

Exercise BLK_Cola.sav

X = Sales

Y = Display location

1 = Normal Display

2 = End-Aisle Display

1. N.D. Sales with normal display

$$S_{SPSS} = 0.145 \Rightarrow S = 0.122$$

$$K_{SPSS} = -0.357 \Rightarrow K = 2.253$$

$$p\text{-value Shapiro-Wilk test} = 0.864$$

2. N.D. Sales with end-aisle display

$$S_{SPSS} = -0.359 \Rightarrow S = -0.303$$

$$K_{SPSS} = -0.741 \Rightarrow K = 2.035$$

$$p\text{-value Lilliefors test} \geq 0.2$$

$$p\text{-value Shapiro-Wilk test} = 0.709$$

3. p-value Levene-Test = 0.203

Homogeneity of the variances

4. p-value t-Test = 0.007

significant differences

One-sided t-Test

average sales normal display = 50,3

average sales end-aisle display = 72,0

H_0 : Sales with use of normal display are not smaller than sales with use of end-aisle display

H_1 : Sales with use of normal display are smaller than sales with use of end-aisle display

$$p\text{-value (one-sided)} = \frac{0.007}{2} = 0.0035$$

it is the sales with use of normal display are significantly smaller than sales with use of end-aisle display.