Type I Sums of Squares dichotomous key

Ken Aho
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1a More than one predictor, and predictors are quantitative, i.e., multiple regression, or predictors are both quantitative and categorical, i.e., ANCOVA

Don't use type I SS. Use type II or III SS, e.g., \texttt{car::Anova}, or use \texttt{t-tests} to evaluate quantitative predictors using \texttt{lm()}.

1b All predictors are categorical, i.e., ANOVA framework

2a One factor, i.e., one-way ANOVA

Type I SS OK, i.e., type I = type II = type III SS.

2b More than one factor, i.e., multi-way ANOVA

3a Balanced design

Type I SS OK, i.e., type I = type II = type III SS.

3a Design not balanced

Don't use Type I SS. Use type II or type III SS, e.g., \texttt{car::Anova}