

FIGURES

Figures include all types of illustrative materials such as drawings, curves, graphs, charts, maps, or photographs. A figure should not be used simply to repeat data in a table or in the text. Students may use figures in the text and include the raw data in tabular form in the Appendix. A small figure may be inserted in the text between paragraphs shortly after it is mentioned and separated from the text by two double spaces both above and below the figure. Full-page figures should be inserted on the next numbered page following the page on which they are first cited in the text. In some theses, figures may be removed from the text and placed on consecutive pages as one of the last chapters before the Appendix and so identified in the Table of Contents. A figure is always referred to by number, e.g., Figure 35. In the text, the word figure must be written out, but when used parenthetically, the reference may be abbreviated to: (See Fig. 35). All figures must be kept within the standard margins for text material (1.5-inch margin on the bound edge side and 1 inch for the other three sides).

If using the APA Figure format, refer to the *Publication Manual of the American Psychological Association*. (7th ed), Washington, D.C.: American Psychological Association (APA), 2019.

Numbering and Titles

Each figure title (alternatively, "caption" or "legend") must be placed a double-space below the bottom of the figure, beginning with the word "Figure" followed by the number, followed by a period and the title of the figure, all with initial capital letters of major words. If the full figure title is shorter than the width of the figure, then it must be centered. If the title is longer than one line, the word "Figure" must be flush with the left margin of the page, and carry over lines should be single spaced and indented to begin under the letter "g" in "Figure." No title may extend beyond either the left or right margin of the figure or beyond the margins for written text. Titles of similar figures should be consistent in terminology and grammatical form.

All figures should be numbered with Arabic numerals consecutively throughout the entire thesis. Students are also allowed to use decimal points for numbering figures (i.e., Figure 5.12, which refers to the 12th figure in Chapter 5). If decimal points and chapter numbers are used, this number must be the same as the actual chapter in which the figure appears. If figures are removed from the text and placed on consecutive pages in a separate chapter, all figures must be numbered with consecutive Arabic numerals.

Arrangement

A figure may be placed on the page so that it is read in the normal position with the page vertical, or with the page turned 90 degrees so that it is read from the long side opposite the binding. In either case, the title is at the bottom of the page as read. The page number remains upright in the upper right corner of the vertical page even when the page is turned for a long figure.

Separate figures may be placed vertically in sequence when the size allows multiple figures on the same page. Separate figures should not be placed side-by-side, unless they share the same figure number and title and are used for comparison or contrast, or approval is granted by the Thesis Examiner.

Alternately, the original figure, typed on horizontally oversized paper equivalent to the quality of standard thesis paper, may be bound directly in the thesis, providing the following items are adhered to. The standard margins must be retained, even on the oversized unfolded page: 1.5-inch left margin, 1 inch on the other three sides. The page number remains in the upper right corner of the folded-open page. It is important to note that the oversized page will have to be scanned, converted to PDF, and added to the final PDF copy of the thesis, using a PDF editor.

Since the right edge of a thesis is trimmed off in the binding process, the right edge fold of an oversized page must be at least 0.5 inches from the edge of the normally bound pages (i.e., beginning at the left edge, the first fold must be 8 inches from the edge). No oversized page should exceed 21.5 inches in width.

Labels, Lettering, and Spacing

Labels or ordinates and abscissas should be placed parallel to the appropriate coordinate in the direction of that coordinate, away from the intersection (from the lower left corner). Lettering on figures should be expertly and neatly done. Figures should not be enclosed in boxes. Lines on the top and right side should be avoided. The lines should be drawn with black ink, and coordinate axes should be heavier than other lines. Excess grid lines or crowded intervals on the axis must be avoided. The inner data must not exceed the maximum interval shown on either axis. The name of the trait represented by the axis should be short, centered, and include units in which the trait is measured.

The lines in a figure should be clearly labeled and identified. Different lines must be shown by different kinds of black lines made with dots or dashes. Not more than four or five lines should be shown on the same figure. Bars in bar graphs should all be the same width with various degrees of stippling to indicate the various types of data being shown. Single figures with few labels are the easiest to comprehend.

Legends and Footnotes to Figures

When a legend is required, such information should be brief, placed before the title of the figures, and ended with a period, so long as it does not violate the standard margins. Footnotes to a figure should follow the directions given for Footnotes to a Table of this Thesis Manual. As a last resort, if the legend is too long to be included on the same page with the figure, then the entire legend should be centered on the numbered page following the figure, and designated as: Legend for Figure 34 (Followed by the legend with the carry-over lines single-spaced and indented two spaces). No other text material can appear on such a legend carry-over page.