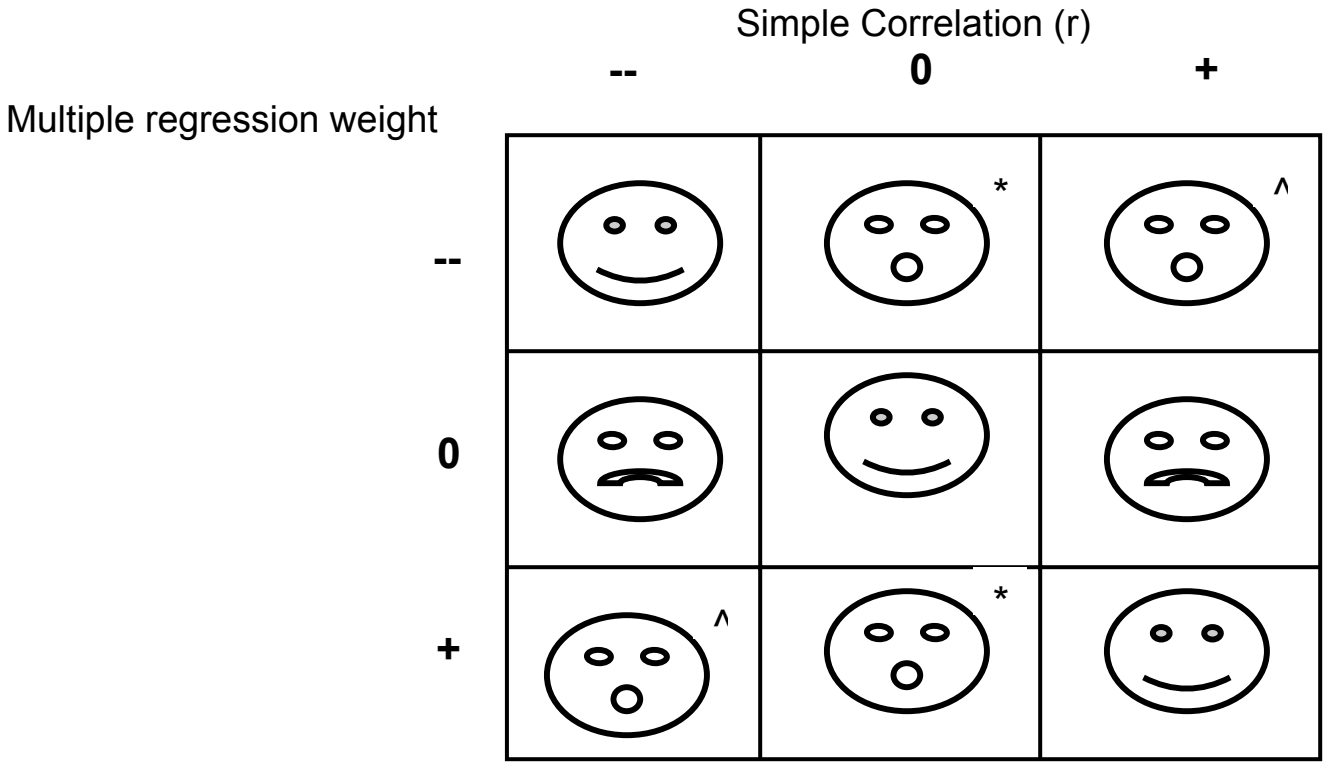
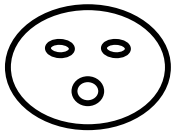
On the Relationship Between Bivariate Relationships (r) and Multivariate Contributions (b_1)

While the relationship between bivariate and multivariate "contributions" can seem confusing, fortunately, there are a finite number of possibilities…



Predictors that have a correlation with the criterion and a contribution to the multiple regression model with the *same sign* (-, 0, or +).

Predictors that have a correlation with the criterion but have no contribution to the multiple regression model – "Collinearity Effects"



Predictors that have a correlation with the criterion and a contribution to the multiple regression model that have *different signs* – " Suppressor Effects". There are "two kinds":

- **Not significantly correlated with the criterion, but contributes significantly to the multiple regression model ***
- **Significantly correlated with the criterion and contributes significantly to the multiple regression model – but the sign of r and b are *opposite*!!! ^**