Factors Impacting Employee Satisfaction

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Contents

0.1 Introduction

0.2 The Data Set

```
library(dplyr)
```

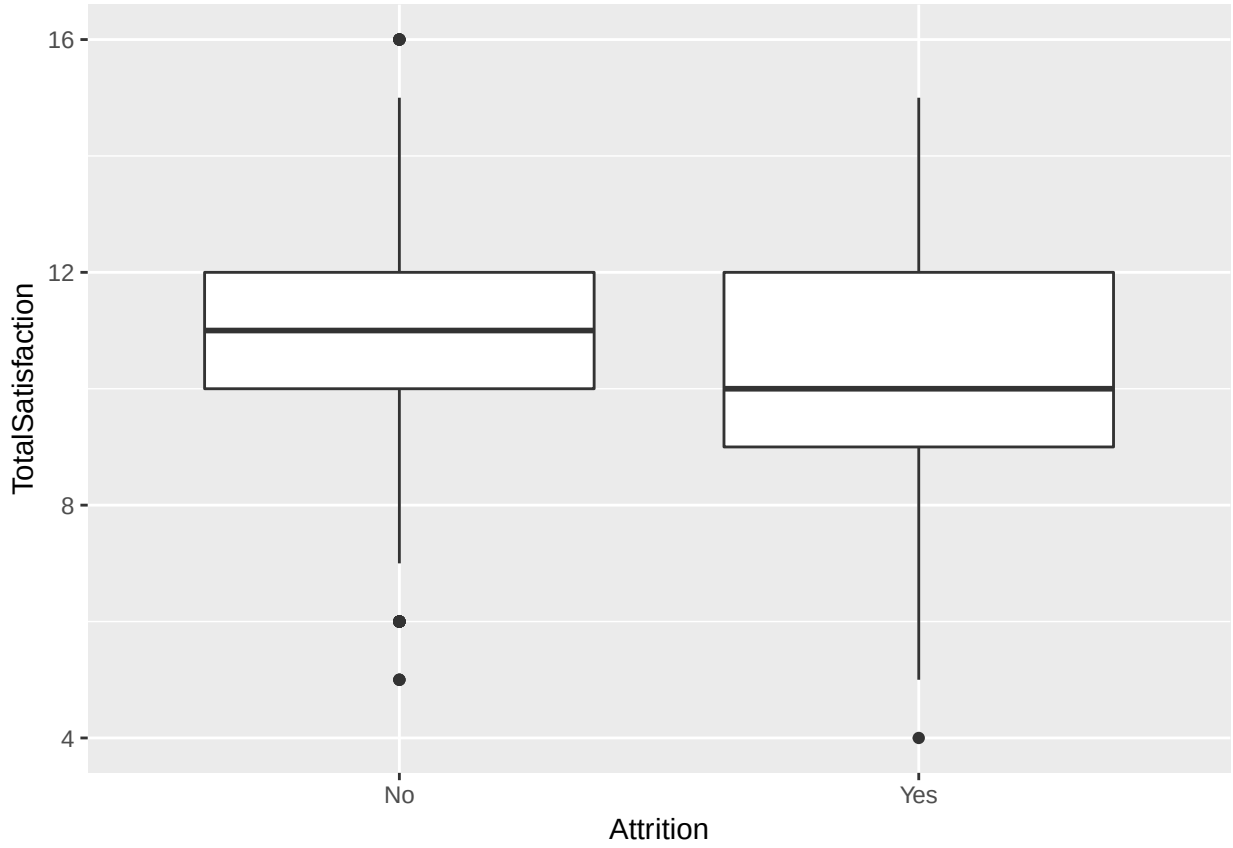
```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
IBM <- read.csv("WA_Fn-UseC_-HR-Employee-Attrition.csv")
colnames(IBM)[1] <- "Age"
IBM <- select(IBM, Age:EducationField, EnvironmentSatisfaction:NumCompaniesWorked, OverTime:Relationshi
  mutate(TotalSatisfaction=EnvironmentSatisfaction+JobSatisfaction+RelationshipSatisfaction+WorkLifeBala

library(ggplot2)
Att_TotalSat <- select(IBM, Attrition, TotalSatisfaction)
ggplot(Att_TotalSat,aes(x=Attrition, y=TotalSatisfaction))+geom_boxplot()
```



We can see from the boxplot that there is a relationship between Attrition and Total Satisfaction. Employees who left the company in the end has a lower average total satisfaction and those who stay in the company are more satisfacted with their company. So we can say that by predicting the employee's total satisfaction, we can know whether he is going to leave this company or not.

1 Hypothesis

2 Method

3 Analysis

4 correlation test

```
##
##  Pearson's product-moment correlation
##
## data:  IBM[, "MonthlyIncome"] and IBM[, "JobSatisfaction"]
## t = -0.27421, df = 1468, p-value = 0.784
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  -0.05826288  0.04398681
## sample estimates:
##          cor
```

```
## -0.007156742
```

```
Test_statistic<-round(-0.27421,4)
df<-1468
P_value<-0.784
Correlation<-round(-0.007156742,4)
corr<-data.frame(Test_statistic,df,P_value,Correlation)
library(knitr)
kable(corr,caption="MonthlyIncome ~ JobSatisfaction")
```

Table 1: MonthlyIncome ~ JobSatisfaction

Test_statistic	df	P_value	Correlation
-0.2742	1468	0.784	-0.0072

5 Conclusion

Test 5 - Git Hub App