

## CHAPTER OVERVIEW

### 3: Quantitative Data Analysis with SPSS

This portion of this text provides details on how to perform basic quantitative analysis with SPSS, a statistical software package produced by IBM. Students and faculty can access discounted versions of the software via a variety of educational resellers, with lower-cost limited-term licenses for students that last six months to cover the time spent in a course (see IBM's list of resellers [here](#)). For most users, the GradPack Standard is the right option. Many colleges and universities also make SPSS available in campus computer labs or via a virtual lab environment, so check with your campus before assuming you need to pay for access. SPSS for non-students can be very expensive, though a [30-day free trial is available](#) from IBM and should provide sufficient time to learn basic functions. Note that SPSS does offer screenreader capabilities, but users may need to install an additional plugin and may wish to seek technical support in advance for accomplishing this. Those looking for free, open-source statistical analysis software may want to consider R instead, though it does have a steeper learning curve. Hopefully, R supplements to this book will be available at some point in the future.

The examples and screenshots provided throughout this section of the book utilize data from the [2021 General Social Survey](#). The standard 2021 GSS file has been imported into SPSS and modified and simplified to produce an [SPSS file that is available for download](#) so users of this book can follow along with the examples. The number of variables has been reduced to 407, with most duplicated and survey-experiment variables removed as well as those that are difficult to use or that were responded to by only a very small number of people. Variable information has been adjusted and variables have been reordered to further simplify use. Finally, survey weights<sup>[1]</sup> have been removed from this dataset, as the proper use of survey weights is beyond the scope of this text. The dataset is thus designed only for learning purposes. Researchers who want to conduct actual analyses will need to download the original 2021 GSS file, import it into SPSS, and apply the survey weights. To learn more about survey weighting in the GSS, read [this FAQ](#), and for instructions about applying survey weights in SPSS, see [this handy guide from Kent State](#).

A simplified codebook is also available as part of this book (see [Modified GSS Codebook for the Data Used in this Text](#)). The codebook is an edited version of the [2021 GSS Codebook](#), with some technical detail removed and the variable list edited and simplified to match the dataset. Users of this book should take some time to familiarize themselves with the codebook before beginning to work with the data.

- [3.1: Quantitative Analysis with SPSS- Getting Started](#)
- [3.2: Quantitative Analysis with SPSS- Univariate Analysis](#)
- [3.3: Quantitative Analysis with SPSS- Data Management](#)
- [3.4: Quantitative Analysis with SPSS- Bivariate Crosstabs](#)
- [3.5: Quantitative Analysis with SPSS- Multivariate Crosstabs](#)
- [3.6: Quantitative Analysis with SPSS- Comparing Means](#)
- [3.7: Quantitative Analysis with SPSS- Correlation](#)
- [3.8: Quantitative Analysis with SPSS- Bivariate Regression](#)
- [3.9: Quantitative Analysis with SPSS- Multivariate Regression](#)

---

This page titled [3: Quantitative Data Analysis with SPSS](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Mikaila Mariel Lemonik Arthur](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.