

How can I create boxplots by group in SAS?

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Boxplots are a graphical representation of the distribution of a numerical variable, and they are commonly used in data analysis to identify patterns and outliers. In SAS, creating boxplots by group allows for the comparison of multiple groups and their respective distributions. This can be achieved by using the PROC BOXPLOT procedure, which allows for the grouping of data by a categorical variable. By specifying the appropriate variables and groupings, SAS can generate individual or side-by-side boxplots for each group, allowing for easy visual comparisons and insights into the data. Overall, creating boxplots by group in SAS is a useful tool for exploratory data analysis and can provide valuable information for decision-making processes.

Create Boxplots by Group in SAS

are useful for quickly visualizing the five-number summary of a dataset, which includes:

The minimum value
The first quartile
The median
The third quartile
The maximum value

The following example shows how to create grouped boxplots in SAS to visualize the distribution of several groups at once.

Example: Create Boxplots by Group in SAS

First, let's create a dataset in SAS that contains three different groups:

```
/*create dataset*/  
data my_data;  
input Group $ Value;
```

datalines;

A 7

A 8

A 9

A 12

A 14

B 5

B 6

B 6

B 8

B 11

C 8

C 9

C 11

C 13

C 17

;

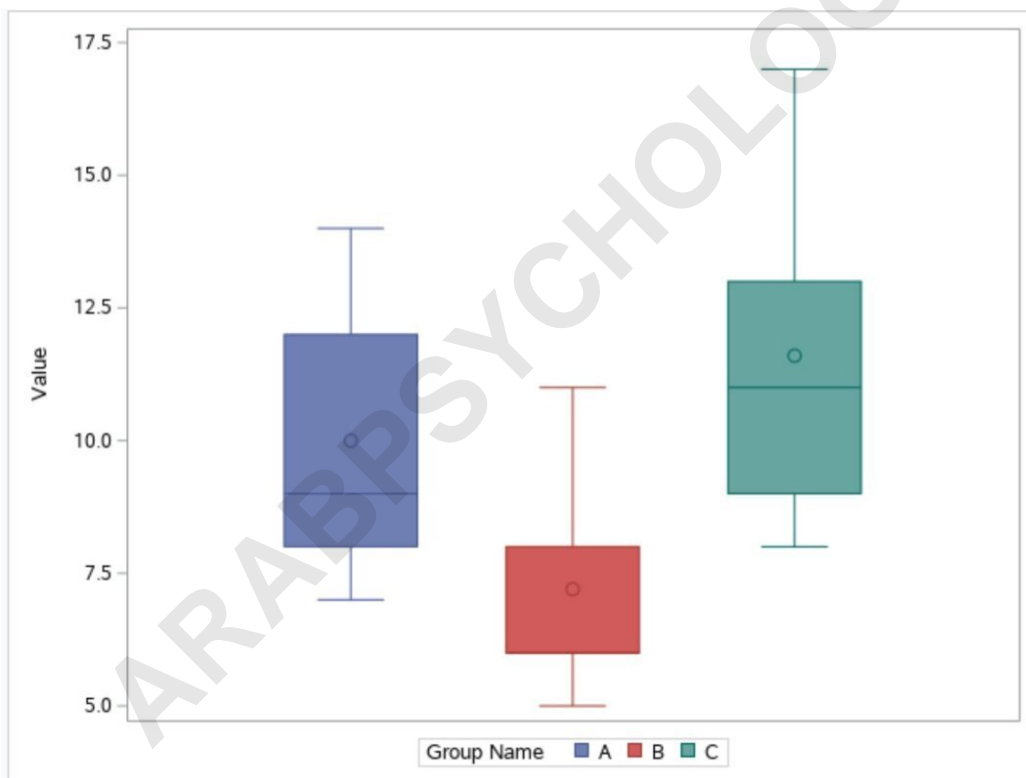
run;

Note that there are three different groups in this dataset: A, B, and C.

Next, we can use the following code to create boxplots by group:

```
/*create boxplots by group*/  
proc sgplotdata=my_data;  
vbox Value / group=Group;  
keylegend / title="Group Name";  
run;
```

The result is three individual boxplots that display the distribution of data values for groups A, B, and C:



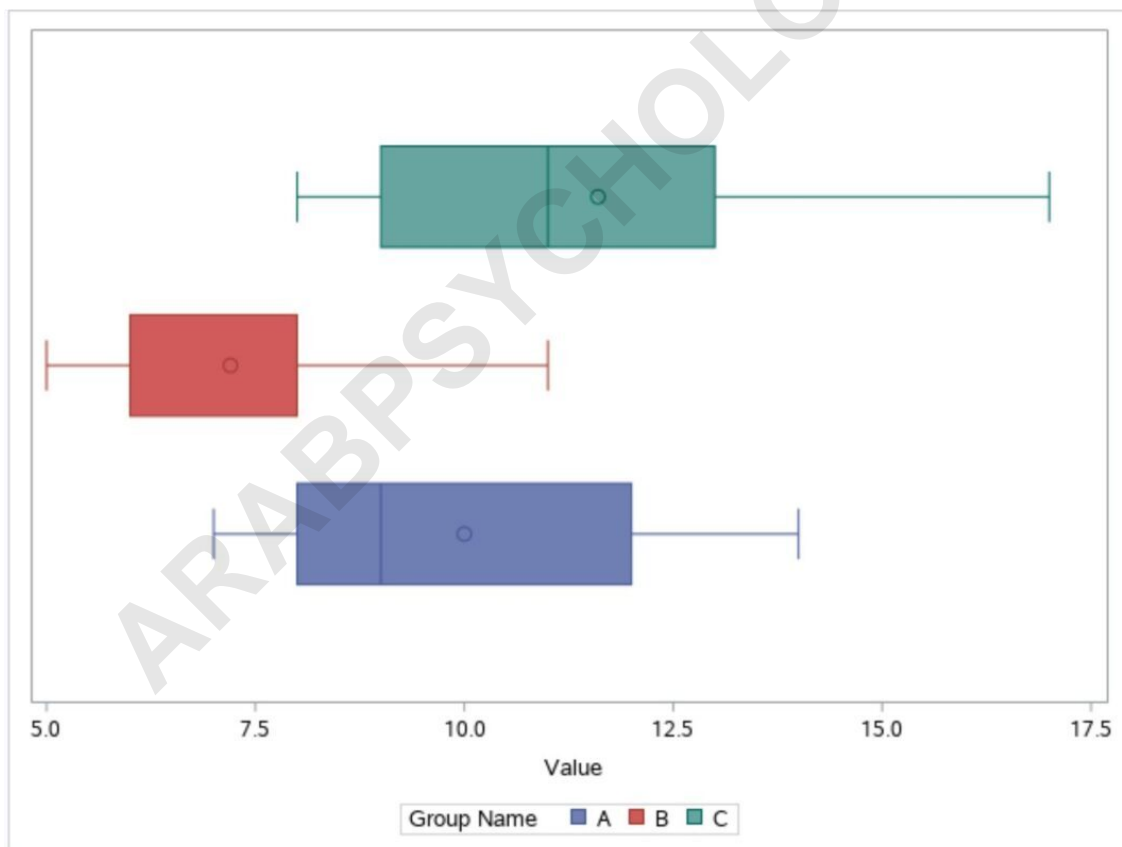
Related:

Note that you can use the hbox function to create

horizontal boxplots instead:

```
/*create horizontal boxplots by group*/  
proc sgplot data=my_data;  
hbox Value / group=Group;  
keylegend / title="Group Name";  
run;
```

The result is three horizontal boxplots:



The legend at the bottom of the plot shows which color corresponds to each group.

Additional Resources

The following tutorials provide additional information about boxplots:

ARABPSYCHOLOGY.COM