

We can do ANCOVA like this too - let's consider our co-variate of Gaming frequency...

The *adjusted* means from the ANCOVA (which take into consideration the influence of the covariate) were:

Water Group = 7.33

Double Espresso Group = 6.32

Single Espresso Group = 6.87

$$\text{Ability} = \text{Intercept} + \beta_1(\text{Gaming}) + \beta_2(\text{Double Espresso}) + \beta_3(\text{Single Espresso}) + \varepsilon$$

Add the covariate to our model *before* the experimental factor:

```
> lm2 <- lm(Ability ~ Gaming + Condition, data = cond)
> lm2
```

```
Call:
lm(formula = Ability ~ Gaming + Condition, data = cond)
```

```
Coefficients:
            (Intercept)              Gaming ConditionDouble Espresso ConditionSingle Espresso
                -3.4498                0.8538                -1.0085                -0.4563
```