Multinomial Logistic Regression with R

```
## melt data set to long for ggplot2
lpp <- melt(pp.write, id.vars = c("ses", "write"), value.
head(lpp)  # view first few rows

##    ses write variable probability
## 1 low    30 academic     0.09844
## 2 low    31 academic     0.10717
## 3 low    32 academic     0.11650
## 4 low    33 academic     0.12646
## 5 low    34 academic     0.13705
## 6 low    35 academic     0.14828
```

Multinomial Logistic Regression with R

```
## plot predicted probabilities across write values for e
## facetted by program type
ggplot(lpp, aes(x = write, y = probability, colour = ses)
    ., scales = "free")
```

Ordinal Logistic Regression with R

```
ggplot(dat, aes(x = apply, y = gpa)) +
  geom_boxplot(size = .75) +
  geom_jitter(alpha = .5) +
  facet_grid(pared ~ public, margins = TRUE) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1,
```

Poisson Regression with R

```
with(p, tapply(num_awards, prog, function(x) {
  sprintf("M (SD) = %1.2f (%1.2f)", mean(x), sd(x))
}))
```

Poisson Regression with R

```
##                  General                  Academic
## "M (SD) = 0.20 (0.40)" "M (SD) = 1.00 (1.28)" "M (SD)

ggplot(p, aes(num_awards, fill = prog)) +
  geom_histogram(binwidth=.5, position="dodge")
```

Negative Binomial Regression with R

```
ggplot(dat, aes(daysabs, fill = prog)) + geom_histogram(b
    ., margins = TRUE, scales = "free")
```

```
with(dat, tapply(daysabs, prog, function(x) {
    sprintf("M (SD) = %1.2f (%1.2f)", mean(x), sd(x))
}))

##                  General                  Academic
## "M (SD) = 10.65 (8.20)"  "M (SD) = 6.93 (7.45)"  "M (S
```