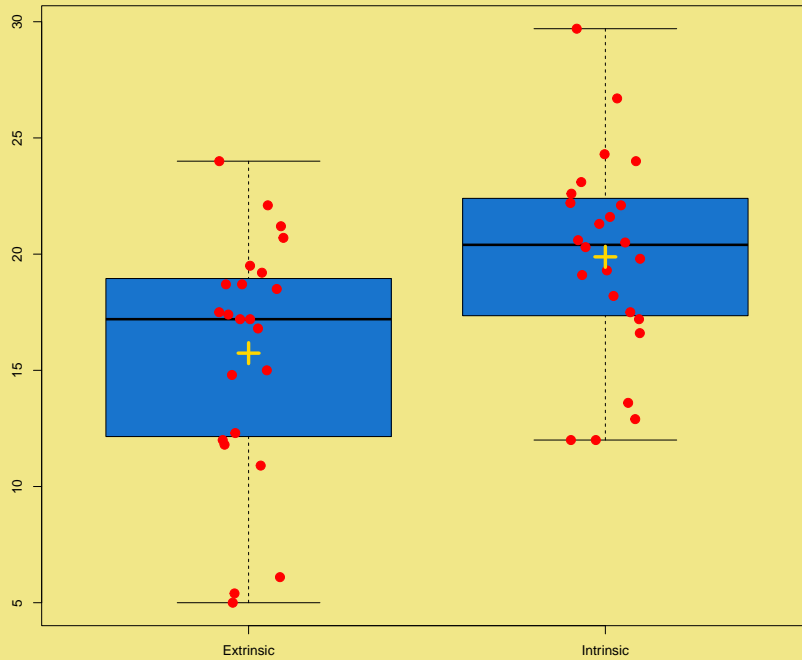


```
head(case0101,n=5)
summary(case0101)
data("case0101") ; attach(case0101)
#tapply(Score, Treatment, summary)
library(psych)
psych::describeBy(Score,group=Treatment)
```

```
boxplot( Score ~ Treatment,col="dodgerblue3")
stripchart(Score ~ Treatment, vertical = TRUE,
  method = "jitter", add = TRUE, pch = 20, cex=2.2,col = 'red')
(means <- tapply(Score,Treatment,mean))
points(means,col="gold1",pch=3,cex=2.4,lwd=4)
```



```
tapply(Score, Treatment, summary)
```

```
$Extrinsic
```

| Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. |
|------|---------|--------|-------|---------|-------|
| 5.00 | 12.15 | 17.20 | 15.74 | 18.95 | 24.00 |

```
$Intrinsic
```

| Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. |
|-------|---------|--------|-------|---------|-------|
| 12.00 | 17.43 | 20.40 | 19.88 | 22.30 | 29.70 |

```
t.test(Score ~ Treatment)
```

Welch Two Sample t-test

data: Score by Treatment

t = -2.9153, df = 43.108, p-value = 0.005618

alternative hypothesis: true difference in means between group Extrinsic

95 percent confidence interval:

-7.010803 -1.277603

sample estimates:

mean in group Extrinsic mean in group Intrinsic

15.73913

19.88333

```
t.test(Score ~ Treatment, var.equal=TRUE)
```

Two Sample t-test

data: Score by Treatment

t = -2.9259, df = 45, p-value = 0.005366

alternative hypothesis: true difference in means between group Extrinsic

95 percent confidence interval:

-6.996973 -1.291432

sample estimates:

mean in group Extrinsic mean in group Intrinsic

15.73913

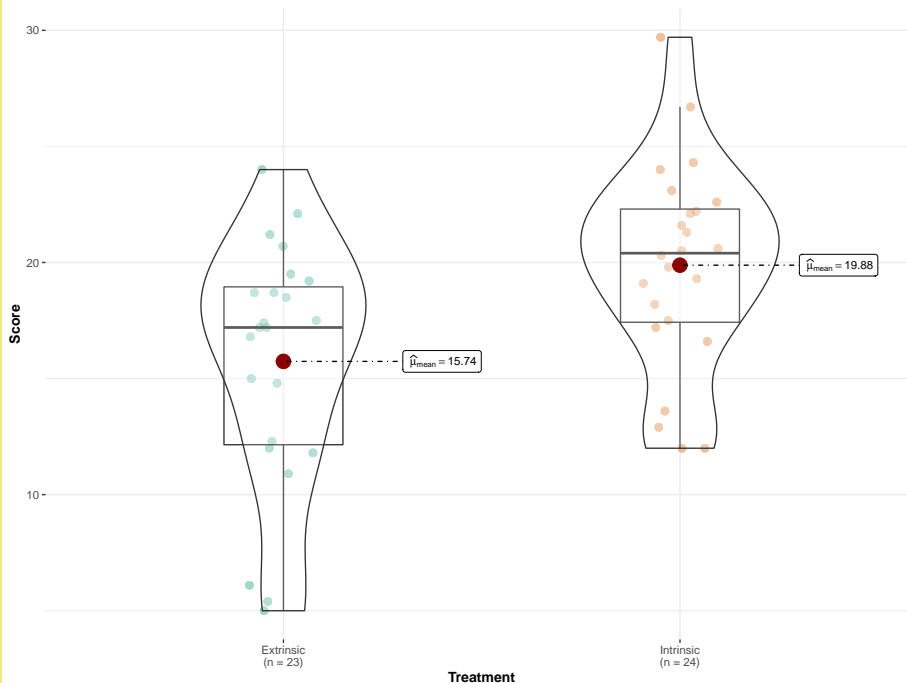
19.88333

Autre solution:

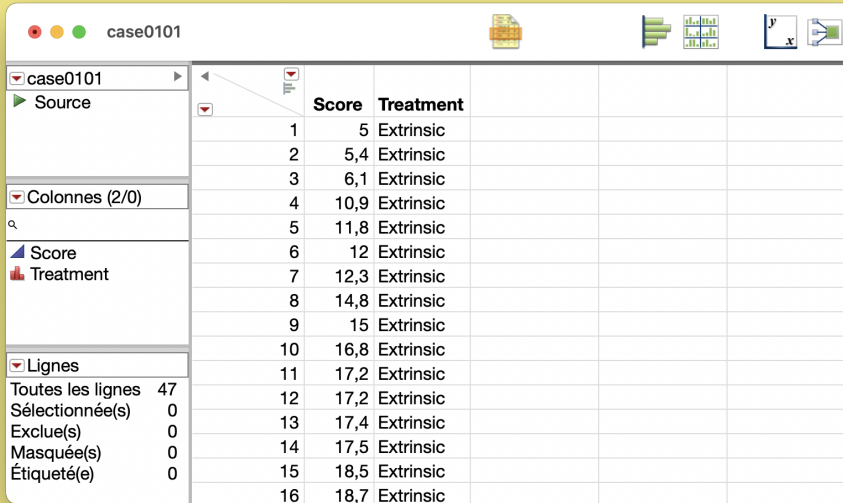
```
install.packages("ggstatsplot")  
library(ggstatsplot)  
  
ggstatsplot::ggbetweenstats(  
  title = "Créativité",  
  data = case0101,  
  x = Treatment,  
  y = Score,  
  bf.message = FALSE,  
  var.equal = TRUE,  
)
```

Créativité

$t_{\text{Student}}(45) = -2.93, p = 0.005, \hat{g}_{\text{Hedges}} = -0.84, \text{CI}_{95\%} [-1.42, -0.24], n_{\text{obs}} = 47$



Une dernière solution : JMP.



The screenshot shows the JMP software interface with a data table named 'case0101'. The table has two columns: 'Score' and 'Treatment'. The 'Score' column contains numerical values, and the 'Treatment' column contains the word 'Extrinsic'. The table is displayed in a grid format. On the left side, there is a sidebar with a tree view showing the table structure. The 'Columns' section shows 'Score' and 'Treatment' as columns. The 'Rows' section shows 'Toutes les lignes' (All lines) with a count of 47. Below this, there are counts for 'Sélectionnée(s)' (Selected), 'Exclue(s)' (Excluded), 'Masquée(s)' (Masked), and 'Étiqueté(e)' (Labeled), all of which are 0.

| | Score | Treatment |
|----|-------|-----------|
| 1 | 5 | Extrinsic |
| 2 | 5,4 | Extrinsic |
| 3 | 6,1 | Extrinsic |
| 4 | 10,9 | Extrinsic |
| 5 | 11,8 | Extrinsic |
| 6 | 12 | Extrinsic |
| 7 | 12,3 | Extrinsic |
| 8 | 14,8 | Extrinsic |
| 9 | 15 | Extrinsic |
| 10 | 16,8 | Extrinsic |
| 11 | 17,2 | Extrinsic |
| 12 | 17,2 | Extrinsic |
| 13 | 17,4 | Extrinsic |
| 14 | 17,5 | Extrinsic |
| 15 | 18,5 | Extrinsic |
| 16 | 18,7 | Extrinsic |