**Attention, Determinants, Fluctuation, Selectivity**

Attention is best described as the sustained focus of cognitive resources on information while filtering or ignoring extraneous information. It is a very basic function that often is a precursor to all other neurological/cognitive functions.

**Focused attention**: The ability to respond discretely to specific visual, [auditory](https://en.wikipedia.org/wiki/Auditory_spatial_attention) or tactile stimuli.

**Sustained attention** ([**vigilance**](https://en.wikipedia.org/wiki/Vigilance_Theory)**and**[**concentration**](https://en.wikipedia.org/wiki/Attentional_control)): The ability to maintain a consistent behavioral response during continuous and repetitive activity.

**Selective attention**: The ability to maintain a behavioral or cognitive set in the face of distracting or competing stimuli. Therefore, it incorporates the notion of "freedom from distractibility."

**Alternating attention:** The ability of mental flexibility that allows individuals to shift their focus of attention and move between tasks having different cognitive requirements.

**Divided attention:** This is the highest level of attention and it refers to the ability to respond simultaneously to multiple tasks or multiple task demands.

This model has been shown to be very useful in evaluating attention in very different pathologies, correlates strongly with daily difficulties and is especially helpful in designing stimulation programs such as attention process training, a rehabilitation program for neurological patients of the same authors.

**Objective and Subjective Factors That Determine our Attention!**

It is true that the attention is a selective activity and volition of our mind is very important to determine our attention. But despite this, there are some factors in the objects as well as in the individual himself which can influence our attention.

**These factors which determine our attention are divided into two types**

**Objective Factors:**

These factors pertain to particular aspects of objects which are inherent in objects.

**Movement:**

A moving object draws our attention more easily than a stationary object. For example, flickering lights draw our attention than non-flickering lights. A moving vehicle draws our attention more than a stationed vehicle.

**Intensity:**

More intense light, sound or smell draws our attention more easily than less intense one. For example, a high voltage bulb will be observed quicker than low voltage bulb,

**Novelty:**

New kinds of objects draw our attention quickly. Advertising agencies adopt this technique very effectively.

**Size:**

A bigger or a smaller object draws the attention of people very easily than average level size of any object,

**Change:**

A change in our environment draws our attention quickly. For example, regular sound of a moving clock does not draw our attention, but the movement it stops, our attention is diverted.

A show piece placed in a new place, a radio playing a song stops due to electricity failure draws our attention.

**Repetition:**

When a stimulus is presented repeatedly our attention is diverted, For example, repeated horn of a fire brigade or ambulance.

**Clarity:**

An object or sound which can be experienced clearly draws our attention than the stimuli which are not clear. For example, during night times stars and planets which are seen clearly draw our attention.

**Colours:**

Colourful objects draw our attention more easily than black or white objects.

**Contrast:**

An object that is strikingly different from its background draws our attention. For example, a black spot on a white shirt

**Subjective Factors:**These factors refer to individuals. These are inherent in people. There are many subjective factors which determine our attention.

**Interest:**

Objects of our interest draw our attention immediately. For example, while moving on a road a sportsman is attracted towards the shop where sports materials are placed. A person who is interested in a particular singer will immediately divert his attention the moment he listens his voice.

**Motives:**

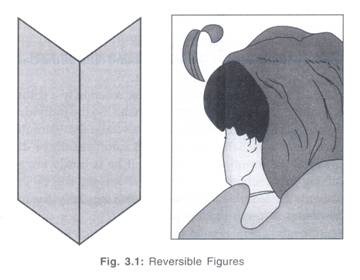
Motives are powerful forces which make us to divert our attention. For example, a hotel will draw the attention of a hungry person because he has a drive for food.

**Mental set:**

Our set or readiness of mind is very important in attending to any stimulus. For example, when a person is in fantasy he may not listen to any call. On the other hand, if he is waiting for a phone call eagerly, he will listen to that immediately.

* **. Emotional state:**
* Attention is disturbed during emotional state. It also affects our perception. For example, when a person is highly excited due to fear, he may not listen or understand what others say.
* **e. Habits:**
* Our attention is diverted automatically towards the things to which we are habituated. For example, a smoker remembers smoking even if he is otherwise busy in some work. A person habituated to take food at a particular time remembers food at correct time. Attention of a nurse is automatically diverted towards a serious patient.

**Fluctuation of Attention:**

* It appears for us that our attention can be concentrated on a particular act for more time. But careful observation clearly shows that we cannot concentrate on a single act or stimulus for more than few seconds.
* When we are seeing an object or listening to a sound, after few seconds, the attention will be shifted towards other stimulus or other area of the stimulus for a fraction of time and returns to the original stimulus.
* This process is called fluctuation. Here we will be unable to notice this short shrift. This phenomenon can be demonstrated experimentally.
* 
* on constant observation the figure of the book appears for sometime as partially closed and partially open for some time. Similarly, in the figure of a woman, constant attention leads to perception of the faces of old woman and young lady alternately. Such a temporary shift in attention is called fluctuation of attention.

**Distraction of Attention:**

* When our attention is concentrated on a particular act or stimulus, some other more powerful stimulus may draw our attention and holds it to remain there for more time.
* It may or may not return to the earlier stimulus. For example, while reading a book, our concentration will be on the book. Meanwhile if we listen to an attractive music sound, our attention may be shifted towards that under such circumstances, physically we may be reading the book, but we may not follow the contents. Students are much affected by distraction. Hence, they should learn to have concentration of mind on studies.

**Division of Attention:**

* Attending to more than one act at a time is known as division of attention. In such situations, we will divide our attention towards more than one act.
* Example, a tailor will be stitching the cloths and also speaking to his customers.
* A nurse will be observing the pulse of a patient and also changes on his face.
* it is possible to perform more than one act because, either our attention is shifted from one act to another rapidly, or our attention is concentrated on only one act and the remaining activities are carried on automatically.
* Such activities do not need our attention, because these are almost mechanical. But in some technical jobs, attention has to be divided to perform more than one act at a time. However, under such circumstances, the quality and quantity of the task is affected. This can be proved experimentally by using a “Division of attention board”.

**Span of Attention/Apprehension**

* Span refers to the number of letters or digits or sounds that an individual can grasp within a given period of time. Using an instrument called ‘Tachistoscope’, it is experimentally proved that an individual can grasp 4-5 digits or letters easily within a fraction of time.
* It is also proved that span will be more for meaningful material like words, than digits or non-sense syllables. It may be observed that digits on number plates of automobile vehicles are restricted to 4 only.