

STATISTICS (SPSS FOR BEGINNER)

Chapter 12 (3)

Nonparametric Test (Kruskal Wallis)

Dimaz Ramananda, S.E., M.Ak.



- The difference between nonparametric test and parametric test is that nonparametric test can be done without a specific parameter (mean, median, etc.)



TEST FOR THREE AND MORE THAN TREE INDEPENDENT SAMPLE

- Kruskal Wallis

A. Case 1

*nonpar5.sav

	 distance	 gas
1	50.2	petrol a
2	52.3	petrol a
3	51.2	petrol a
4	52.3	petrol a
5	53.4	petrol a
6	51.9	petrol a
7	52.3	petrol a
8	52.1	petrol a
9	53.2	petrol b
10	55.2	petrol b
11	52.5	petrol b
12	53.4	petrol b
13	51.2	petrol b
14	53.7	petrol b
15	54.3	petrol b
16	52.8	petrol b

	 distance	 gas
17	51.2	petrol c
18	52.2	petrol c
19	49.2	petrol c
20	51.8	petrol c
21	50.2	petrol c
22	53.2	petrol c
23	52.6	petrol c
24	51.7	petrol c
25	52.3	petrol d
26	53.5	petrol d
27	52.1	petrol d
28	51.9	petrol d
29	52.8	petrol d
30	52.9	petrol d
31	53.2	petrol d
32	52.5	petrol d

How to:


1. Open nonpar5.sav
2. Choose analyze
3. Choose Nonparametric tests
4. Choose legacy dialogs
5. Choose K independent samples
6. Put distance on the test variable list box
7. Put gas on the grouping variable box
8. Click define group
9. Follow tutorial
10. Click continue
11. Check Kruskal-wallis H box only
12. Click Ok



How to make decision (find the hypothesis):

- If probability (asyp. sig) > 0.05, Ho is accepted
- If probability (asyp. sig) < 0.05, Ho is not accepted

B. Case 2

*nonpar5_asg.sav

	 distance	 car
1	50.2	brand a
2	52.3	brand a
3	51.2	brand a
4	52.3	brand a
5	53.4	brand a
6	51.9	brand a
7	52.3	brand a
8	52.1	brand a
9	53.2	brand a
10	55.2	brand a
11	52.5	brand b
12	53.4	brand b
13	51.2	brand b
14	53.7	brand b
15	54.3	brand b

	 distance	 car
16	52.8	brand b
17	51.2	brand b
18	52.2	brand b
19	49.2	brand b
20	51.8	brand b
21	50.2	brand c
22	53.2	brand c
23	52.6	brand c
24	51.7	brand c
25	52.3	brand c
26	53.5	brand c
27	52.1	brand c
28	51.9	brand c
29	52.8	brand c
30	52.9	brand c

How to:

1. Open nonpar5_asg.sav
2. Choose analyze
3. Choose Nonparametric tests
4. Choose legacy dialogs
5. Choose K independent samples
6. Put distance on the test variable list box
7. Put car on the grouping variable box
8. Click define group
9. Follow tutorial
10. Click continue
11. Check Kruskal-wallis H box only
12. Click Ok

How to make decision (find the hypothesis):

- If probability (asyp. sig) > 0.05 , H_0 is accepted
- If probability (asyp. sig) < 0.05 , H_0 is not accepted