Unequal Cell Sizes

Psychology 3256

Introduction

- Most designs assume equal ns

- except for the simplest ones, like say one way ANOVA

- Well let's say you have unequal ns, what then?

What to do..

- Perhaps estimate the missing value(s)

- use the mean or media maybe

- do you include interactions or not?

- No matter what, you have lost df

There are other ways

- Most of our analyses use Type I SS

- They are fine if ns are equal

- bad when unequal

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Type II SS

- They are good when there is a missing value, but….

- but bad when there is an interaction

Type III SS

- You may not know if there is an interaction or not

- so if you use Type III you are safe

- while we have learned Type I, analysis software uses Type III

- If ns are equal Type I=Type II=Type III

Type IV

- Well, they can work with empty cells

- The problem with empty cells is umm, there is no unique solution

Empty Cells

	A1	A2
B1	4	2
B2	2	

So, what goes there?