

# OSS\_\_draft

## Demographics for Complete Cases

	Demographics		
	Male	Female	Total
Number	13	27	40
Strain1=1	4	15	19
Strain1=2	9	12	21
Strain2=3	3	10	13
Strain2=4	4	6	10
Strain2=5	6	11	17
Strain3=6	2	8	10
Strain3=7	4	6	10
Strain3=8	3	6	9
Strain3=9	4	7	11

There are total 40 individuals complete the whole design (67.5% women with mean age 53.82679, standard deviation 13.20323, 32.5% men with mean 45.72919 and standard deviation 14.98331)

```
library(gdata)
df_ag = read.xls ("Actigraphy Data.xlsx",header=TRUE)
#head(df_ag)
df_sleeplog1 = read.xls ("Sleep Logs Data (Rested, sleep quality, latency, highness, tolerance).xlsx",header=TRUE)
#head(df_sleeplog1)
df_sleeplog2 = read.xls ("Sleep Logs Data (Sleep Duration).xlsx",header=TRUE)
#head(df_sleeplog2)
```

The general scope of the data:

```
library(ggplot2)
library(tidyverse)

cISI_B<-df_ag$ISI_B
cgender<-as.factor(df_ag$gender_m)
cage<-df_ag$Age
cdat<-data_frame(cISI_B,cgender,cage)
cdat<-cdat[complete.cases(cdat),]
cdat[, 'cage']<-cut(cdat$cage,seq(20,80,length.out=4))
ggplot(cdat,aes(cage,cISI_B,fill=cgender))+geom_boxplot()+geom_point(alpha=0.3)
```

