

1

Question: Does the time between seeing objects effect the recall of the objects?

For my experiment I am going to take photographs of 10 objects and print them in black and white onto a single page. I am going to use a class of 30 year 10 students for the experiment. They will need to have a piece of blank paper and a pen. The variables will be the number of items that are remembered initially and then the number of items remembered after 10 minutes.

The students will be shown the page of objects and have one minute to study the objects. I will then take the page away and get them to write down all of the objects that they can remember over a two minute period. Once the two minutes is up I will collect in the sheets of paper. I will wait a further 10 minutes before asking the students to write down as many objects that they can still remember. They will have another two minutes, which I will be timed, to write down the objects they can remember. I choose 10 minutes because my research suggested that short term memory was restricted to a limited time. I also felt that 10 minutes was a good test to see how well the students had initially studied the original photos as this could also increase the initial number of objects remembered and the number of objects remembered after 10 minutes. I am going to ask them to read silently during that time.

2

10 objects will be used. The objects are a pie, stereo, laptop, glasses, a calculator, finger, bucket, fence, car and batteries. I chose these objects as they were readily accessible objects at school and therefore easy for me to photograph.

I think that the number of objects that people remember initially will be more than the number of objects they remember after the 10 minute break.

Because for this experiment I am investigating if there is a difference in the number of objects remembered I am going to take each individual student's results immediately after they have seen the pictures and then subtract from the same individual student the number of objects they remembered after 10 minutes.

Data from the class:

Student number	Memory after looking at the objects	Memory after 10 minutes	Difference in memory
1	9	7	2
2	9	7	2
3	10	8	2
4	8	7	1
5	9	5	4
6	7	5	2
7	7	4	3
8	9	6	3
9	10	7	3
10	10	9	1
11	9	5	4
12	8	7	1
13	7	3	4
14	7	4	3
15	8	7	1
16	7	4	3
17	8	5	3
18	7	4	3
19	9	6	3
20	6	3	3

21	9	6	3
22	9	7	2
23	8	7	1
24	7	5	2
25	10	6	4
26	8	6	2
27	7	4	3
28	9	6	3
29	6	3	3
30	8	4	4

3

Mean after seeing the objects = 8.17 (2dp)

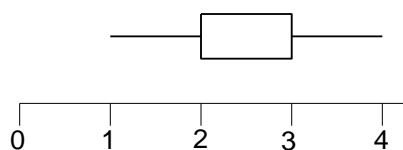
Mean after 10 minutes = 5.57 (2dp)

No student remembered more after 10 minutes as shown by the difference in the two means.

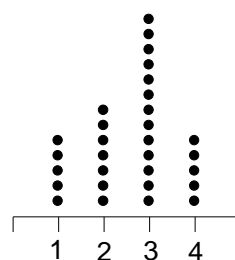
Statistics from the experiment

Min	1
LQ	2
Median	3
UQ	3
Max	4
Range	3

Difference in memory



Dot plot of difference in memory



4

Students in my experiment showed that they remembered less after 10 minutes. So the time did affect their recall.

5