

# Topic for Project

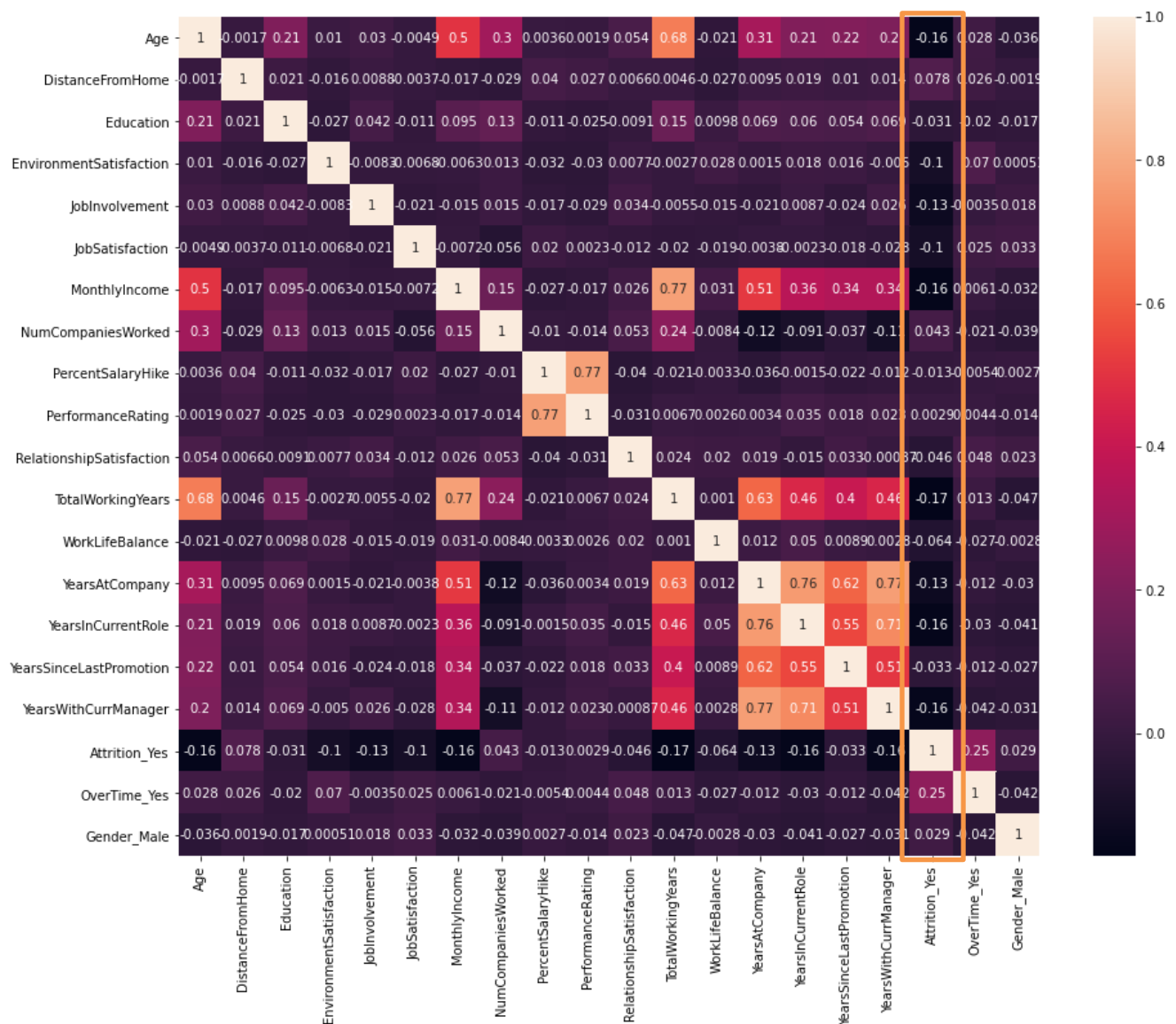
## Analyse the Attrition rate of Employees

**Problem Statement:** - Organizations are realizing that employees are valuable assets. So the HR manager's role in the present era was prominent. 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 entirely depends on the pool of employees. Attrition rate defines the organization's image. Higher the attrition rate the organization has to face some incurred costs to recruit, induct, placement and train the employee. Ashna Group facing an employee attrition problem.

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**Date:** - 4<sup>th</sup> June 2021

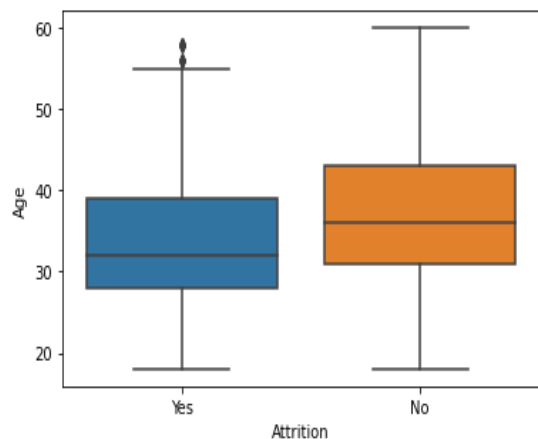
## Q (1):- Uncover the factors that lead to employee attrition.



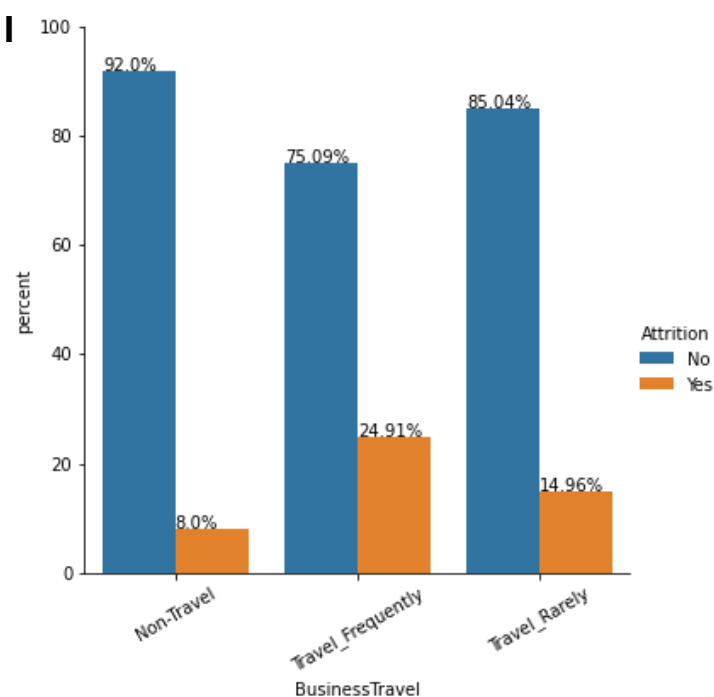
- ✚ **Environment Satisfaction:** - Less Environment Satisfaction leads to Attrition.
- ✚ **Job Involvement:** - Less Job Involvement leads to more Attrition.
- ✚ **Job Satisfaction:** - Less Job satisfaction leads to more Attrition.
- ✚ **Monthly Income:** - Less Monthly Income leads to more Attrition.
- ✚ **Years With current manager:** - As any one spends more time with current manager he doesn't leave company.

## Q2 (a):- Show influence of different factors on Attrition rate

- ✚ **Age vs. Attrition:** - As people gets older (having more experience), they try to not leave the company.

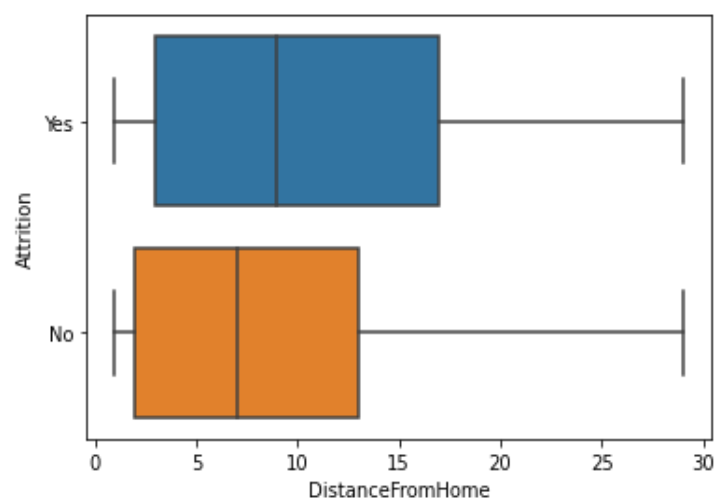


### ✚ Travel vs. Attrition:-



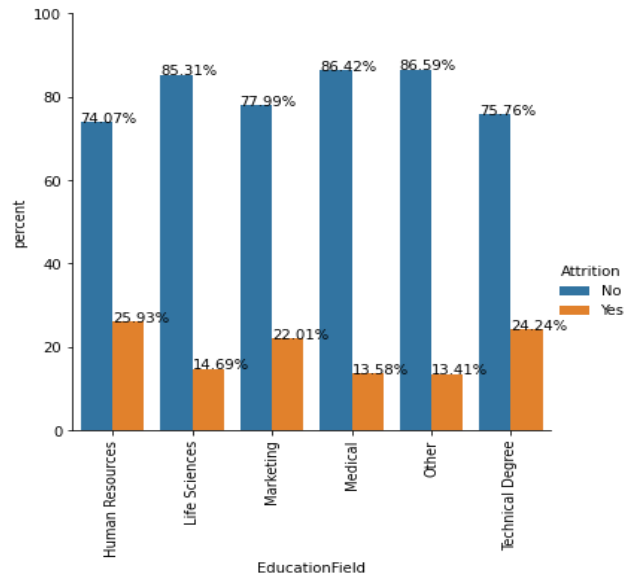
It shows who has travel frequently, has more tendency to leave company.

### ✚ Distance from home vs. Attrition:-



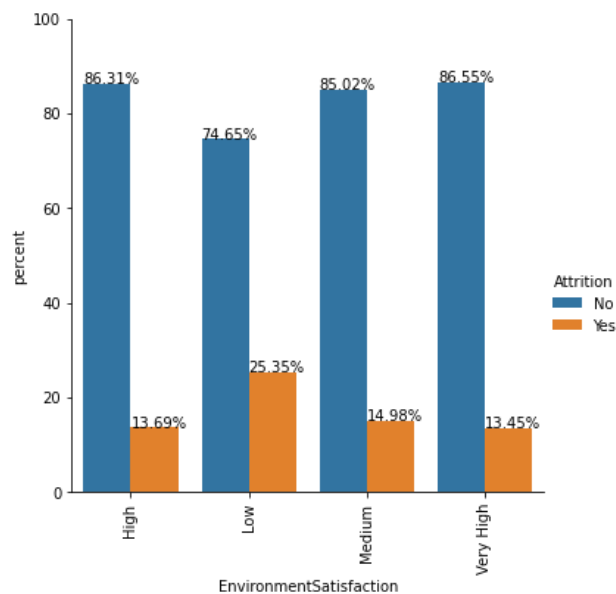
People which are leaving the company, have to travel more.

### Education Field vs. Attrition:-



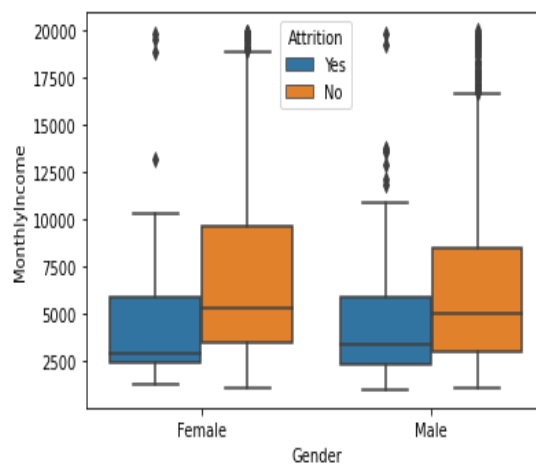
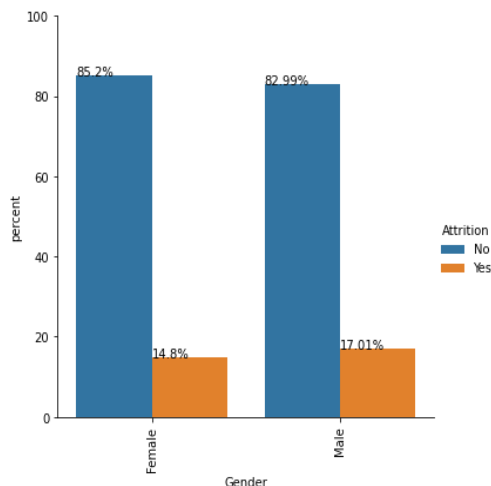
**Human Resources has highest rate of Attrition.**

### Environment Satisfaction vs. Attrition:-



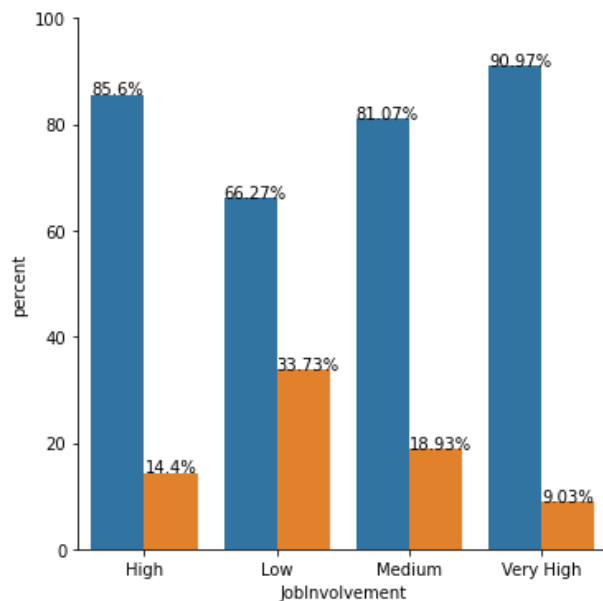
**As Environment Satisfaction increases, Attrition rate decreases.**

### Gender vs. Attrition:-



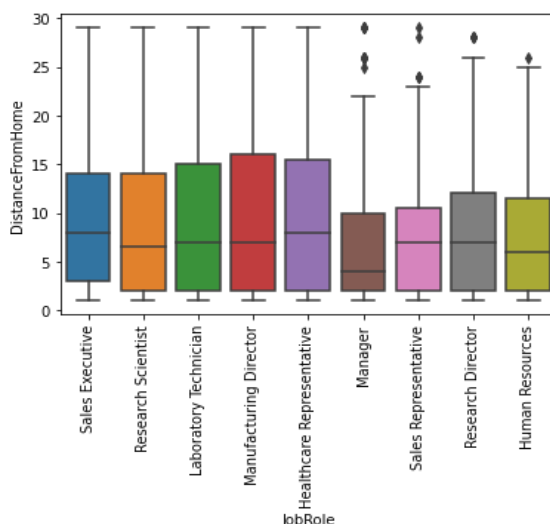
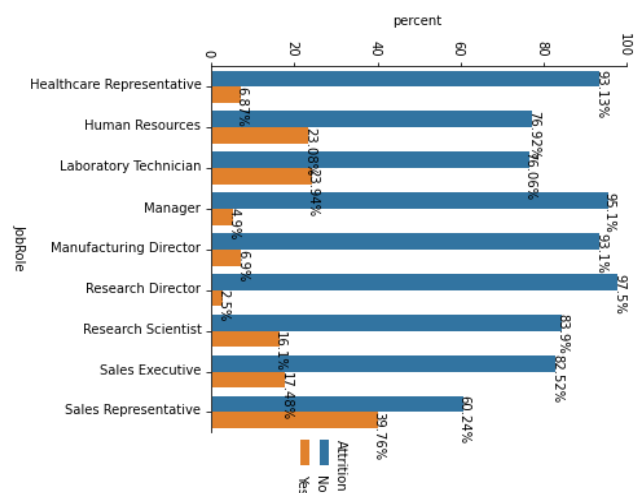
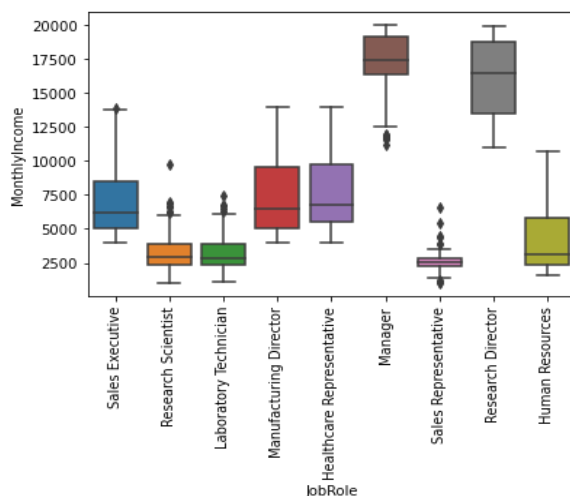
**Women who are leaving they got less income than their Male friends.**

### **Job Involvement vs. Attrition:-**



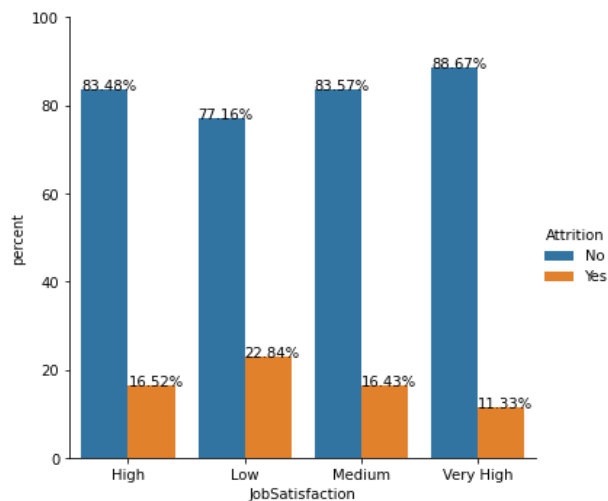
**Where job involvement less, they tend to leave org. I think they have bored and leave the company.**

### **Job Role vs. Attrition:-**



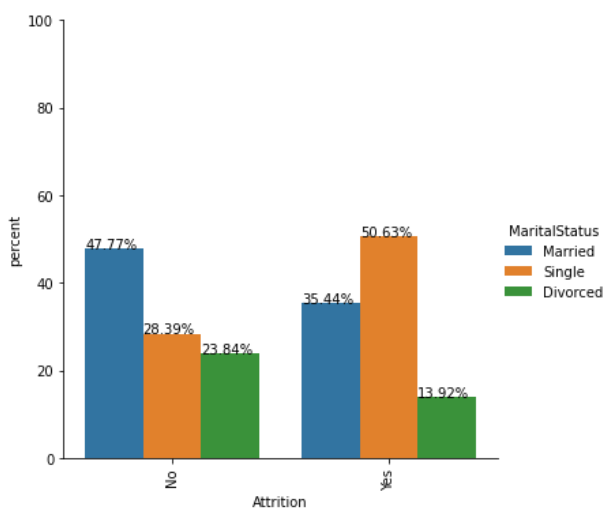
**Sales representative although not have highest distance from home but they got lowest monthly income that lead to highest Attrition rate.**

### Job Satisfaction vs. Attrition:-



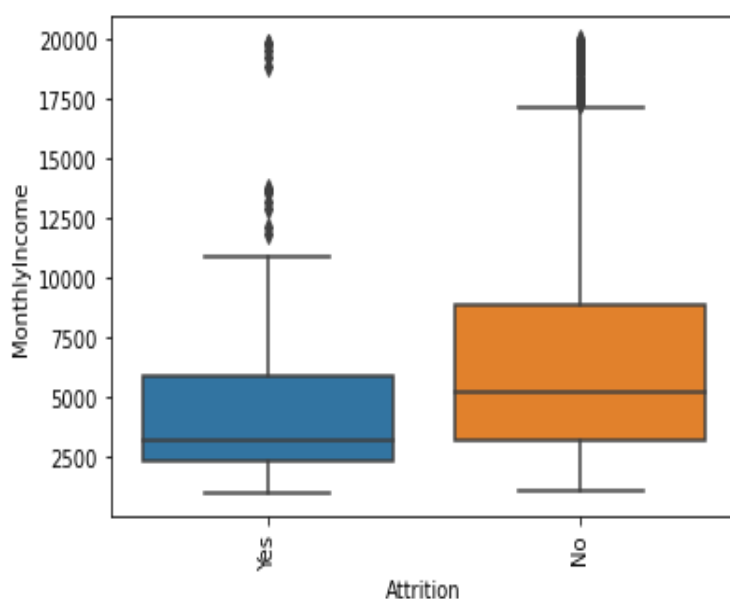
Less Job satisfaction leads to high rate of Attrition.

### Marital Status vs. Attrition:-



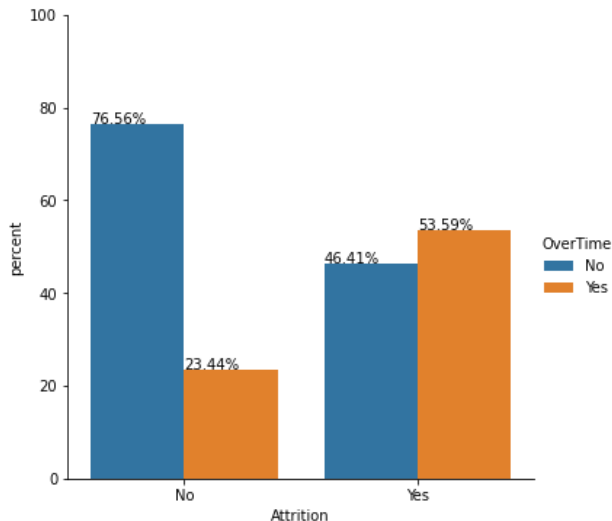
We can see that 'Single' people have more Attrition rate.

### Monthly Income vs. Attrition:-



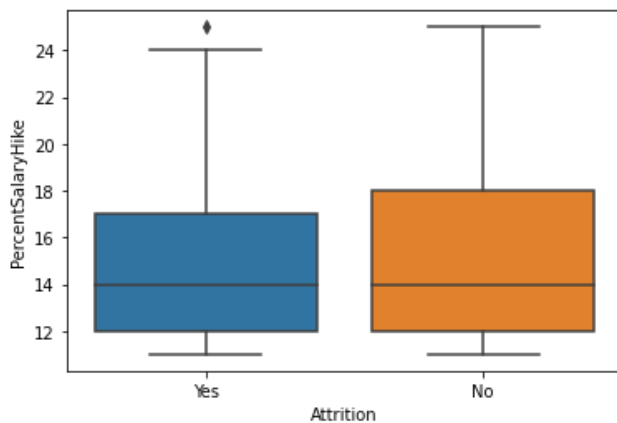
Leaving people have very less monthly income.

### Overtime vs. Attrition:-



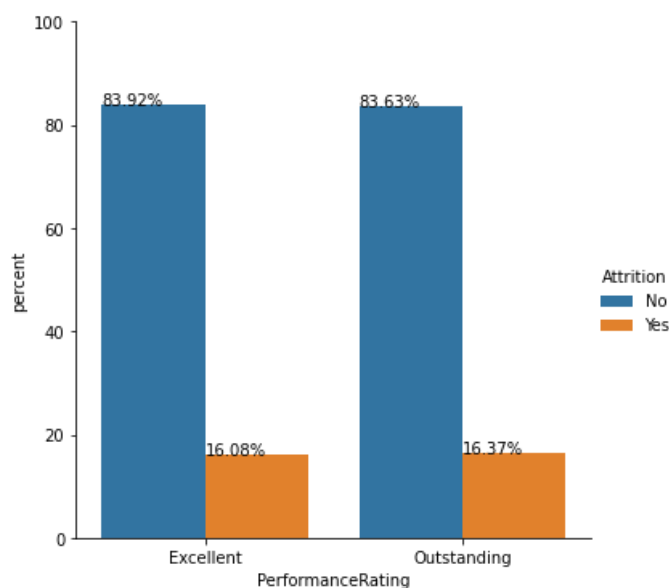
People who are not leaving company they also not work over time much. But In leaving people, 50 % are doing over time.

### PercentSalaryHike vs Attrition:-



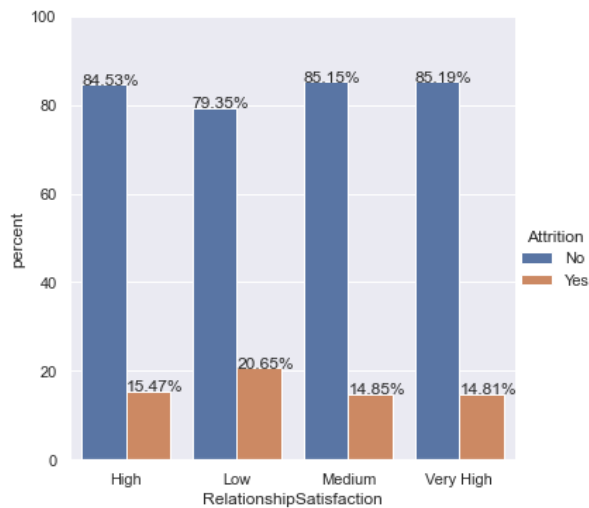
Attrition Rate doesn't depend more on "Salary Hike". We can also see it in correlation Heat map.

### Performance Rating vs Attrition:-



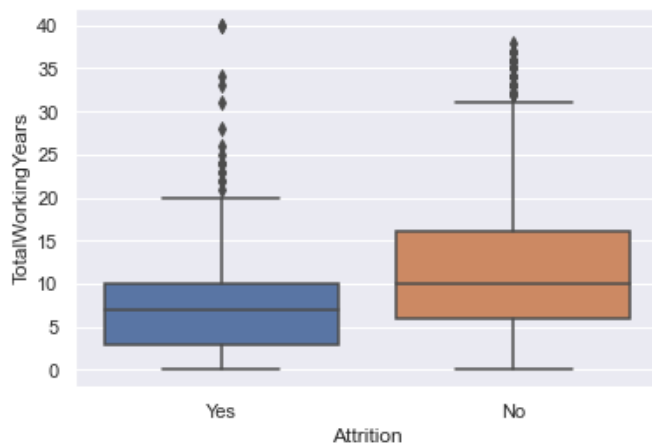
I think performance rating does not have much effect on Attrition Rate. We can also see it in correlation Heat map.

### Relationship Satisfaction vs Attrition:-



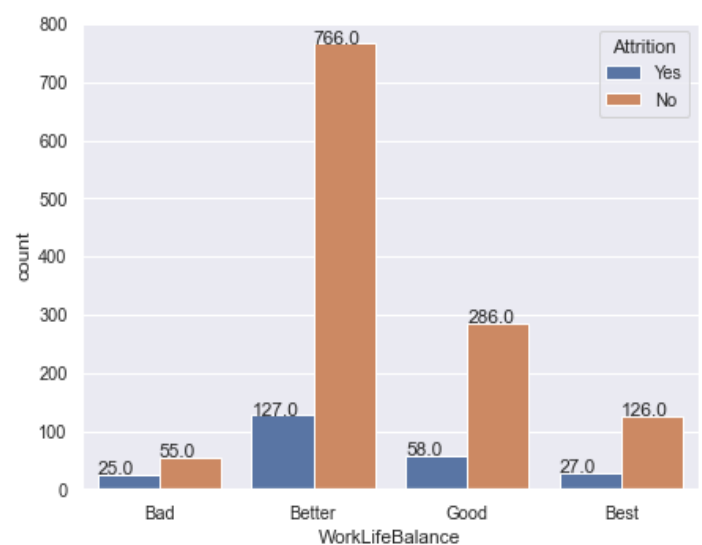
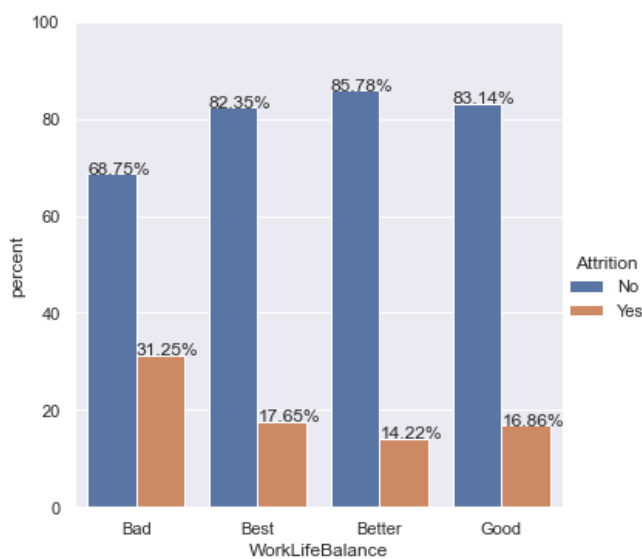
If anyone does not have problem with their relationship, He will not leave the company.

### TotalWorkingYears vs Attrition:-



Someone with less experience tend to leave company.

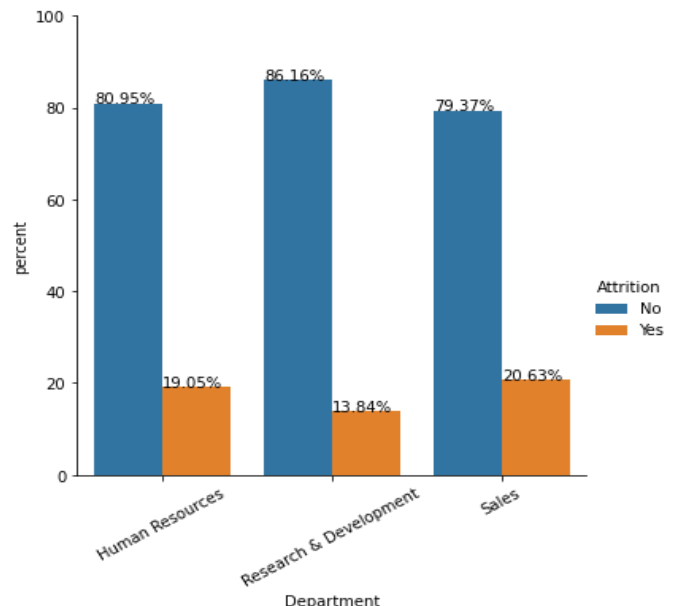
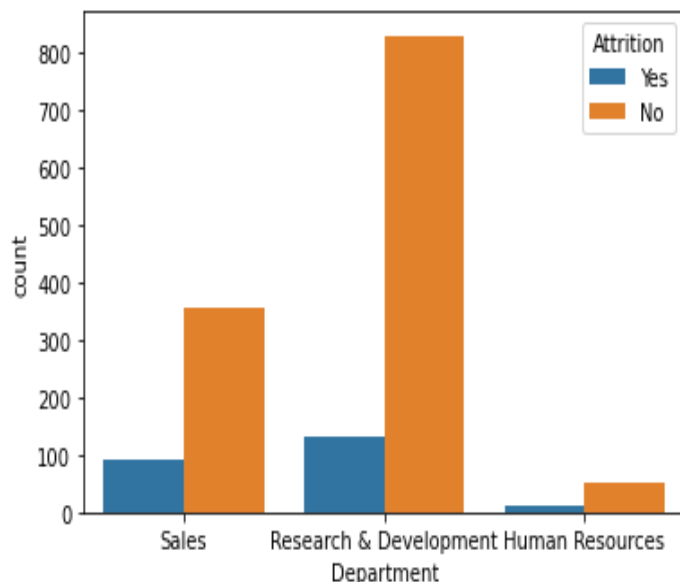
### WorkLifeBalance vs Attrition:-





We can see say that Most of the people have “Better” work life balance in company. ‘Bad’ work life balance people are very less in numbers and they tend to leave the company.

## Q2 (b):- Departments facing higher Attrition

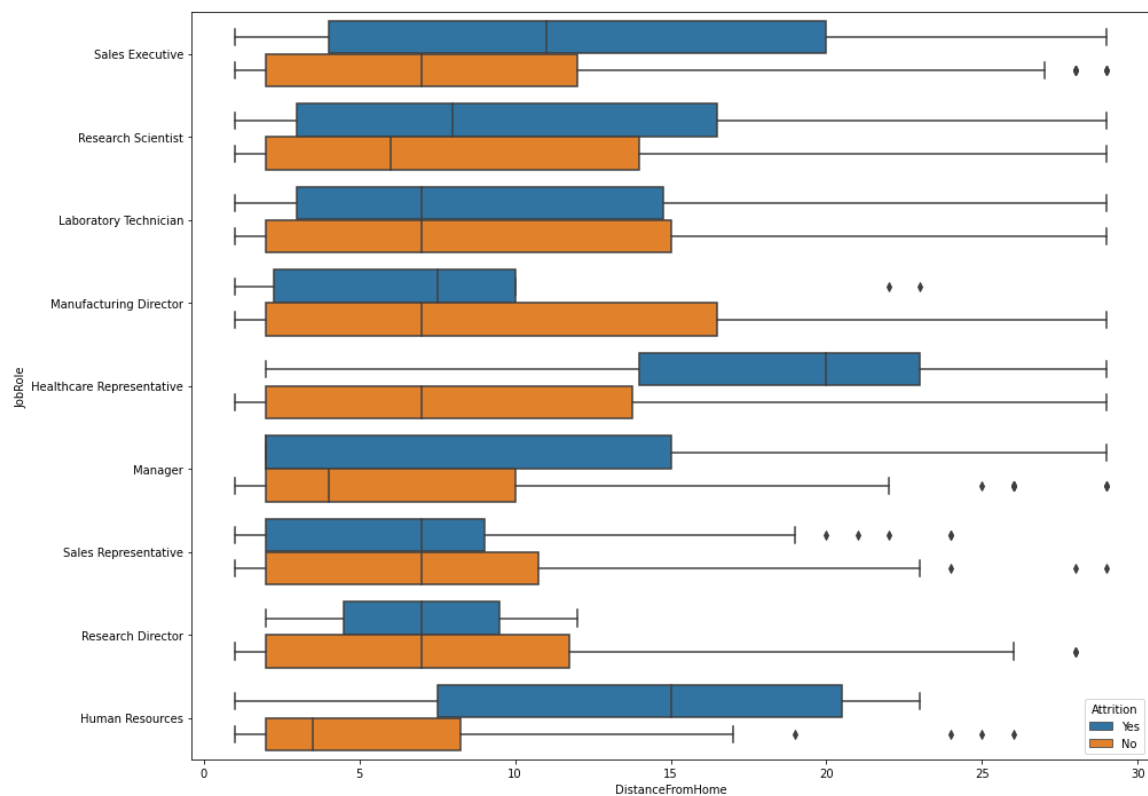


Department	Human Resources	Research & Development	Sales
Attrition			
No	51	828	354
Yes	12	133	92

Based upon these graphs and table, we found that “Sales Department” is having the highest percentage of employee leaving the company (approx 20.62% compared to 19.04% and 13.84%).

## Q2(c):- Show a breakdown of distance from home by job role and Attrition

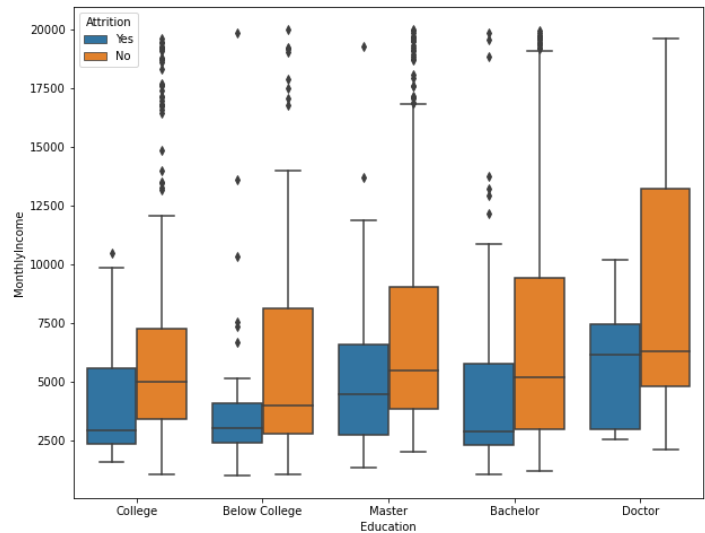
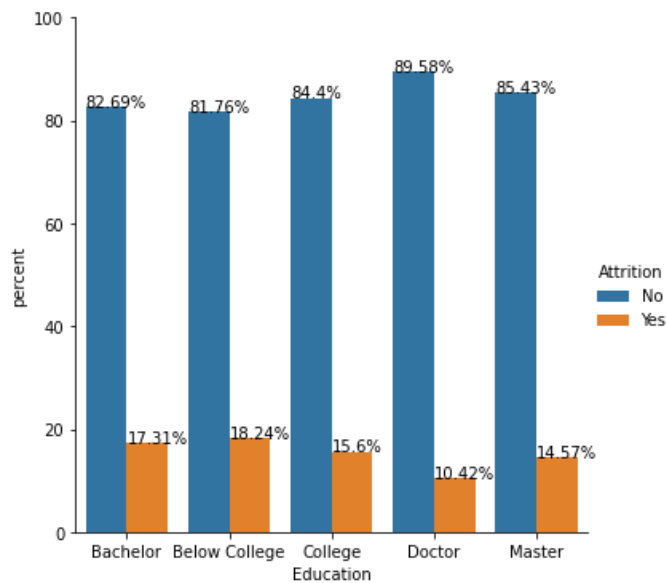
Attrition	No	Yes
JobRole		
Healthcare Representative	9.204918	17.666667
Human Resources	6.600000	13.416667
Laboratory Technician	9.329949	9.661290
Manager	7.927835	10.000000
Manufacturing Director	9.533333	8.800000
Research Director	8.474359	7.000000
Research Scientist	8.869388	9.765957
Sales Executive	9.026022	12.649123
Sales Representative	9.000000	8.151515



As Distance from home increases, Attrition increases.

## Q 2(d):- Compare average monthly income by education and Attrition






Attrition	No	Yes
Education		
Bachelor	6882.919662	4770.242424
Below College	5926.129496	4360.161290
College	6586.058824	4282.545455
Doctor	8559.906977	5850.200000
Master	7087.814706	5335.155172



1. From Above graph we can say that Due to less Monthly Income, People tend to leave the company.
2. We can also say that as the degree increases, Monthly Income also increases and tendency to leave organisation decrease.
3. "Below college" people more likely to leave the organisation due to the less Monthly Income.

### Q3). Provide few solutions to the problem of attrition at the company.

Upon observing and analysing, it was found that the problem of Attrition rate can be solved by following the below approaches:-

-  **Reducing unnecessary Business Travel:** - As we see the attrition rate is 8% for non-travel employees compared to approx. 15% for rarely-travel and 25% around for frequently travelling employees. Company can provide the transportation facility to employees or if it is possible they can give work from home to some of them to avoid travelling.
-  **Special focus on Sales Department:** - As we see, the attrition rate is highest in the Sales department; hence special focus on employees working conditions in this department is required.
-  **Improving Job Satisfaction:** - Company can provide a positive working environment for the employees. And start rewarding and recognising the employees who work hard and have good performance rating.
-  **Improve relation between employee and manager:** - Company can work on improving relation between employee and manager. Manager can sit down face-to-face on a weekly or monthly basis to discuss ideas, solve problems, and track goal progress. These meetings will make employees feel more comfortable about asking for help and give the manager a better understanding of the unique personalities and motivations of their team members. By doing so we can also improve involvement of employees in the company.
-  **Improve work environment:** - Company can improve the work environment by providing a relaxing atmosphere with comfy furniture, working equipment. Company can give breaks to play games or just recharge as necessary.