In [ ]:

In [1]:
```r
# Load required library for Kolmogorov-Smirnov test
if (!requireNamespace("lawstat", quietly = TRUE)) {
  install.packages("lawstat")
}
library(lawstat)

data <- read.csv("Pilot_modified_data_1.csv")



# Perform Kolmogorov-Smirnov test for normality for each column
for (col_name in colnames(data)) {
  ks_test_result <- ks.test(data[[col_name]], "pnorm")
  print(paste("Column:", col_name))
  print(paste("Test statistic:", ks_test_result$statistic))
  print(paste("P-value:", ks_test_result$p.value))
  if (ks_test_result$p.value < 0.05) {
    print("The distribution is significantly different from normal.")
  } else {
    print("The distribution is not significantly different from normal.")
  }
  cat("\n")
}
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: Panas.."
[1] "Test statistic: 0.977249868051821"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."

Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: Panas...1"
[1] "Test statistic: 0.841344746068543"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."

Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: BFI..E."
[1] "Test statistic: 0.918426338640056"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."

Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
```

```
[1] "Column: BFI..A."
[1] "Test statistic: 0.859602809228291"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: BFI..C."
[1] "Test statistic: 0.918426338640056"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: BFI..N."
[1] "Test statistic: 0.841344746068543"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: BFI..O."
[1] "Test statistic: 0.977249868051821"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: EI..Self.A."
[1] "Test statistic: 1"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: EI..Self.M."
[1] "Test statistic: 1"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: EI..Social.A."
[1] "Test statistic: 1"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: EI..RM."
[1] "Test statistic: 1"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```

```
Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: Total"
[1] "Test statistic: 0.947838103345938"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."

Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: PAQ"
[1] "Test statistic: 0.841344746068543"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."

Warning message in ks.test.default(data[[col_name]], "pnorm"):
“ties should not be present for the Kolmogorov-Smirnov test”
[1] "Column: CBCL"
[1] "Test statistic: 0.859602809228291"
[1] "P-value: 0"
[1] "The distribution is significantly different from normal."
```