**## 柱状图，Y轴变量名：value，X轴变量名：category，分组变量名：group**

ggplot(data, aes(x = factor(category), y = value, fill = group)) +

stat\_summary(fun = mean, geom = "bar", position = position\_dodge(0.9), width = 0.8) +

scale\_x\_discrete(labels = c("1" = "Label1", "2" = "Label2", "3" = "Label3")) +

scale\_y\_continuous(breaks = seq(0, 1, 0.2)) +

scale\_fill\_manual(values = c("#C0504D", "#4F81BD"),

labels = c("group1" = "Group 1", "group2" = "Group 2")) +

labs(x = "Category", y = "Value", fill = "Group") +

theme\_classic() +

theme(legend.position = "right", text = element\_text(size = 14))

**## 有误差条的柱状图，Y轴变量名：value，X轴变量名：category，分组变量名：group**

ggplot(data, aes(x = factor(category), y = value, fill = group)) +

geom\_bar(stat = "identity", position = position\_dodge(width = 0.7), width = 0.7) +

geom\_errorbar(aes(ymin = lower, ymax = upper), width = 0.2, position = position\_dodge(width = 0.7)) +

scale\_x\_discrete(labels = c("1" = "Label1", "2" = "Label2")) +

scale\_fill\_manual(values = c("#4F81BD", "#B0E0E6", "#C0504D"),

labels = c("1" = "Group 1", "2" = "Group 2", "3" = "Group 3")) +

labs(x = "Category", y = "Percentage", fill = "Group") +

scale\_y\_continuous(breaks = seq(0, 1, 0.2), labels = scales::percent\_format(accuracy = 1)) +

theme\_classic() +

theme(legend.position = "right", text = element\_text(size = 14))

**## 折线图，Y轴变量名：value，X轴变量名：category，分组变量名：group**

ggplot(data, aes(x = factor(category), y = value, group = group)) +

geom\_smooth(method = "lm", se = FALSE, aes(linetype = factor(group)), color = "black") +

scale\_x\_discrete(labels = c("1" = "Label1", "2" = "Label2")) +

scale\_linetype\_manual(values = c("solid", "dotted", "dashed"),

labels = c("Group 1", "Group 2", "Group 3")) +

labs(x = "Category", y = "Percentage", linetype = "Group") +

scale\_y\_continuous(breaks = seq(0, 1, 0.2), labels = scales::percent\_format(accuracy = 1)) +

theme\_classic() +

theme(legend.position = "right", text = element\_text(size = 14))

**## 线条图，Y轴变量名：value，X轴变量名：category，分组变量名：group**

ggplot(data, aes(x = category, y = value, group = group, linetype = factor(group))) +

geom\_line(color = "black", size = 1.0) +

scale\_x\_continuous(breaks = c(1, 0), labels = c("Different", "Same")) +

scale\_y\_continuous(breaks = seq(7.0, 9.0, 0.2)) +

scale\_linetype\_manual(values = c("solid", "dotted", "dashed"),

labels = c("Group 1", "Group 2", "Group 3")) +

labs(x = "Color Match", y = "Average Rating") +

theme\_bw() +

theme(panel.grid = element\_blank(), text = element\_text(size = 14))

**## 散点图，Y轴变量名：y\_var，X轴变量名：x\_var**

ggplot(data, aes(x = x\_var, y = y\_var)) +

geom\_point(size = 3, color = "blue") +

geom\_smooth(method = "lm", formula = y ~ poly(x, 2), color = "black") +

labs(title = "Scatter Plot", x = "X Variable", y = "Y Variable") +

theme\_classic(base\_size = 16)

**## 箱线图，Y轴变量名：value，X轴变量名：category**

ggplot(data, aes(x = factor(category), y = value, fill = category)) +

geom\_boxplot() +

labs(x = "Category", y = "Value", fill = "Category") +

theme\_minimal() +

theme(text = element\_text(size = 14))

**## 小提琴图，Y轴变量名：value，X轴变量名：category**

ggplot(data, aes(x = factor(category), y = value, fill = category)) +

geom\_violin(trim = FALSE) +

labs(x = "Category", y = "Value", fill = "Category") +

theme\_light() +

theme(text = element\_text(size = 14))

**## 分面散点图，Y轴变量名：value，X轴变量名：category，分面变量名：group**

ggplot(data, aes(x = category, y = value, color = group)) +

geom\_point() +

facet\_wrap(~ group) +

labs(x = "Category", y = "Value", color = "Group") +

theme\_bw() +

theme(text = element\_text(size = 14))

**## 热力图，X轴变量名：x\_var，Y轴变量名：y\_var，填充变量名：fill\_var**

ggplot(data, aes(x = x\_var, y = y\_var, fill = fill\_var)) +

geom\_tile() +

scale\_fill\_gradient(low = "white", high = "blue") +

labs(x = "X Variable", y = "Y Variable", fill = "Value") +

theme\_minimal() +

theme(text = element\_text(size = 14))

**## 饼图，填充变量名：category，值变量名：value**

data\_pie <- data %>%

group\_by(category) %>%

summarise(value = sum(value))

ggplot(data\_pie, aes(x = "", y = value, fill = category)) +

geom\_bar(stat = "identity", width = 1) +

coord\_polar("y", start = 0) +

labs(fill = "Category") +

theme\_void() +

theme(text = element\_text(size = 14))