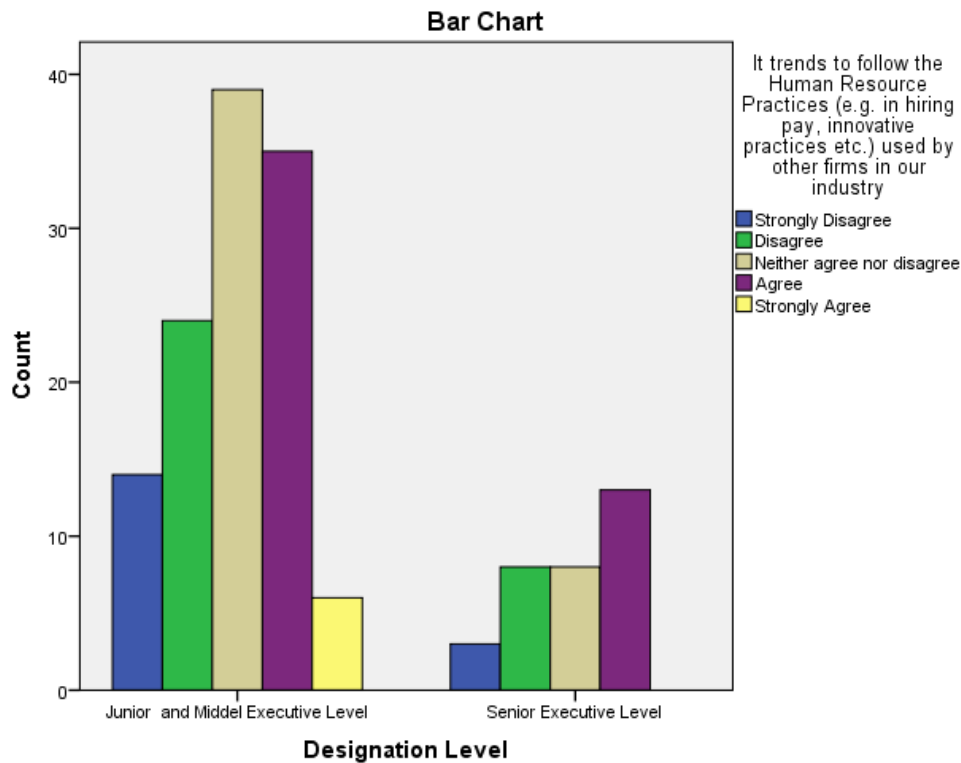
H₁: The two factors are not independent (associated).

Tool Used: Chi Square Test (Analyze Descriptive Statistics Crosstabs)

Table-30: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.950 ^a	4	.007
Likelihood Ratio	18.845	4	.001
Linear-by-Linear Association	.011	1	.917
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.12.			
Symmetric Measures			
	Value	Approximate Significance	
Nominal by Nominal	Phi	.152	.007
	Cramer's V	.152	.007
N of Valid Cases	600		
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be **0.007 (less than 0.05)** so we **reject null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are associated**.



❖ **Analysis:** Association between **Designation Level-(Junior & Middle Level Executives and Senior Level Executives) (dependent variable)** and **‘It works closely with the Senior Management group on the key strategic issues and execution of action plans’**.

Table-31: It works closely with the Senior Management group on the key strategic issues and execution of action plans

Designation Level			It works closely with the senior management group on the key strategic issues and execution of action plans					Total
			Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
Junior and Middle Executives Level	Count		16	68	184	164	40	472
	% within Designation Level		3.4%	14.4%	39.0%	34.7%	8.5%	100.0%
Senior Executives Level	Count		12	24	36	48	8	128
	% within Designation Level		9.4%	18.8%	28.1%	37.5%	6.2%	100.0%
Total		Count	28	92	220	212	48	600
		% within Designation Level	4.7%	15.3%	36.7%	35.3%	8.0%	100.0%

Interpretation & Findings: From the above crosstab, it can be said that out of total 600 respondents (Junior, Middle & Senior Level Executives), 8.0% respondents strongly agreed, 35.3% respondents agreed, 36.7% respondents were neutral, 15.3% respondents disagreed and 4.7% respondents strongly disagreed that ‘It works closely with the senior management group on the key strategic issues and execution of action plans’.

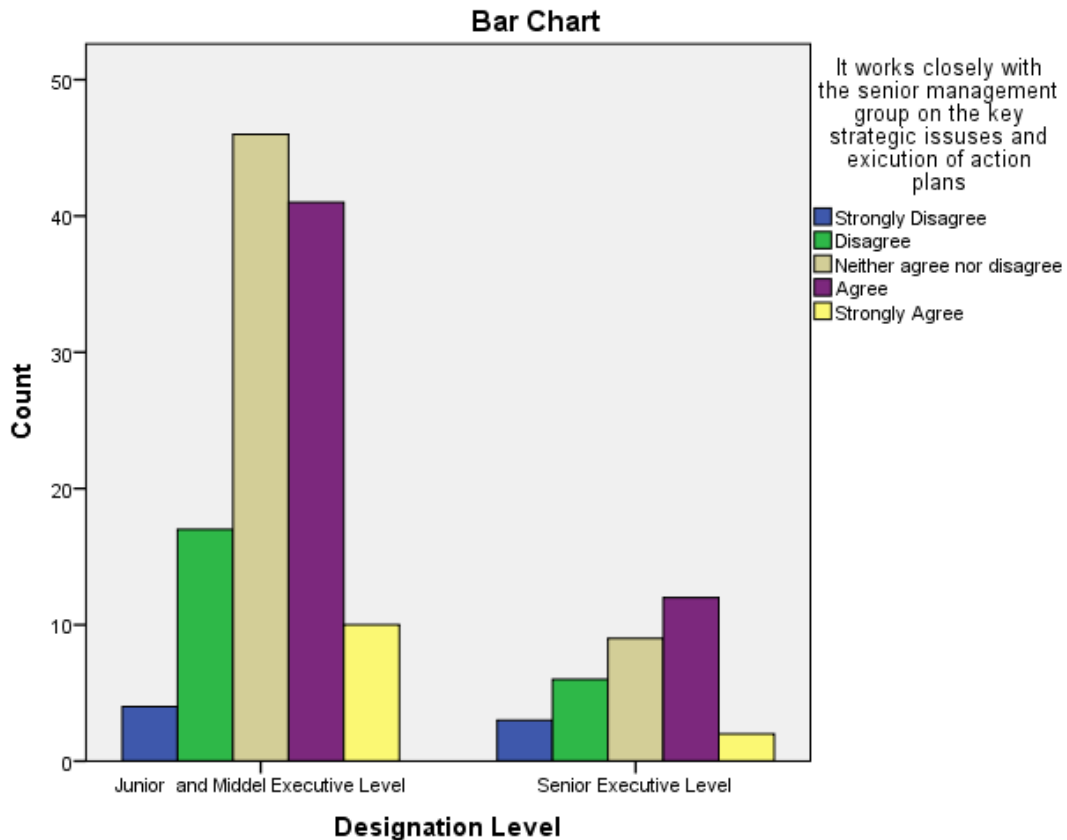
As far as perception of Junior & Middle Executives & Senior Level Executives is concerned, it can be said that majority of the respondents have equally agreed and strongly agreed.

H₀: The two factors are independent.
H₁: The two factors are not independent (associated).
Tool Used: Chi Square Test (Analyze → Descriptive Statistics → Crosstabs)

Table-32: Chi-Square Tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.045 ^a	4	.011
Likelihood Ratio	12.014	4	.017
Linear-by-Linear Association	3.460	1	.063
N of Valid Cases	600		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.97.			
Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.147	.011
	Cramer's V	.147	.011
N of Valid Cases		600	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

Interpretation & Findings: From the table we find out that asymptotic significance for Pearson Chi Square comes out to be 0.011 (less than 0.05) so we **reject null hypothesis** at 5% level of significance. Hence it can be concluded that **two variables are associated**.



4.3. CORRELATIONS ANALYSIS:

Correlations analysis has been performed to study the correlation among Hiring Practices, Performance Appraisal and Training Practices, Employee Satisfaction and Reasons of Attrition.

Table-33: Correlations

Correlations		Hiring Practices	Performance Appraisal and Training Practices	I am satisfied with the company
Hiring Practices	Pearson Correlation	1	.476**	.448**
	Sig. (2-tailed)		.000	.000
	N	600	600	600
Performance Appraisal and Training Practices	Pearson Correlation	.476**	1	.240**
	Sig. (2-tailed)	.000		.000
	N	600	600	600
I am satisfied with the company	Pearson Correlation	.448**	.240**	1
	Sig. (2-tailed)	.000	.000	
	N	600	600	600

** . Correlation is significant at the 0.01 level (2-tailed).

Findings & Conclusion

The above table shows that there is a positive correlation among the Hiring Practices, Performance Appraisal and Training Practices and Employee Satisfaction. The correlation analysis shows that three variables are significantly correlated at the 0.000 level, which is lower than the 0.05 confidence level for the study.

Table -34: Correlations

Correlations		Performance Appraisal and Training Practices	Hiring Practices	Reasons of Attrition
Performance Appraisal and Training Practices	Pearson Correlation	1	.476**	.114**
	Sig. (2-tailed)		.000	.005
	N	600	600	600
Hiring Practices	Pearson Correlation	.476**	1	.089*
	Sig. (2-tailed)	.000		.029
	N	600	600	600
Reasons of Attrition	Pearson Correlation	.114**	.089*	1
	Sig. (2-tailed)	.005	.029	
	N	600	600	600

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

IV. Findings & Conclusion

The above table shows that there is a positive correlation among the Hiring Practices, Performance Appraisal and Training Practices and Reasons of Attrition. The correlation analysis shows that three variables are significantly correlated at the 0.000 level, which is lower than the 0.05 confidence level for the study.

Hence, we can say that our **Alternate Hypothesis: 3 (H1), is accepted and Null hypothesis: 3 (H0), is rejected and finally our Research Objective-3** is fulfilled.

V. Conclusion & Managerial Implications

In case of DPSUs in India, the major findings of this research is that four null hypotheses related to Performance Appraisal and Training Practices and two null hypotheses related to Human Resource Management or Personnel Department are **rejected**.

When Junior / Middle Level & Senior Level executives were asked about the factors to be considered as the purpose of Performance Appraisal and Training Practices in Defence PSUs in India, both showed the gap in the perception for following these independent variables-

- Identify the potential of employees
- Remedy of employees past poor performance
- Build team work within the company
- Help employees understand the business, e.g. knowledge of company, New technologies etc

And when Junior / Middle Level & Senior Level Executives were asked about the Human Resource Management or Personnel Department in Defence PSUs in India, both showed the gap in the perception for following these two independent variables-

- Human Resource Management or Personnel Department tends to follow the Human Resource Practices (e.g. in hiring pay, innovative practices etc.) used by other firms in our industry

- Human Resource Management or Personnel Department works closely with the senior management group on the key strategic issues and execution of action plans

And for rest of the independent variables related to hiring practices and performance appraisal and training practices Defence PSUs in India, Junior / Middle Level & Senior Level executives, both showed similarity in their responses hence, researcher didn't find the gap in their perceptions for the aforementioned independent variables.

In Defence PSUs in India, because of comfort and job security of government job and post-retirement benefits generally employees prefer to stick to the same work and work location. Until unless astronomically high packages are not offered, government employees do not prefer to change their job. It can be easily verified and corroborated as employees' attrition is less than one percent. Private and foreign investment is bringing money in India to augment industrial growth but does not bring trained manpower. Companies are ready to pay higher pay packages to trained and talented manpower. As they have not yet established their infrastructure; inducting fresh graduate and further training them is the longest way to accomplish their journey. New players prefer hiring talented and experienced man power that is only possible by alluring employees from DPSUs who are the most preferred target employees. New players are exploiting these reasons and luring experienced manpower by offering them higher pay packages. Defence PSUs are the only pool of most talented and most experienced defence industrial manpower and unfortunately easy targets of new related firms. It has been observed that defence PSU are most vulnerable to incoming investors as far as retention of Human Resource is concerned. Therefore, this study was conducted to see the trends of Employee Attrition in Defence PSU and comparison of existing HR practices in Defence PSUs; and further finding out correlation between Employee Attrition rate and existing HR policies.

The companies should make retention strategies to control the attrition rate and while developing it, they should keep in mind the following-

- Management's support for the employees
- Job satisfaction & motivation
- Clarity of the job description at the recruitment and selection stage
- Recognition should be given to achievers
- Employees should have a say in the organisation
- Regular training to upgrade the knowledge of employees
- Comfortable work environment
- Flexible work policies
- Reward long term service
- Hire effective leader
- Span of workload
- Hold exit interviews & regular review sessions
- Taking care of employee's family's needs

After completing this paper, it can be concluded that there's no universal attrition management solution for every company. Each organization has to build its own motivation system based on compatibility between organizational and individual goals. A solution varies from organisation to organisation and from industry to industry. The organisations should have a clear understanding of their employee turnover rate and how it is affecting their company. In order to make Defence PSUs in India, to be successful in their business ventures, focus must be directed towards HR practices.

Companies should adopt remedial measures mentioned above and should retain their efficient employees for as long as they can. Along with the subordinates, the supervisors also need to be trained to control and retain their junior. Companies should calculate their attrition rate on regular basis and should also calculate the cost attached to it. Thus, it can see whether this cost justifies the revenue generated by it or not.

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