**DIVISION OF ATTENTION**

**Introduction:**

Divided attention could be defined as our brain's ability to **attend to two different stimuli at the same time**, and respond to the multiple demands of your surroundings. Divided attention is a type of simultaneous attention that allows us to process different information sources and successfully carry out multiple tasks at a time. This skill is also known as multitasking, which people often carry out without realizing it. This cognitive skills is very important, as it allows us to be more efficient in our day-to-day lives.

A great example of this would be singing along to a song while driving a car, doing homework while listening to music, etc

Our ability to attend to multiple stimuli and do various tasks at a time does have its limits. When you divide your attention, the efficiency with which you do these actions is decreased, and you will almost certainly perform poorly. **Interference is the term used to describe when a person has a hard time attending to two stimuli at a time.** We see interference when the brain is only able to process a certain amount of information. However, **cognitive training can help improve divided attention**, and as a consequence, the ability to do more than one activity at a time.

One of the central problems studied under attention is the possibility of dividing attention between two tasks. In the earlier days some ministers were dictating 4 to 5 letters simultaneously. What actually happens in such cases is rapid shifting of attention between two tasks. When both the tasks are done simultaneously one of them becomes automatic. To some extent division of attention is possible when one task is a simple physical one and the other task is mental. When we try to divide our attention, the performance goes down. Thus, real division of attention is not possible. When children do not divide their attention, they have better chance of learning. Index of divisibility shows the extent of division of attention between two tasks.

**How can you improve divided attention?**

Divided attention, as with other cognitive skills, can be learned, trained, and improved. Cogni-Fit's training programs may help improve how quickly the user can change their attention between tasks, how much of their brain resources they use when attending to multiple stimuli at a time, and improve the ability to process complex information.

The divided attention rehabilitation program is based on the science of [neuroplasticity](https://www.cognifit.com/brain-plasticity-and-cognition). Cogni-Fit has an entire battery of exercises designed to help in the rehabilitation of divided attention and other cognitive skills, which is made possible by brain plasticity. The brain and its neural connections can be strengthened and improved through practice. By training divided attention, the frequent actions will become automated, which allows the user to be more efficient.

**Problem**:

To find out the possibility of division of attention between - two muscular tasks.

**Materials**:

1) Division of attention board having circular and triangular grooves with a set of error counters with two stylus.

2) Stop clock

3) Wooden screen

4) Writing materials

**Procedure**:

Before the start of the experiment all the necessary electrical connections are made.

**Two Muscular Tasks**

***I* Series:** Muscular task 1: Instruct the subject that at the signal 'Start' he has to trace the triangle pattern of the instrument with the stylus provided adjacent to it as fast as he can with his right hand. With these instructions say start" simultaneously start the stop clock and allow the subject to trace the grove for 30 seconds. At the end ask him to stop and note down the number of triangles he has traced (S1).

***II* Series:** Muscular task 2: In this series the subject with the same instructions has to trace the circle with his left hand for same amour of time and at the end note down the traces (S2).

***III* Series:** Two muscular tasks: The subject with the same instructions has to trace both the circle and the triangle in his left and right hand simultaneously for fifty seconds. Note down the number of triangles (D1) and the circles (D2) traced separately.

**Precautions:**

1. The effort should be made to see that the subject performs the task properly.

2. The subject should not know the purpose of the experiment.

**Analysis of Results:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No.of Errors**  **Trial 1** | **No.of Errors**  **Trail 2** | **No.of Errors**  **Trail 3** | **Difference between Trail 1- Trail 3** |
| Triangle |  |  |  |  |
| Circle |  |  |  |  |
| Both |  |  |  |  |

**Discussion:**

Discuss the Index of divisibility for mental tasks with that of muscular. Normally the Index will be less than 1.00. Discuss the individual tasks differences.

**Conclusion:**

1) See whether division attention was possible in case of the subject.

2) See whether efficiency has gone down when subjects divided their attention.