

# How can I change the point shape in ggplot2?

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## RECOMMENDED CITATION

stats writer (2024). *How can I change the point shape in ggplot2?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=155497>

The process of changing the point shape in ggplot2 involves modifying the "geom\_point" function, which is used to create scatter plots, and specifying a desired point shape using the "shape" argument. This can be done by providing a numerical code or a specific shape name from the available options. By changing the point shape, the overall appearance and interpretation of the scatter plot can be altered, allowing for a more visually appealing and informative representation of the data.

## Change Point Shape in ggplot2

You can use the shape argument to change the shape of points in a ggplot2 scatterplot:

```
ggplot(df, aes(x=x, y=y)) +  
geom_point(shape=19)
```

The default value for shape is 19 (a filled-in circle), but you can specify any value between 0 to 25.

The following chart shows the shapes that correspond to each value:

```
library(ggplot2)
```

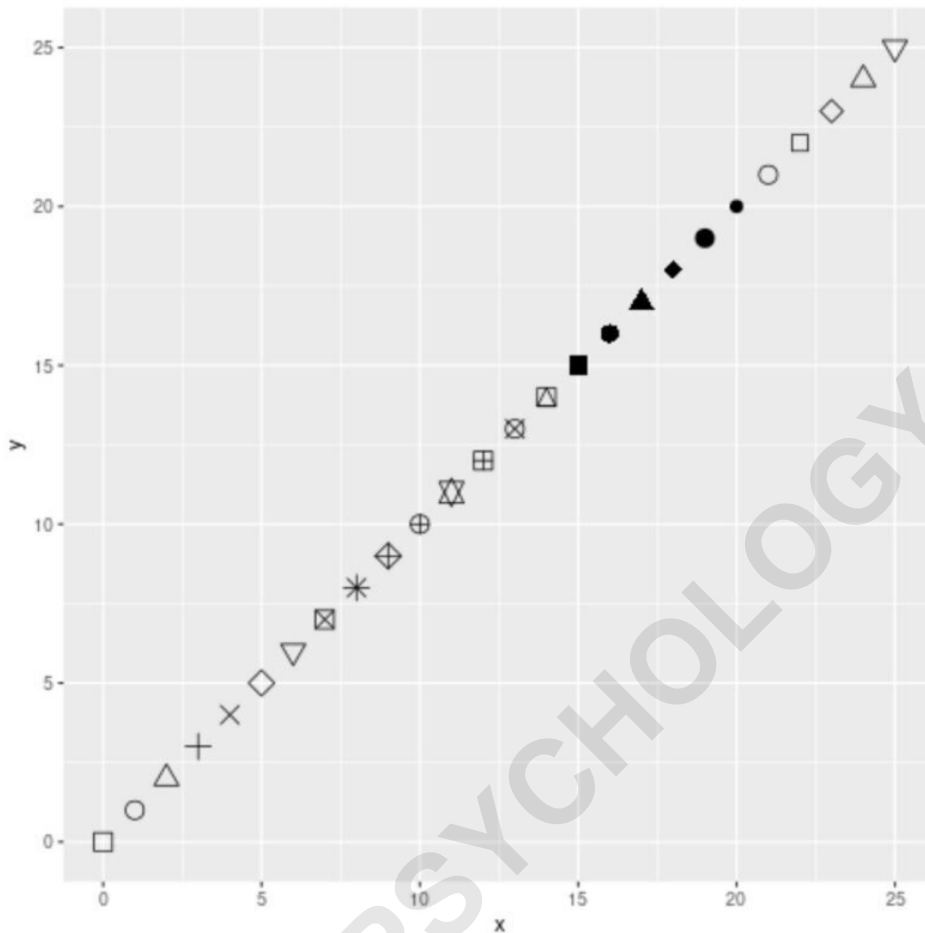
```
#create data frame
```

```
df <- data.frame(x=0:25, y=0:25)
```

```
#create scatter plot
```

```
ggplot(df, aes(x=x, y=y)) +
```

## geom\_point(shape=0:25, size=4)



The following examples show how to modify the shape argument in different ggplot2 scatter plots.

### Example 1: Create Plot with Default Shape

The following code shows how to create a scatter plot in ggplot2 using the default shape (filled-in circle) for the points:

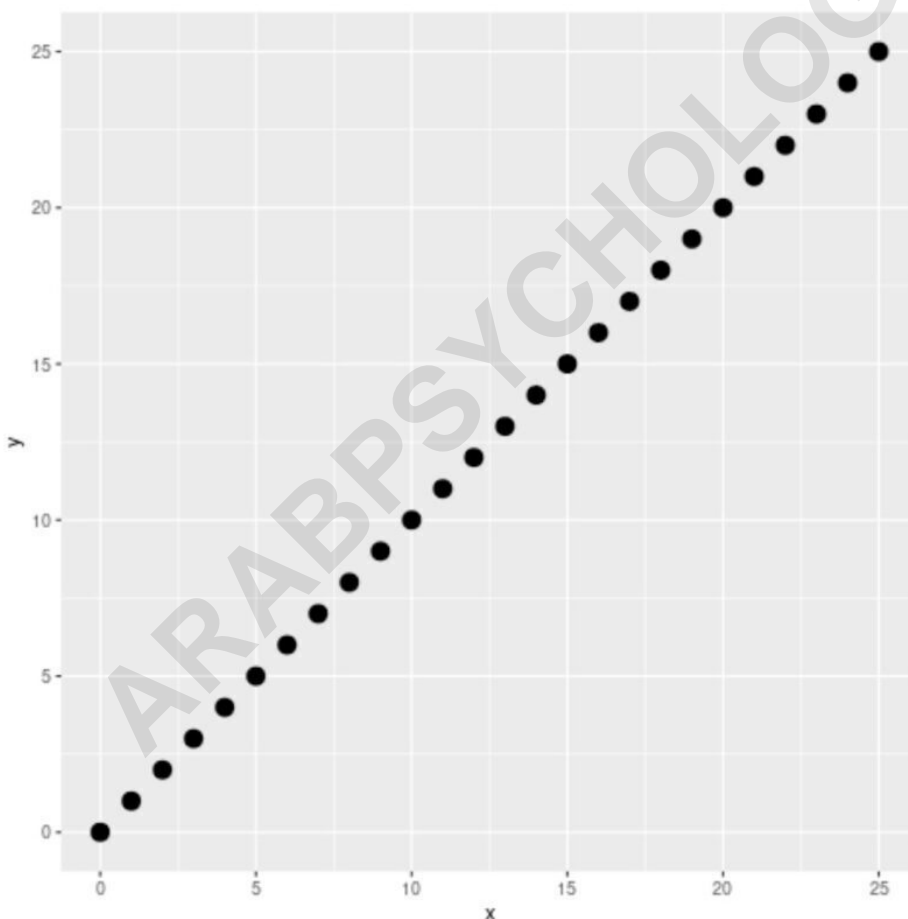
```
library(ggplot2)
```

```
#create data frame
```

```
df <- data.frame(x=0:25, y=0:25)
```

```
#create scatter plot with default point shape
```

```
ggplot(df, aes(x=x, y=y)) +  
geom_point(size=4)
```



Since we didn't use the shape argument to specify a point shape, ggplot2 used the default shape of a filled-

**in circle.**

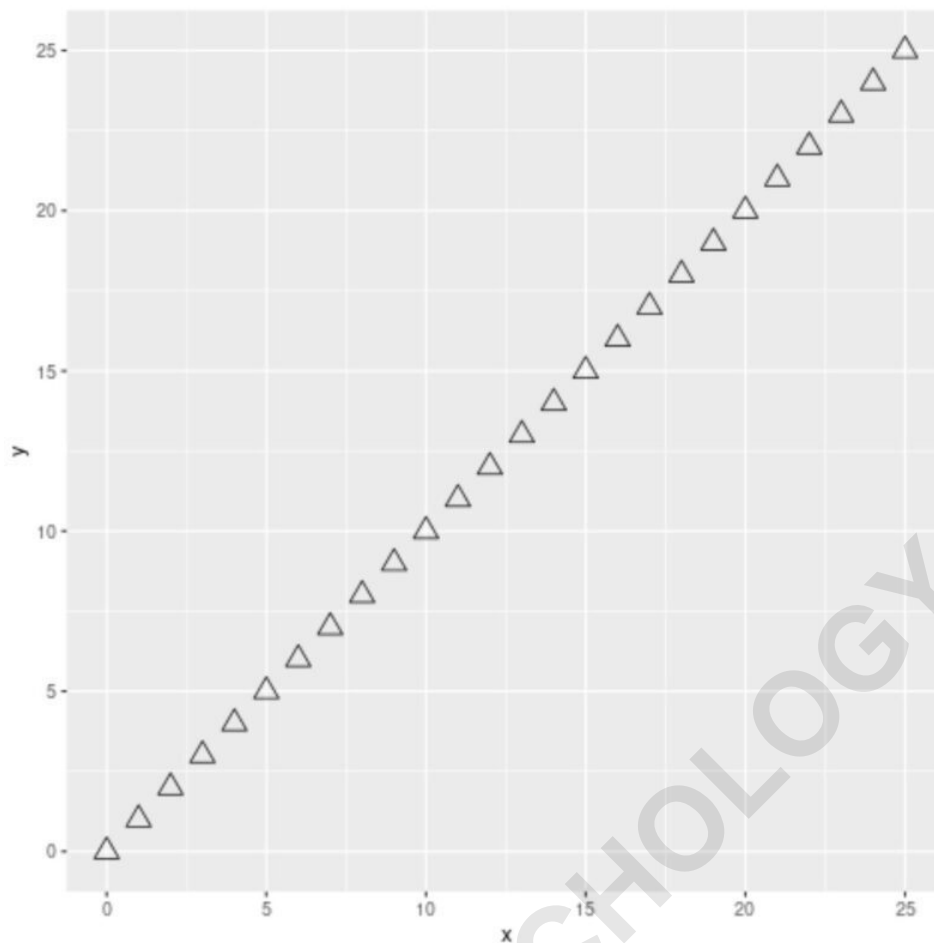
### **Example 2: Create Plot with Custom Shape**

The following code shows how to create a scatter plot in ggplot2 using an empty triangle (shape=2) for the point shape:

```
library(ggplot2)

#create data frame
df <- data.frame(x=0:25, y=0:25)

#create scatter plot with custom point shape
ggplot(df, aes(x=x, y=y)) +
geom_point(shape=2, size=4)
```



### Example 3: Create Plot with Shape Based on Value

```
library(ggplot2)
```

```
#create data frame
```

```
df <- data.frame(team=c('A', 'A', 'B', 'B', 'C', 'C'),
```

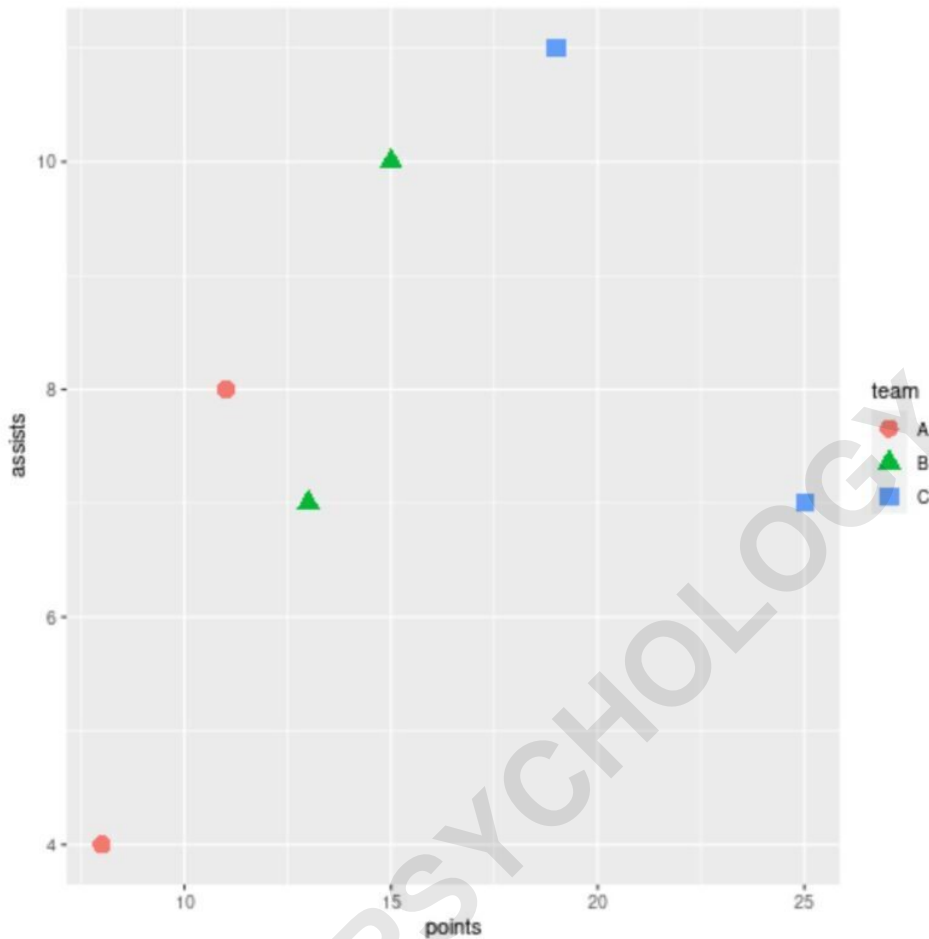
```
points=c(8, 11, 13, 15, 19, 25),
```

```
assists=c(4, 8, 7, 10, 11, 7))
```

```
#create scatter plot where point shape is based on team
```

```
ggplot(df, aes(x=points, y=assists, group=team)) +
```

```
geom_point(aes(shape=team, color=team), size=4)
```



**Notice that the shape and color of the points in the plot are both based on the value for the team variable.**

**Notice that ggplot2 also automatically produces a legend on the right side of the plot to show which points correspond to which team.**

**Note: You can find the complete documentation for the**

## **geom\_point() function .**

**The following tutorials explain how to perform other common operations in ggplot2:**

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