Introduction

Goals

Most of the better statistics texts focus on the mathematical theory behind the procedures and are weak on implementation. In particular, I have not seen a really good stats text (with regard to theory) that also provides details on how to perform most analyses via SPSS, which is the package that we will be using. Conversely, most of the stats texts that focus on “how to do it” are lousy on theory (and sometimes are wrong).

The purpose of this text-in-progress is to provide you with more background and theoretical detail than you’ll find in most basic texts, while also providing some specific information as to how to perform the analyses using SPSS. In other words, I’ve tried to write chapters that discuss the theoretical background to the statistics that we use (without simplifying things to the point of out-right lies) and then provide the details as to how to perform the analyses that you are likely to need.

Text Symbols

 Федерации marks a paragraph that deals with a technical point, a complication to a previous point, or anything else that I suggest that you read particularly carefully. Most of these issues will be emphasized in class, but you should prepare a question if such a paragraph leaves you confused.

⊕ marks a paragraph that deals with some (non-intuitive) specific of SPSS. In general, I have tried to split the difference when SPSS does something (e.g., uses a label) that conflicts with what is done by everyone else in the statistical world, but often this difference-splitting requires explanation. Warning: some of these points might not make sense until you have tried the relevant procedure yourself.

حسابي marks a paragraph that is me being silly.

! marks a paragraph that might be surprising.

تأكد marks a technical (hair-splitting) point that could probably be cut from the text.

Idiosyncrasies

It seems that almost everyone who self-identifies as a statistical sophisticate has at least one or two really weird, personal quirks that make them a bit different from every other putative sophisticate. This is annoying (especially when it’s pretty clear that I’m the one who has it right!), but it’s better to admit than deny. When these arise, I will try to point them out.