

hw6

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Data Preparation

```
m1 <- read.csv("/home/johnbjohn/Documents/git_repos/bacs-hw/hw6/pls-media1.csv")
m2 <- read.csv("/home/johnbjohn/Documents/git_repos/bacs-hw/hw6/pls-media2.csv")
m3 <- read.csv("/home/johnbjohn/Documents/git_repos/bacs-hw/hw6/pls-media3.csv")
m4 <- read.csv("/home/johnbjohn/Documents/git_repos/bacs-hw/hw6/pls-media4.csv")
media <- rbind(m1,m2,m3,m4)
```

Question 1) Let's describe and visualize the data:

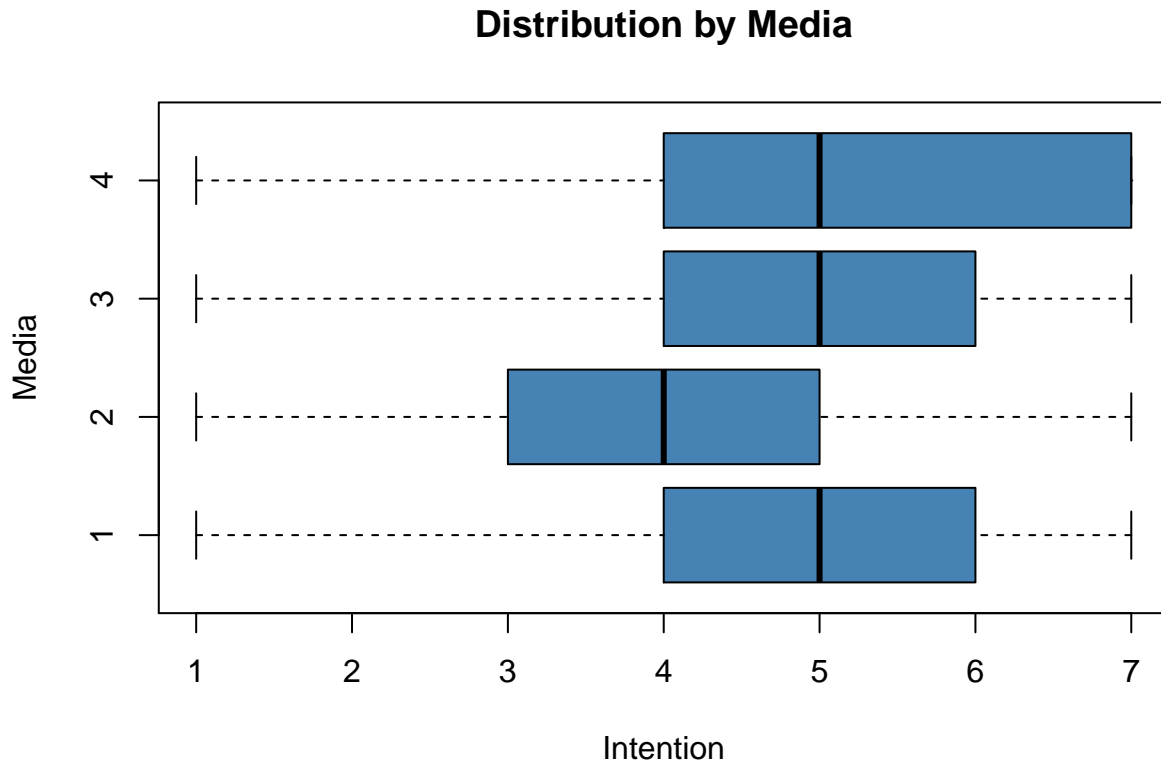
a. What are the means of viewers intentions to share (INTEND.0) for each media type? (report four means)

Here is the mean of INTEND.0 in each data set: (starting from media1 all the way to media4)

1. media1\$INTEND.0 mean: 4.8095238
2. media2\$INTEND.0 mean: 3.9473684
3. media3\$INTEND.0 mean: 4.725
4. media4\$INTEND.0 mean: 4.8913043

b. Visualize the distribution and mean of intention to share, across all four media.

```
test <- c("animation + audio", "pictures + audio", "pictures + text", "text only")
boxplot(INTEND.0 ~ media, data=media, main="Distribution by Media", xlab="Intention", ylab="Media", col=test)
```



c. From the visualization alone, do you feel that media type makes a difference on intention to share?

Question 2) Let's try traditional one-way ANOVA:

a. State the null and alternative hypotheses when comparing INTEND.0 across four groups in ANOVA

b. Produce the traditional F-statistic for our test

c. What are the cut-off values of F for 95% and 99% confidence according to the null distribution of F?

d. According to the traditional ANOVA, do the four types of media produce the same mean intention to share, at 95% confidence? How about at 99% confidence?

e. Do you feel the classic requirements of one-way ANOVA are met?