

## Single Factor Experiments CRD (SAS codes)

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2024-01-24

### CODE: Single Factor Experiments CRD (SAS codes).sas

```
DATA QUES_CRD;
    INPUT QUES $ OBS $ RESPONSE_RATE ;
    LABEL QUES='Different Colors'
    OBS='Observation'
    RESPONSE_RATE='Response Rate in Percentage' ;

DATALINES ;
blue 1 28
blue 2 26
blue 3 31
blue 4 27
blue 5 35
green 1 34
green 2 39
green 3 25
green 4 31
green 5 29
orange 1 31
orange 2 25
orange 3 27
orange 4 29
orange 5 28
;
RUN ;
PROC PRINT DATA=QUES_CRD ;
    TITLE 'Questionnaire Color: Single-Factor Experiments CRD' ;
RUN ;

PROC GLM DATA=QUES_CRD ;
    CLASS QUES ;
    MODEL RESPONSE_RATE=QUES ;
    MEANS QUES;
RUN ;
```

## RESULTS: Single Factor Experiments CRD (SAS codes).sas

### Questionnaire Color: Single-Factor Experiments CRD

Obs	QUES	OBS	RESPONSE_RATE
1	blue	1	28
2	blue	2	26
3	blue	3	31
4	blue	4	27
5	blue	5	35
6	green	1	34
7	green	2	39
8	green	3	25
9	green	4	31
10	green	5	29
11	orange	1	31
12	orange	2	25
13	orange	3	27
14	orange	4	29
15	orange	5	28

## Questionnaire Color: Single-Factor Experiments CRD

### The GLM Procedure

Class Level Information		
Class	Levels	Values
QUES	3	blue green orange
Number of Observations Read		15
Number of Observations Used		15

## Questionnaire Color: Single-Factor Experiments CRD

### The GLM Procedure

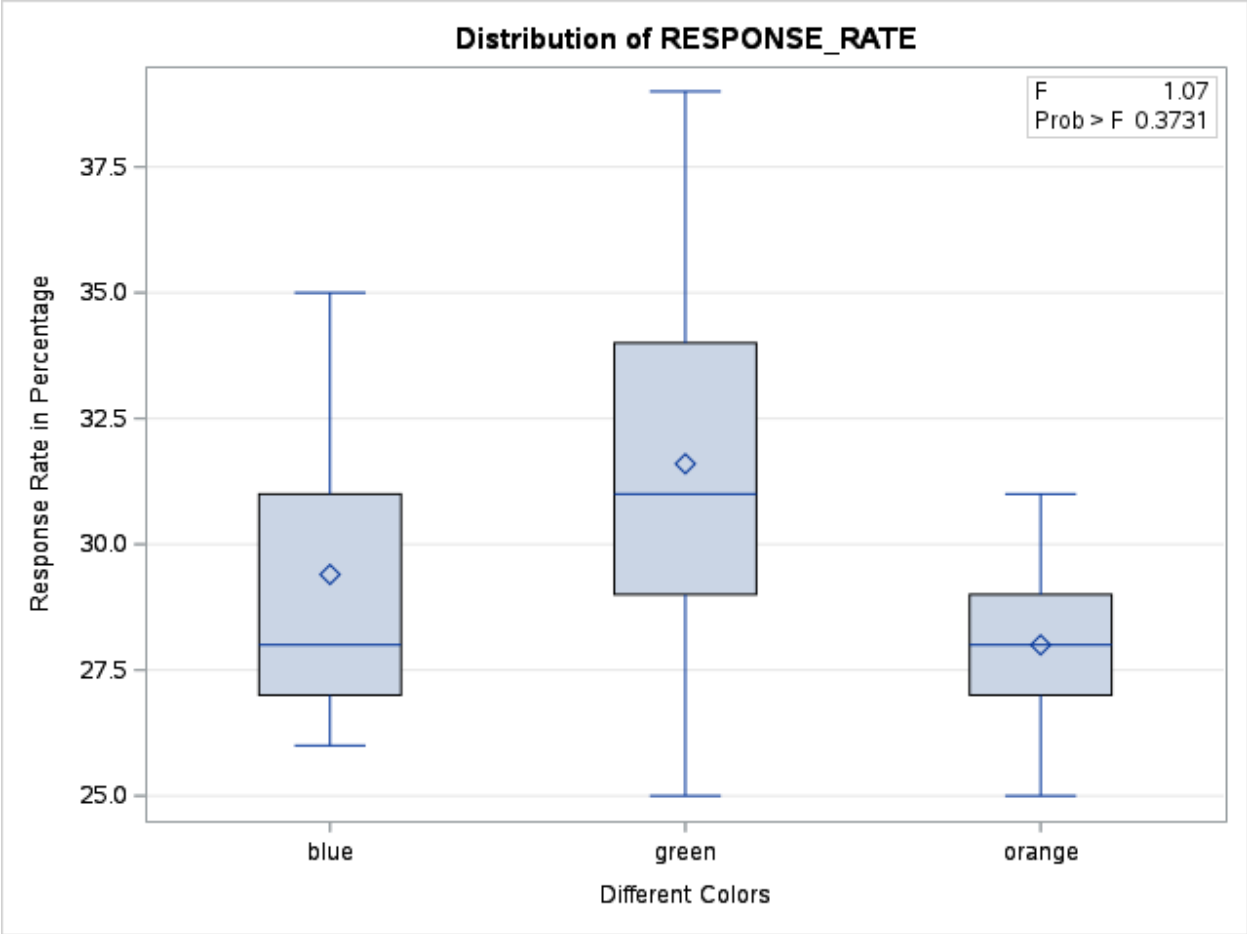
Dependent Variable: RESPONSE\_RATE Response Rate in Percentage

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	32.9333333	16.4666667	1.07	0.3731
Error	12	184.4000000	15.3666667		
Corrected Total	14	217.3333333			

R-Square	Coeff Var	Root MSE	RESPONSE_RATE Mean
0.151534	13.21360	3.920034	29.66667

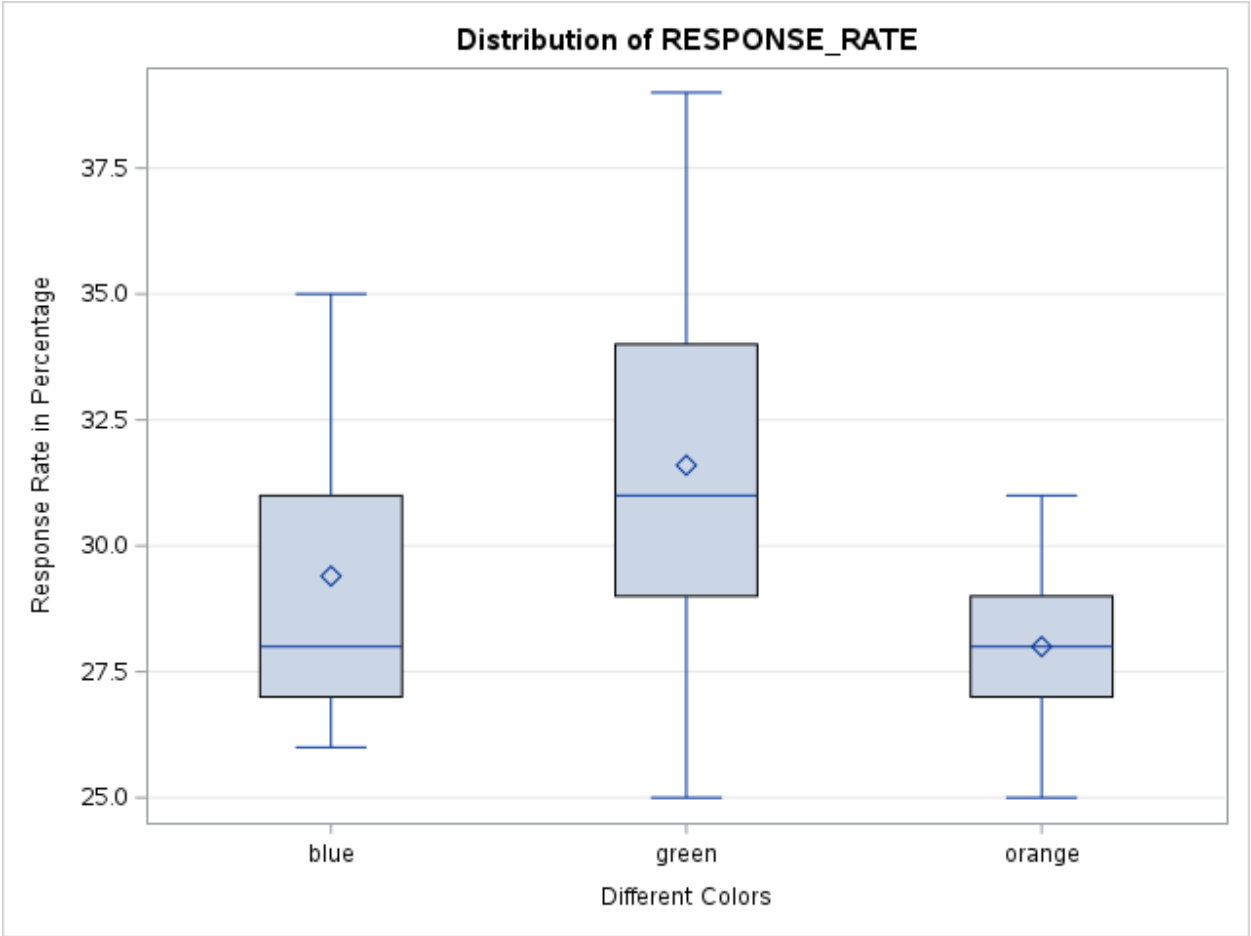
Source	DF	Type I SS	Mean Square	F Value	Pr > F
QUES	2	32.93333333	16.46666667	1.07	0.3731

Source	DF	Type III SS	Mean Square	F Value	Pr > F
QUES	2	32.93333333	16.46666667	1.07	0.3731



Questionnaire Color: Single-Factor Experiments CRD

The GLM Procedure



Level of QUES	N	RESPONSE_RATE	
		Mean	Std Dev
blue	5	29.4000000	3.64691651
green	5	31.6000000	5.27257053
orange	5	28.0000000	2.23606798