Introduction to Psychology
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Lab Session - 03
Memory

As discussed during the week, were we talked about memory recall refers to recollection of or retrieval of information from the mental storage. Human being show 3 prominent types of recall; free recall, cued call and serial recall. Also psychologist they have been using meaningful words as well as nonsense syllables I just stimuli in their experiments and you would see whole lot of experiments here, where both types of stimulus would be used. Free recall refers to the process, where in the person is free to recall the store information without following any sequence, look at this lab session where meaningful words have been used as stimulus.

Hello.

Hello.

This is simple experiment for human memory tests.

OK.

And in this in this test is known as freely called test.

OK.

And in this I will say few words, list of a 24 words and then, after that I will give you paper pen.

OK.

And you have to recall all those words.

OK.

 As many you can and then you just have to write.

I write.

If you have any doubt regarding this listing of words or anything you can ask me.

OK.

Otherwise the, it is a free required test. So, I won't be helping you in the calling of these words.
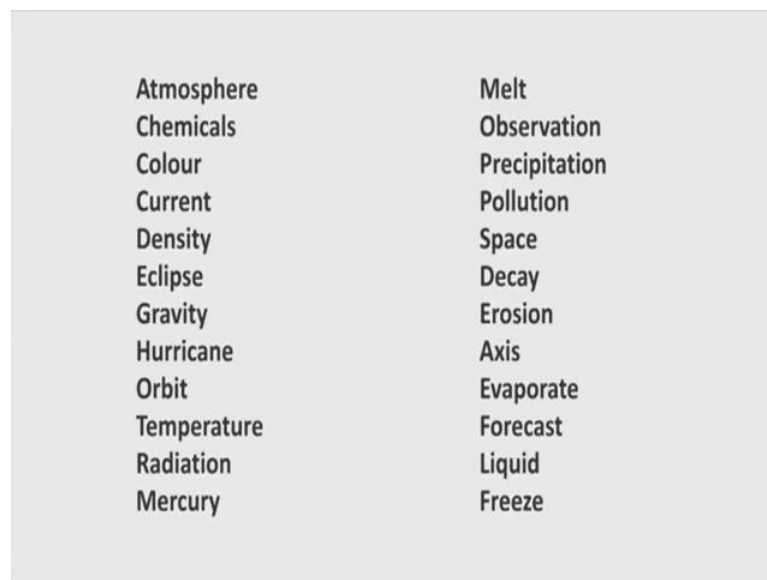
OK.

OK.

So, when you are ready then I can recall the say these words and then you can start.

OK.

You are ready.

Yes.

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Atmosphere	Melt
Chemicals	Observation
Colour	Precipitation
Current	Pollution
Density	Space
Eclipse	Decay
Gravity	Erosion
Hurricane	Axis
Orbit	Evaporate
Temperature	Forecast
Radiation	Liquid
Mercury	Freeze

So the words are atmosphere, chemicals, colour, current, density, eclipse, gravity, hurricane, orbit, temperature, radiation, mercury, melt, observation, precipitation, pollution, space, decay, erosion, axis, evaporate, forecast, liquid and freeze. So, these were the words which I listen to you.

OK.

Now, you just have to recall these words in which are have to write these words down.

OK.

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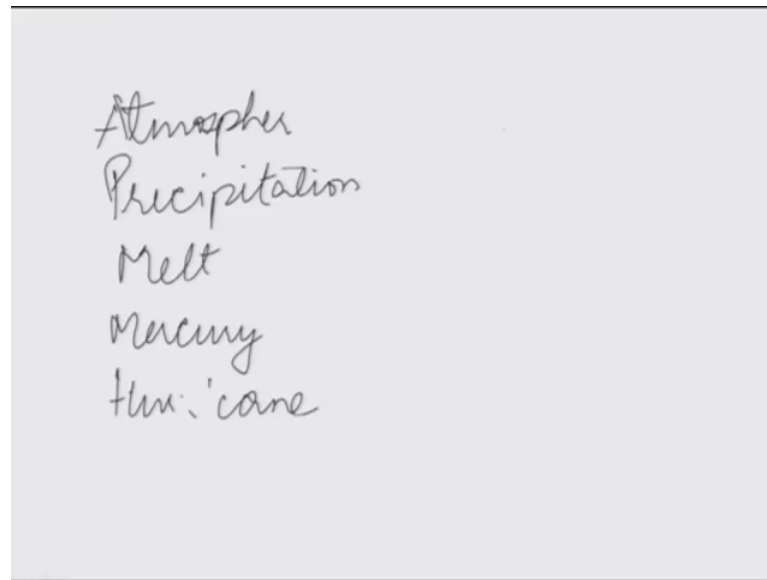
That is all. So, what we what we just did is that I listed some 24 words to you. And here we tested your memory how many words you can recall how many words you can say basic human research with memory suggest that, we cannot recall more than 7 words or store enough primary memory. And what we see here that you listed only 5 words which is a fine, but this you can understand that I listed, I said 24 words and just you record only 5 words.

OK.

But if this deficiency, if these in a memory repayment then people cannot recall these words also.

OK.

Not more than 2 words.

If I any cut off then we can say after this number there is something.

Yes, we do that we do that, but then they have some several tests. So, this basic test just test, how many normal human or normal individuals can call the words, not more than 6 words 1 can recall, but here you have record 5, fine which is good normal.

A total of 24 meaningful words were presented to the participant she was free to recall them in whatever way she could you saw that she successfully record only 5 of them, and that to their orders were completely mixed she recalled atmosphere precipitation melt mercury and hurricane and if you look. at their serial numbers atmosphere was the first word precipitation of the fourteenth word melt was twelfth mercury, eleventh and hurricane was seventh. So, as already discussed 2 phenomenon are visible in free recall the privacy effect and the recency effect recall of items presented at the beginning of the list is an indicator of privacy effect if the participant recalls items presented at the end of the list first and more often then, it is an indicator of recency effect in the present demo what you saw was the recency effect.

Let us now see another session with meaningful words as well as nonsense syllables.
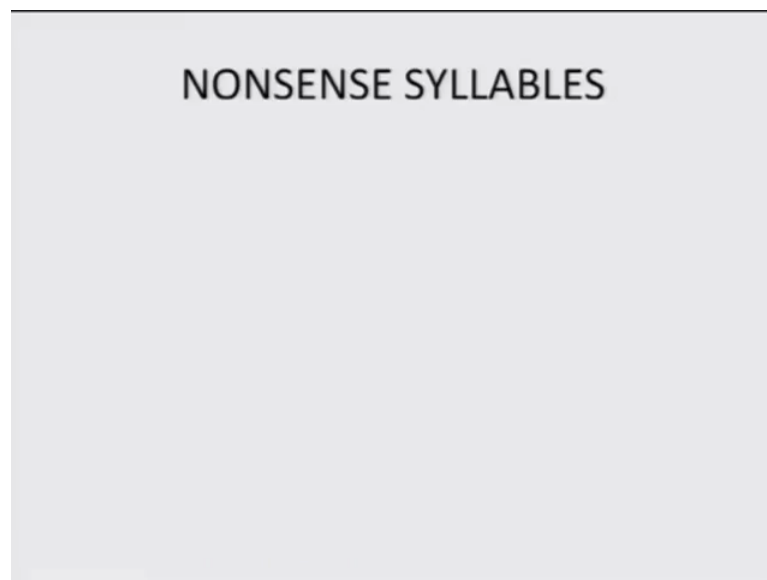
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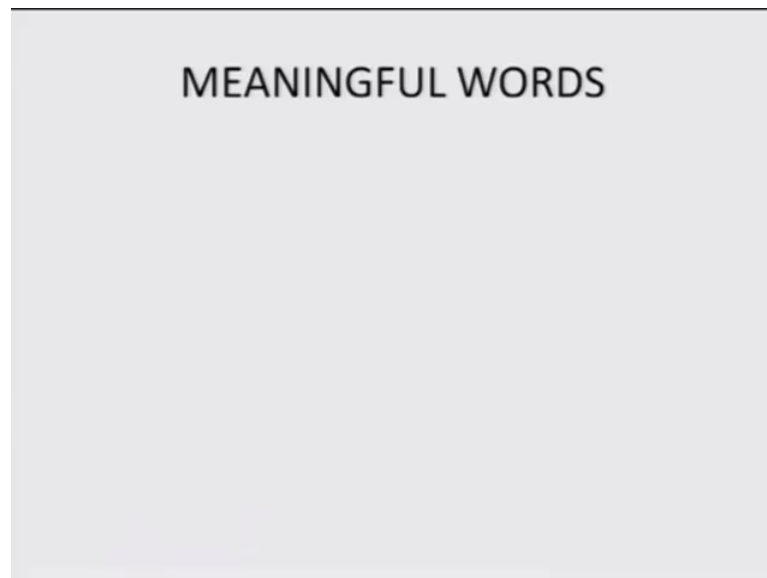
Now there will be another set of meaningful words which I will speak out you have to listen to them.

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GATE
CAT
STATISTICS
LINEMAN
OFFICER
WORKER
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And try to remember as many as possible cat gate fixed worker lineman officers extortion statistics. Now you write an all the words which you remember from the list this much correct thank you.

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NONSENSE SYLLABLES

Now, in this test I will show you few nonsense syllables that is syllables which have been put together which do not have any meaning in them and you have to go through them and after that she will have to write them up all right.

So, let us start like first is XAT, LIQW, XUZFS, SEDNQH, XOPSCWP, RIJZYSPV, PUYZLMWDY, RAQPLSMXNT and now you have to write on all the nonsense syllables which you can remember from the list please write all right thank you.

Let us now, come to cued recall as the name suggest cued recall demands at the participant be able to recall the list given AQ from the list of items that is to be remembered. So, the corresponding word has to be presented and then the based on the cued they participant this to recall. So, let us see this lab session where word pairs of meaningful words have been used as stimuli.

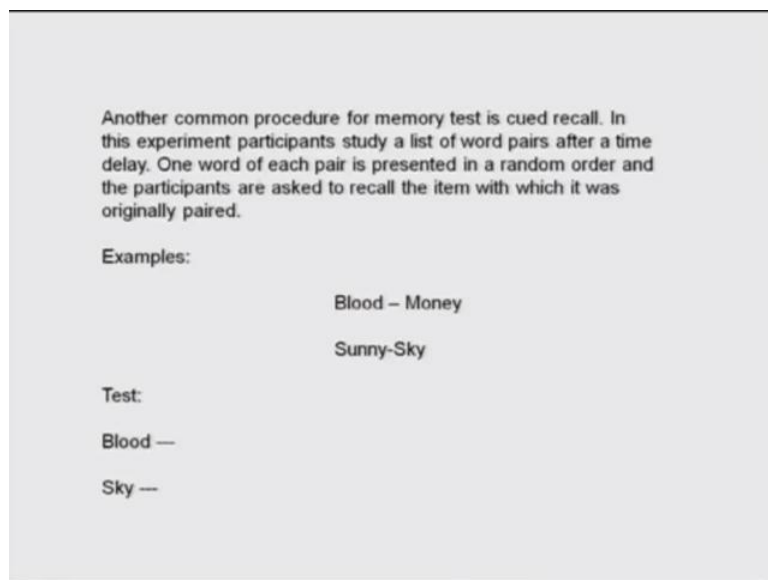This is the simple test to examine human memory.

Human Memory Paper-Pencil Experiment
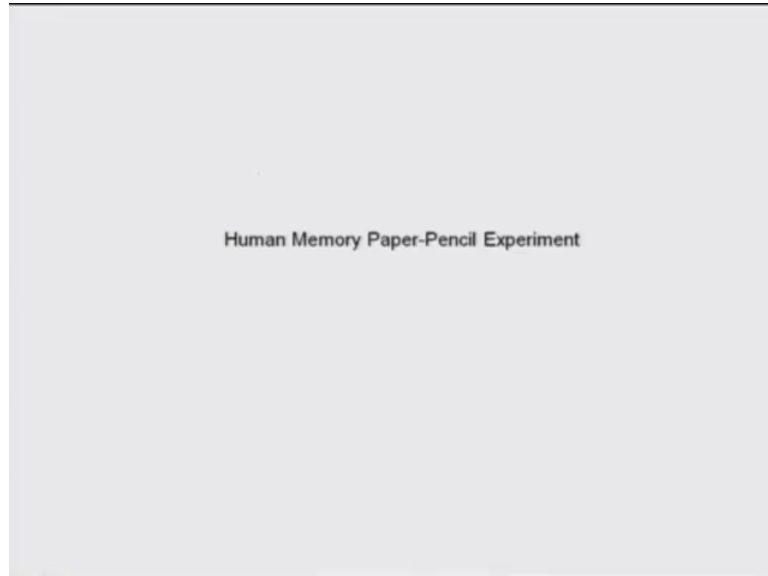
Using the same paper pencil these experiments, you will be having digital marker to respond the test is very simple it is known as cued recalled test. So, in this you will be seeing some pair pairs of word.

For example, blood money.

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Another common procedure for memory test is cued recall. In this experiment participants study a list of word pairs after a time delay. One word of each pair is presented in a random order and the participants are asked to recall the item with which it was originally paired.

Examples:

Blood – Money

Sunny-Sky

Test:

Blood —

Sky —

Sunny sky.

And then I give you cue to recall the other paired word.

So, for instance I give you blood now you know that blood is paired with money.

Money.

So, you have to respond money.

The other word is sky. So, then you have to recall the sunny.

So, all these pairing can be randomized only you will be given cues and then you having to recall the target word.

OK.

So I will give you the list of words.

You just read loud.

And then after once you are done then we will give you two seconds of break then you can recall these.

OK.

You can write. So, read loud these paired words.

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Small	City
Boring	Movie
Hungry	Snake
Huge	Fish
Noisy	Restaurant
Empty	Cup
Expensive	Shoes
Torn	Pajamas

Small, City, Boring, Movie, Hungry, Snake, Huge, Fish, Noisy, Restaurant, Empty, Cup, Expensive, Shoes, Torn, Pajamas.

So, now, this is how these 2 words are there you will be given a cue and then you have to recall the target words.

OK.

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Cue	Target
Small	City
Movie	Boring
Hungry	Snack
Fish	Huge
Noisy	Resturant
Cup	Empty
Expensive	Shoes
Pajamas	torn

So, these are the cue. Now, so what we see here that you record all the words very well which is very good because people who have deficiency with memory cannot recall these association because restoring the memory requires hippo campus where it is connected with frontal cortex. So, these 2 connectivity's are involved. So, anyone who has deficiency in frontal cortex cannot recall anyone who has deficiency in hippo campus cannot also recall.

So, this simple test is used to test human memory and, but it seems that you have performed very well. So, thank you.

You solved at all 8 word, pairs were successfully recalled by the participant. Serial recall refers to recollection of items or events in the order in which they actually occur. Look at this lab session; we have nonsense syllables have been used.

In this test I will show you few nonsense syllabus; that is syllabus, which have been put together which do not have any meaning in them, and you have to go through them and afterwards you will have to write them up all right. So, let us start first is XAT, LIQW, XUZFS, SEDNQH, XOPSCWP, RIJZYSPV, PUYZLMWDY, and RAQPLSMXNT.

Now you have to write down all, the nonsense syllabus which you can remember from the list.

OK.

So, please write all right thank you.

We shall now, see a lab session on digits span this is the experimental demonstration of correct ret retrieval of various numbers shown to the participant.

Now, I will say few numbers and you have to repeat them after me in the same sequence right 2, 7.

2, 7.

5, 9, 0.

5, 9, 0.

4, 8, 6, 1.

4, 8, 6, 1.

7, 3, 0, 9, 4.

7, 3, 0, 9, 4.

2, 4, 9, 6, 5, 8.

2, 4, 9, 6, 5, 8.

1, 4, 6, 8, 2, 5, 3.

Nothing, I lost it.
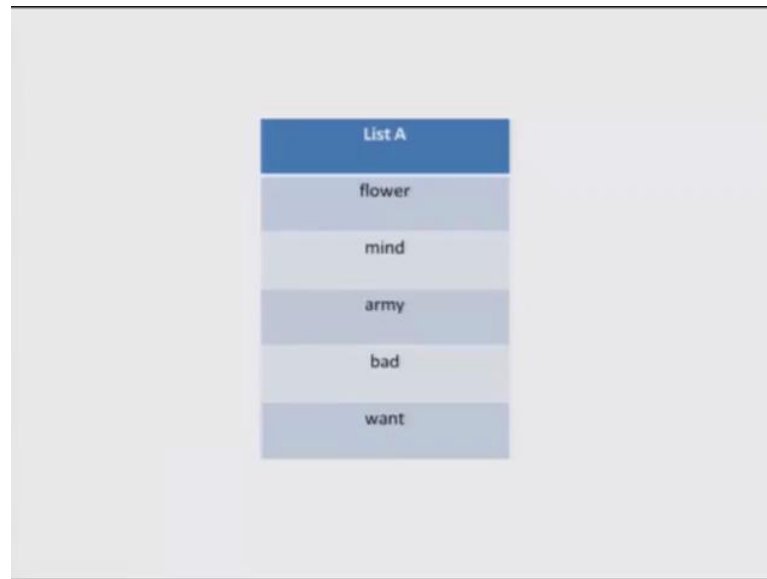
You did 6 digits. So, it is good as we saw that in this case the participant could read out 6 digits and the maximum number of digits a person, can repeat is that digits stand of that person and now in this case the digits spend was 6 digits.

One of the phenomenon's showing the effect of implicit memory is priming when you read word in a list and later. If you are ask to complete a word string with the first fuel

forgets of that is specific word the probability of a recalling that word is greater when, it is primed compare to when it is not look at this lab session.

Ah now I read out the list of few words there will be 2 different lists list A and list B after I have read out these lists you will be told to recall listed.

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So, please listen carefully the words are flower mind army bad want this was list A.

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Now, list b smell brain, navy good need.

Now, I want you to recall words from the list a.
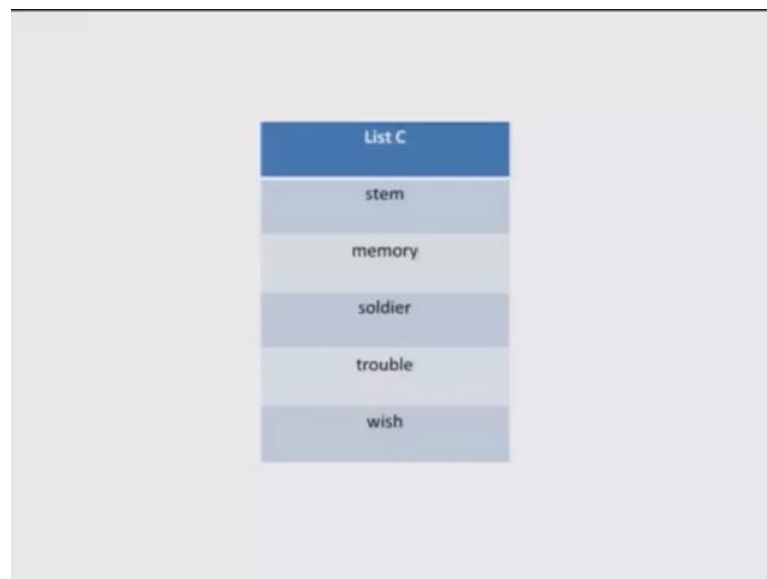
Army

OK.

Want flower.

Bad

All right!

That is it.

Thank you, now again I will read out few words from list C and list D and you will be has to recall list C.

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The words are stem memory soldier trouble wish that was list C.

Now, the list D, CEF, DAX, YOV, VUX, WUB, now you have to recall words from the earlier list which you heard.

Stem.

Right.

Memory.

OK.

Soldier.

Hm.

Trouble.

Right.

Fish.

Thank you.

OK.

Let us now see an experimental demonstration of recognition task using visual stimuli.

This is a visual memory recognition test; you will be shown a card you have to loOK. at it carefully because it will be shown only, first 5 seconds after that I will remove that. And I will show you after some time another card, and you will have to tell me whether the both the cards were same or different right.

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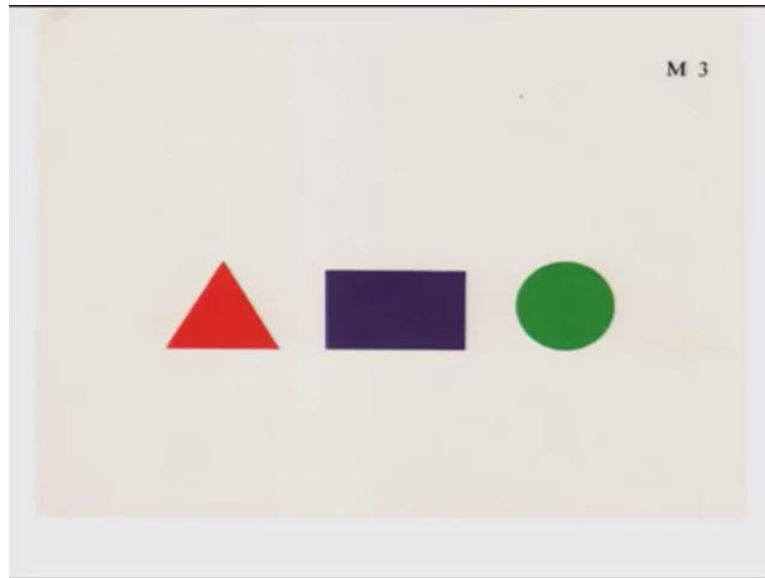
This is the image please look at it carefully.

Hm.

Now you have to count for 1 to 100 loudly please do that.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

OK. now I will show you another card you have to tell me.
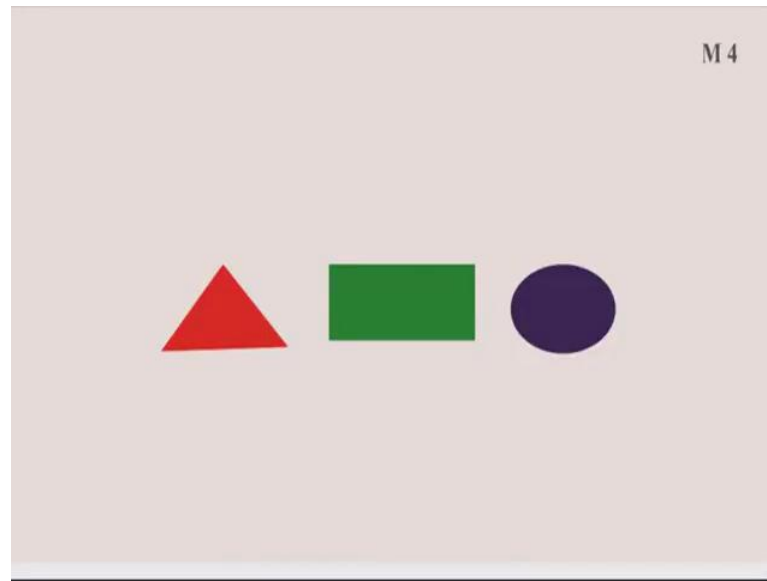
Whether this cards are similar or different.

Hm.

This is the image are they similar or different.

Different.

And what is the difference.

The colour of this image is change earlier it was this was blue and.

Rectangle was blue.

Rectangle was blue and the circle was I think the circle was pink.

OK.

It is peach.

OK.

And the triangle was pink.

All right.

OK.

Thank you. So, you can see that the earlier image had a red triangle purple rectangle and green circle where as the second image had red triangle where as green cir rectangle and purple circles. So, the colours of rectangle and circle were swapped, that was the difference between these 2 images.

We will now see the case of immediate and delayed recall using complex figured test.
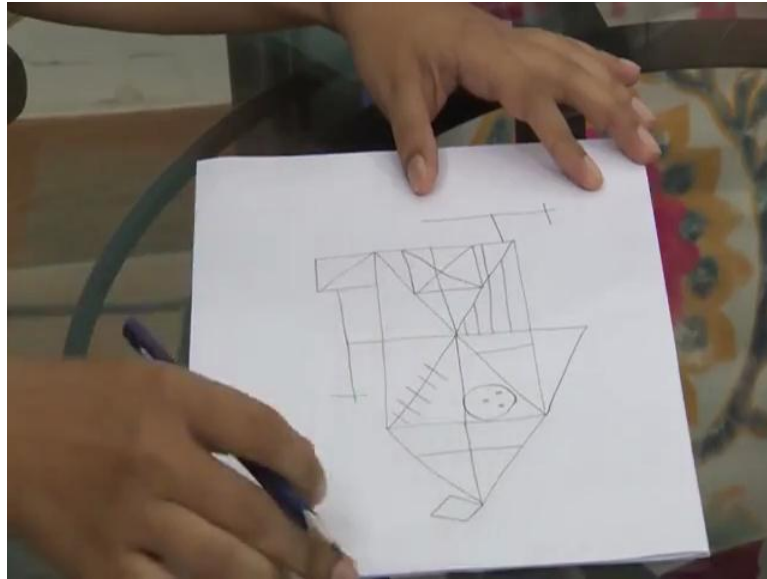
This is the test of visual memory.

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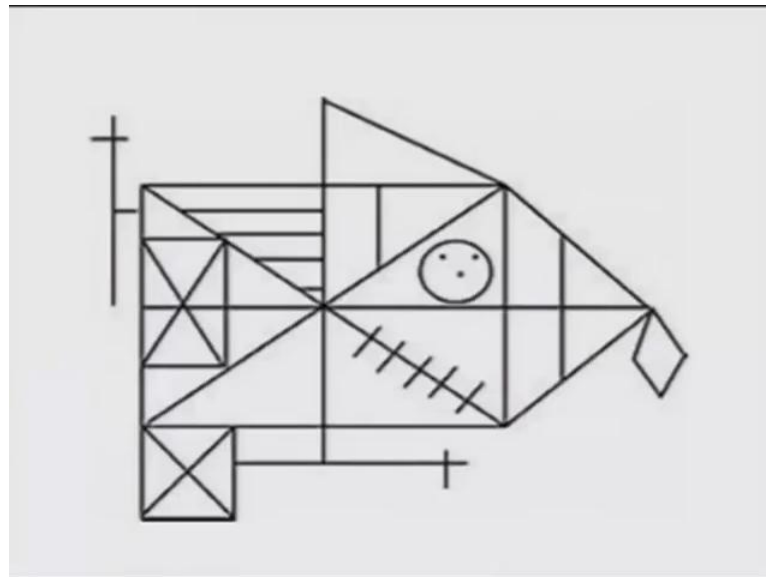
This is a design you have took. a first copy it you will be just given this image and you just have to copy it.

OK.

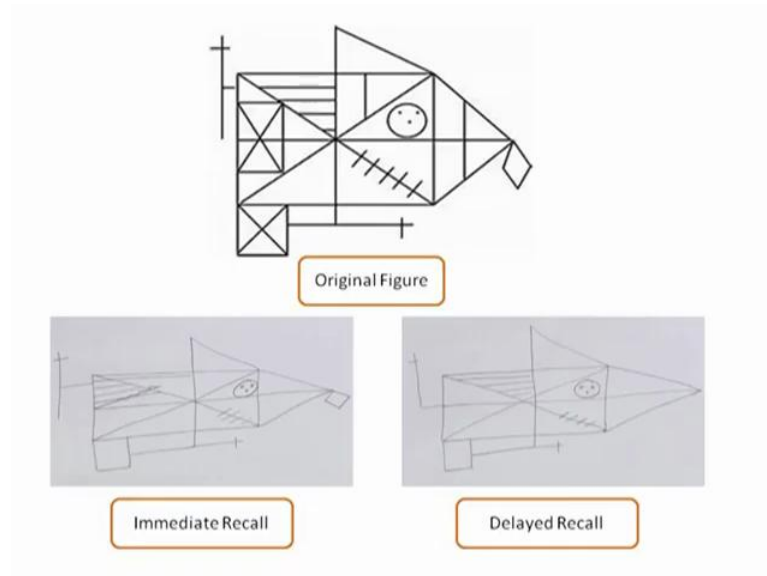Right now, you have to recreate the same design from your memory right.

That.

All right, now that thirty minutes have passed from that first time you copied this design I want you to recreate this design as much as you can remember.

OK.

That is it.

Original Figure

Immediate Recall

Delayed Recall

Now, I will read out a list of few words there will be 2 different lists list A and list B after I have read out this list you will be told to recall list a. So, please listen carefully the words are flower mind army bad want this was list A, now list B smell brain navy good need.

Hm.

Now, I want you to recall words from the list a.

Army.

OK.

Want

Hm.

Flower.

Hm.

Bad

All right,

Hm, that is it.

Thank you, Now again I will read out few words from list C and list D and you will as to recall list C. Right the words are stem memory soldier trouble wish that was list C. Now the list D, CEF, DAX, YOV, VUX, WUB, now you have to recall words from the earlier list which you heard.

Stem.

Right.

Remory

OK.

Soldier

Hm

Trouble

Right.

Wish

Thank you.