

Quiz #3 Matching Exercise

A Priori Matching

Here are the matching variable scores from members of the subject pool. Construct matched pairs subjects that will be randomly assigned to conditions of the design. You'll do this twice (see below) so you can consider the "trade-off" between the definition of a "match" and the number of matched groups you can form.

Subject #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Score	11	12	13	14	14	14	15	16	16	16	17	18	18	19	20

1st time – use **adjacent pairs matching**

Subject #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Score	11	12	13	14	14	14	15	16	16	16	17	18	18	19	20

- Circle adjacent pairs
- How many matches did you make?
- How good are the matches?

2nd time -- make only **exact** matches (the pair of participants in each matched group must have exactly the same score).

Subject #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Score	11	12	13	14	14	14	15	16	16	16	17	18	18	19	20

- List the pairs you made
- How many matches did you make?
- How good are the matches?

3rd time – do **“the best you can”**

Subject #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Score	11	12	13	14	14	14	15	16	16	16	17	18	18	19	20

- List the pairs you made following the “no more than one point difference” rule
- How many matches did you make?
- How good are the matches?

Looking at the results from #2 and #3, do you see what is meant by a "trade-off" between exactness and the number of matched groups you get?

Post hoc Matching

Here are the matching variable scores from the members of the two groups that will be participating in the study. Form matched pairs such that you have one subject from Group1 that is a match to one subject from Group 2. You'll do this thrice (see below) so you can consider the "trade-off" between exactness and the number of matched groups you get.

Group 1 25 26 27 31 25 21 26 19 18 24

Group 2 21 25 23 18 17 16 21 31 25 24

1st time -- make only **exact** matches

- List the pairs you made following the "no more than one point difference" rule
- How many matches did you make?
- How good are the matches?

2nd time -- **use everybody**

- List the pairs you made following the "no more than one point difference" rule
- How many matches did you make?
- How good are the matches?

3rd time – **do "the best you can"**

- List the pairs you made following the "no more than one point difference" rule
- How many matches did you make?
- How good are the matches?

Looking at the results from the three matching, do you see what is meant by a "trade-off" between exactness and the number of matched groups you get?