

How to Create and Customize Pie Charts in Stata

Authored by
stats writer

March 9, 2026

RECOMMENDED CITATION

stats writer (2026). *How to Create and Customize Pie Charts in Stata*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=134740>

Creating and modifying pie charts in Stata is a simple process that can be done in a few steps. First, the user needs to have a dataset with the relevant data they wish to display in the pie chart. Then, they can use the "graph pie" command in the Stata command window to generate a basic pie chart. The user can then modify the chart by adding labels, changing the colors, and adjusting the size and position of the chart. Additional modifications can be made by using the "twoway pie" command and specifying different options such as slice widths and angles. Stata also allows users to customize their pie charts further by using the "graph export" command to save the chart in a desired format. With these simple steps and various customization options, users can easily create and modify pie charts in Stata to effectively convey their data.

Create and Modify Pie Charts in Stata

A pie chart is a circular chart that uses "pie slices" to display the relative sizes of data.

This tutorial explains how to create and modify pie charts in Stata.

How to Create Pie Charts in Stata

We'll use a dataset called *census* to illustrate how to create and modify pie charts in Stata.

First, load the data by typing the following into the Command box:

```
sysuse census
```

We can get a quick look at the dataset by typing the following into the Command box:

summarize

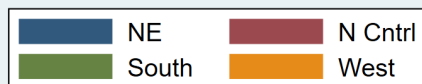
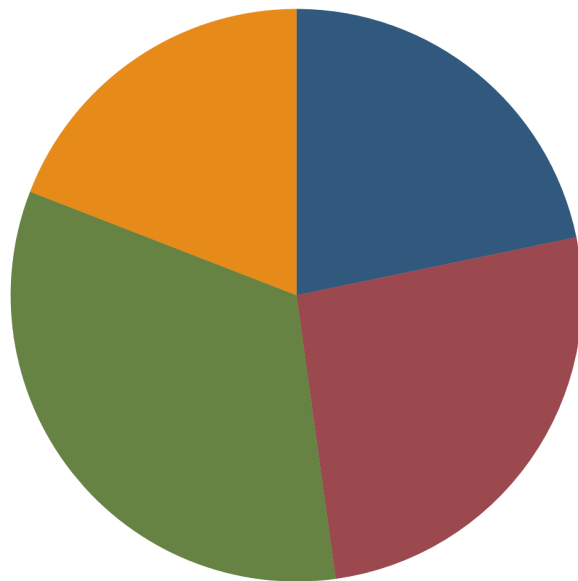
```
. summarize
```

Variable	Obs	Mean	Std. Dev.	Min	Max
state	0				
state2	0				
region	50	2.66	1.061574	1	4
pop	50	4518149	4715038	401851	2.37e+07
poplt5	50	326277.8	331585.1	35998	1708400
pop5_17	50	945951.6	959372.8	91796	4680558
pop18p	50	3245920	3430531	271106	1.73e+07
pop65p	50	509502.8	538932.4	11547	2414250
popurban	50	3328253	4090178	172735	2.16e+07
medage	50	29.54	1.693445	24.2	34.7
death	50	39474.26	41742.35	1604	186428
marriage	50	47701.4	45130.42	4437	210864
divorce	50	23679.44	25094.01	2142	133541

Basic Pie Chart

We can create a pie chart to display the population size of each region using the following syntax:

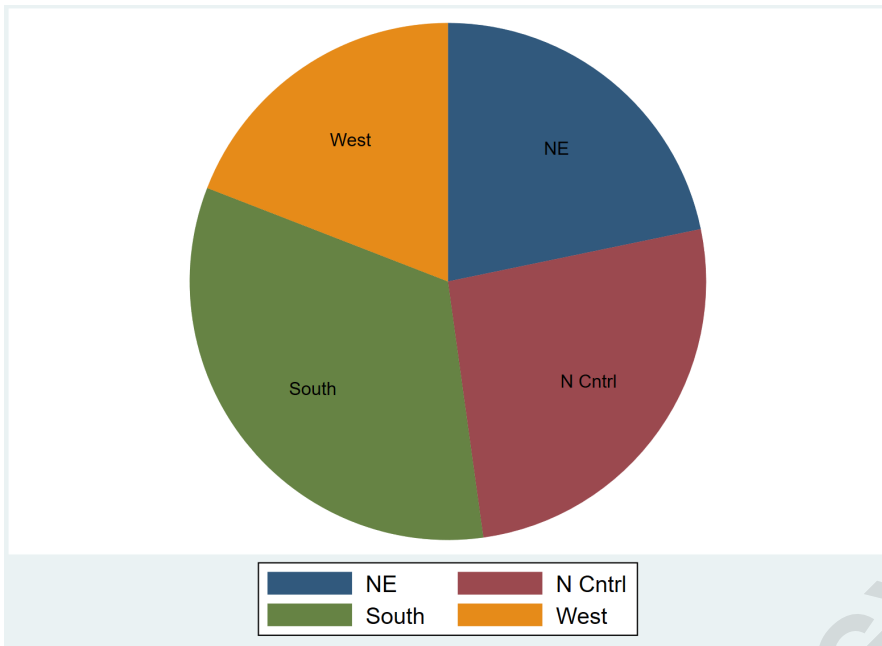
```
graph pie pop, over(region)
```



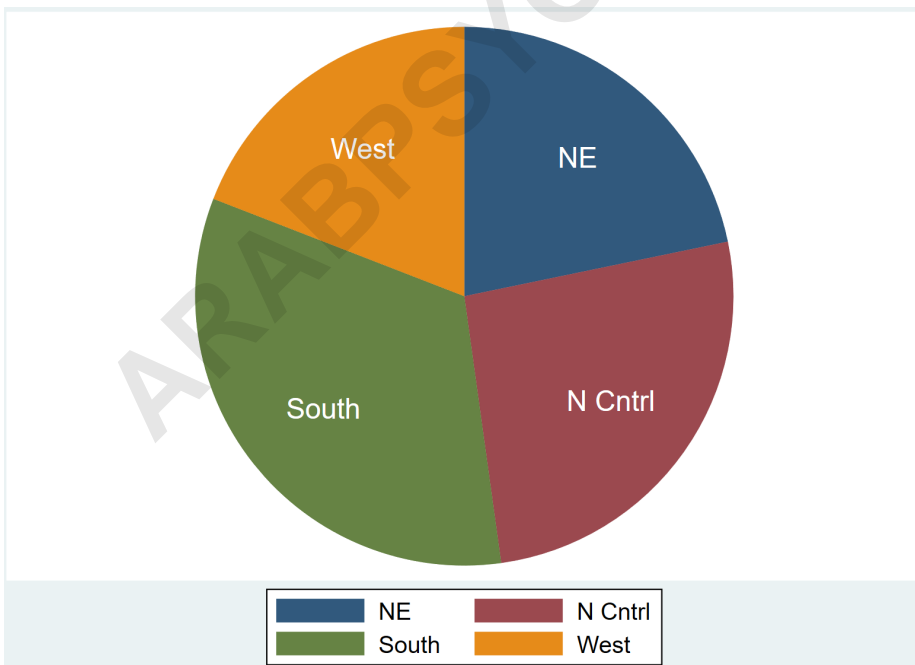
Pie Chart with Labels

We can add labels directly to the pie chart by using the `plabel(_all name)` command:

```
graph pie pop, over(region) plabel(_all name)
```



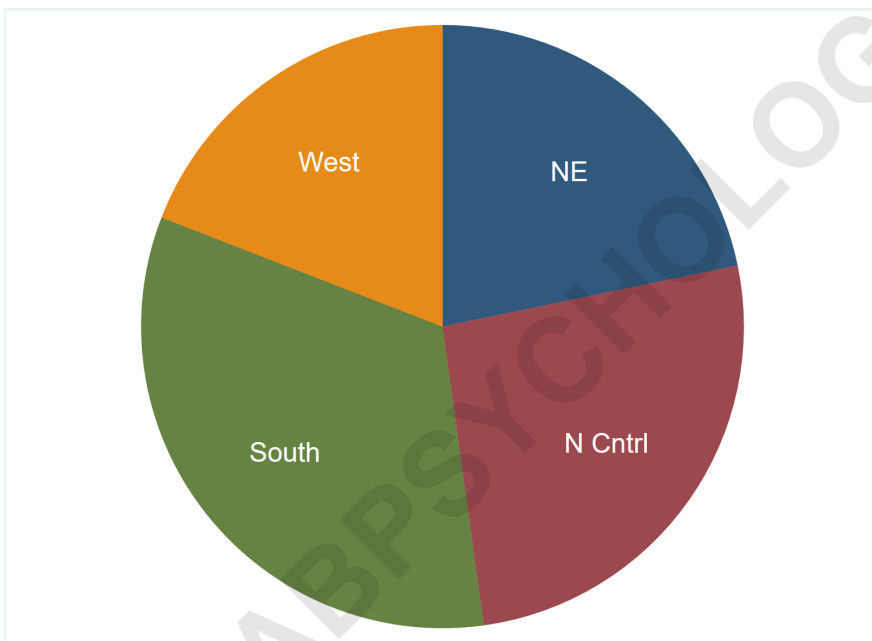
graph pie pop, over(region) plabel(_all name, size(*1.5) color(white))



Pie Chart with no Legend

If we choose to use labels, we may decide that a legend is unnecessary. We can turn off the legend by using the `legend(off)` command:

```
graph pie pop, over(region) plabel(_all name, size(*1.5) color(white)) legend(off)
```



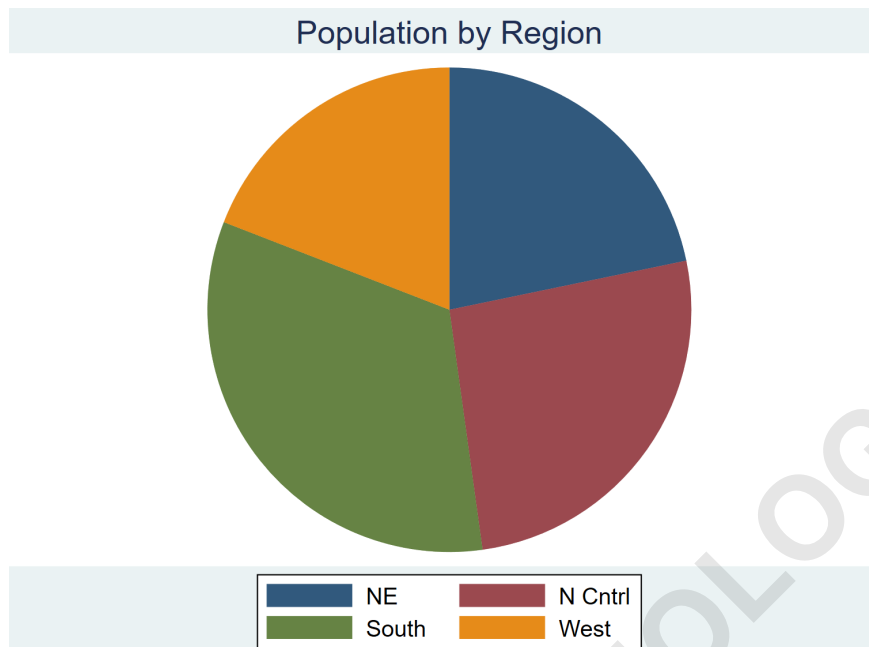
How to Modify Pie Charts in Stata

We can use several different commands to modify the appearance of the pie charts.

Adding a Title

We can add a title to the plot using the `title()` command:

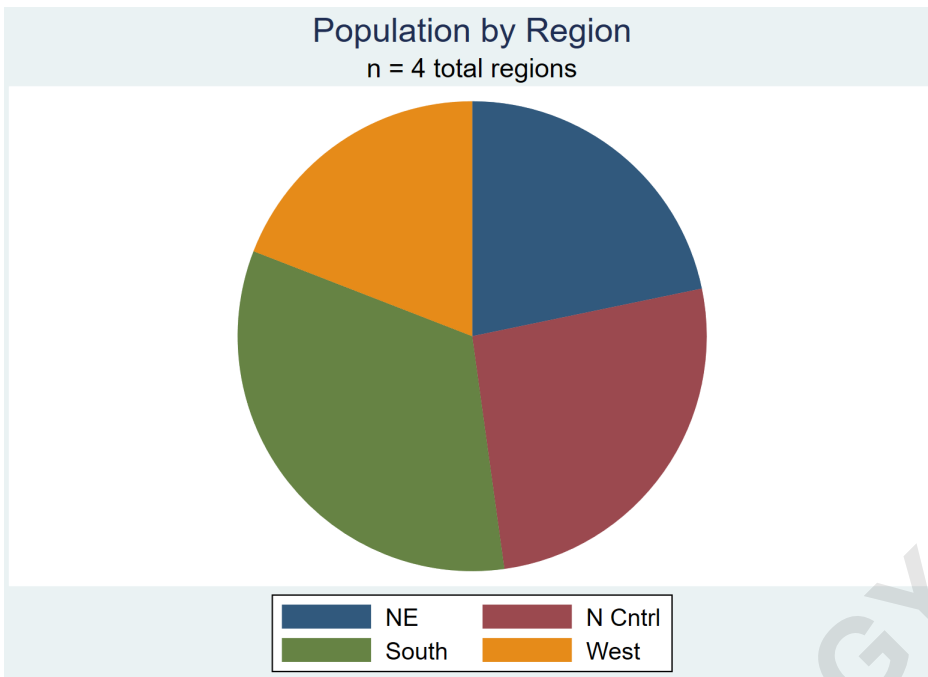
graph pie pop, over(region) title("Population by Region")



Adding a Subtitle

We can also add a subtitle underneath the title using the subtitle() command:

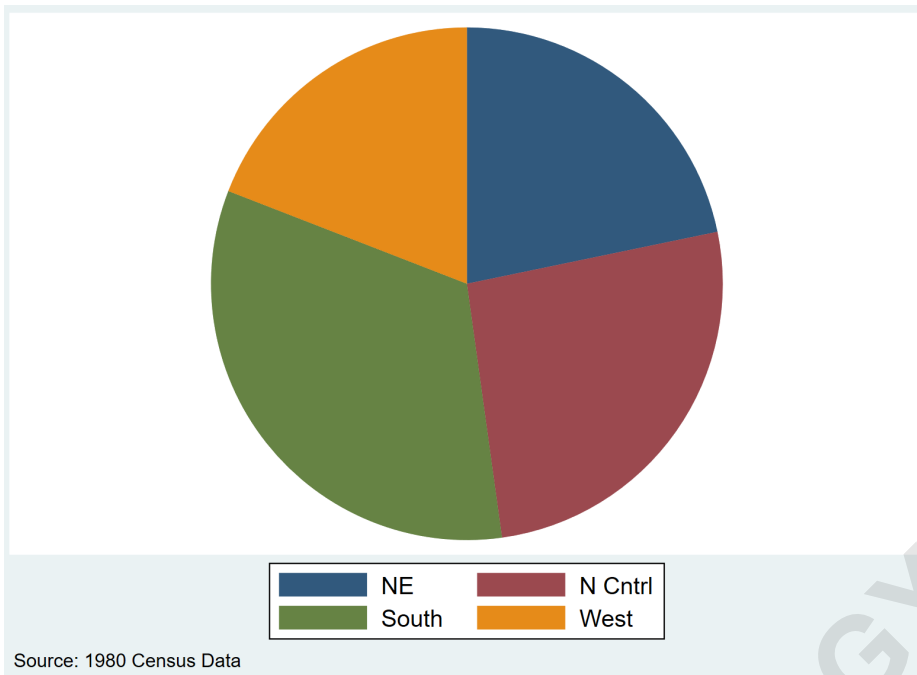
graph pie pop, over(region) title("Population by Region") subtitle("n = 4 total regions")



Adding a Comment

We can also add a note or comment at the bottom of the graph by using the `note()` command:

`graph pie pop, over(region) note("Source: 1980 Census Data")`

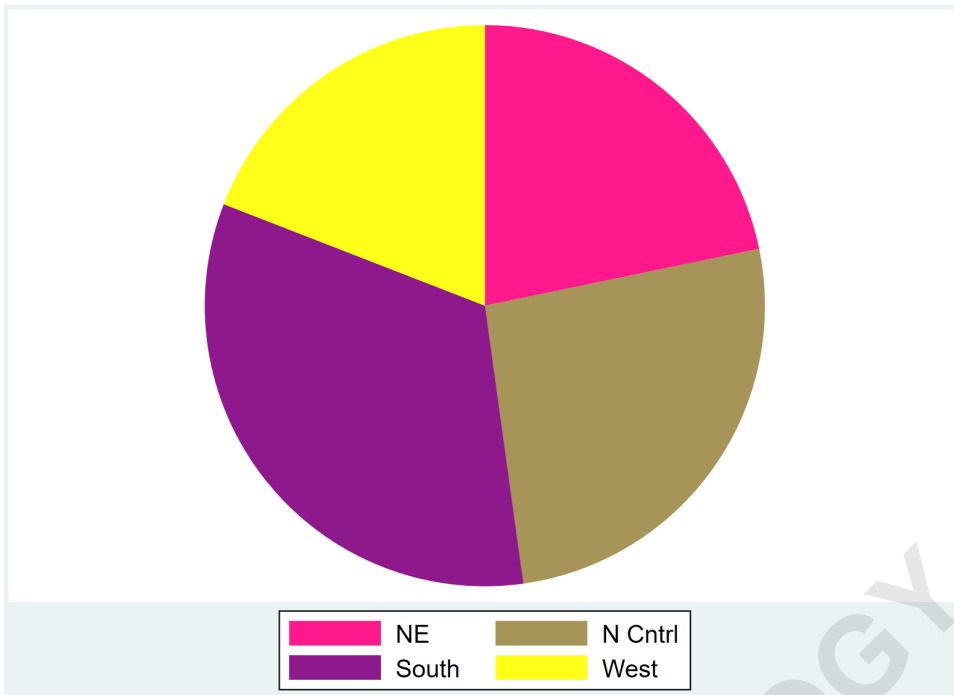


Changing Colors

We can change the colors of the slices in the pie chart by using the following syntax:

```
pie(slice #, color(specific_color))
```

```
graph pie pop, over(region) pie(1, color(pink)) pie(2, color(brown)) pie(3, color(purple)) pie(4, color(yellow))
```



A full list of available colors can be found in the .