



Definition of Attention

'Attending' can be defined as the mental activity of focusing on certain aspects of one's current experiences and ignoring others. Attending may be considered as a kind of mental set which predisposes the individual to concentrate upon one and screen out others.

Types of Attention

Attention are of two kinds.

- i. Voluntary or Volitional Attention: This type of attention involves some effort or will. Some times we have to force ourselves to attend to objects or events in which we lack interest. In such cases, we take efforts to set our attention on the stimulus in question. Thus we can say voluntary attention is intentional.
- ii. Involuntary or Non-Volitional Attention: Involuntary attention is spontaneous, free, natural and passive. Not much effort is needed for this type of attention. Attention of young children is of this nature.

Nature / Characteristics of Attention

- i) Attention is a Selective Process: Attention is a process of selection among items not yet entered in the field of consciousness, a selection of some items (stimuli) to enter consciousness while others remain excluded.
- Ii) Attending is the first step in the mental process of knowing called 'Cognition'.
- Iii) Attention is three dimensional i.e. attention is not only a mental selectivity but it also involves affective and conative aspects.
- Iv) Attention needs motor-adjustment like turning our head, focussing our eyes, leaning forward etc.

Determinants of Attention

- (A) Objective/External factors
 - 1. Size
 - 2. Intensity
 - 3. Change
 - 4. Contrast
 - 5. Novelty
 - 6. Movement
 - 7. Repetition
 - 8. Systematic form

- (B) Subjective/Internal factors
 - 1. Interest
 - 2. Need
 - 3. Mental set
 - 4. Mood
 - 5. Physiological condition

External Factors of Attention

- i. Size: Objects of big size, arrest our attention immediately. Full page advertisements in newspapers capture our attention more easily than quarter page advertisements.
- ii. Intensity: As size is to figure, so is the intensity to the quality of the stimulus. Stimulus with high intensity like loud sound, deep striking colours, etc. are highly successful in attracting our attention.
- iii. Change: Whenever there occurs sudden change in a stimulus, it immediately attracts our attention. For example when the fan suddenly stops, everyone in the class looks up and see the fan.
- iv. Contrast: When a stimulus presents itself as a contrast in the midst of other stimuli, it turns out to be an attention winner e.g. A black dot in a white shirt looks predominant.

- v. Novelty: When a stimulus is presented in a novel or unusual way, it attracts the attention of everyone. For example, when we see the writing "Don't kiss me please" on the back of a lorry instead of the usual writing "Please keep sufficient distance", it quickly arrests our attention.
- vi. Movement: As compared to stationary objects, moving objects easily attracts our attention. For this reason only, the mother of a crying child, to divert its attention, points out to the child moving objects like a crow, car, etc.
- vii. Repetition: A stimulus, even of low intensity if appears repeatedly, it succeeds in winning our attention. The same business advertisement is repeated many times in mass media like T.V, Radio and news papers only to attract the attention of consumers.
- viii. Systematic Form: Objects with systematic form are easily attended to and retained long in our memory as compared to objects which are incomplete or irregular in form. (e.g. We listen to a faint tune even in noisy surroundings)

Internal Factors of Attention

- i. Interest: This plays an important role in eliciting the attention of the grown up adults. One attends to something when it matters to him intensely even though none of the objective factors are present. The attention of violinist walking along the bazaar is struck at the shop selling musical instruments, particularly violins.
- ii. Need or value: Another important subjective factor determining attention is 'Need', For example, the attention of a person waiting for bus of a particular route will always be restricted to buses of that route only.

- iii. Mental Set: One's mental set or disposition of readiness to react to a particular stimulus, is another subjective factor of attention. For example the attention of a person who goes to railway station to receive his friend will always be on spotting the friend in the midst of others.
- iv. Physiological condition: The physiological condition of one's body also determines the level of attention. Students suffering from headache, stomach-ache, fever etc. will be unable to attend to the lesson taught in the class.

Ways and Means of Securing Better Attention in the Class

- 1. To secure attention of pupils, teacher has to first of all remove certain obstacles to attention.
- 2. The teacher has to make good use of the objective factors of attention in his class. Loud voice, striking diagrams, clear blackboard work, use of coloured chalks, etc.
- 3. During classroom teaching, the teacher has to tell his pupils what to attend to, at the stage of introduction itself by providing the over-view of the lesson.
- 4. The teacher should harness the natural interests of pupils to the class lesson and also create new interests of educational value.

Sensory Organs and Sensations

It is said that sense organs are the gateways of human knowledge, as we get the information and knowledge about the external world, only though our sense organs.

Sensation produced by different sense organs are indicated below:

- Visual stimuli eyes Aural (or visual) sensation Seeing
- Auditory stimuli ears Auditory sensation Hearing
- Fragrance/odour emanating stimuli nose olfactory Smelling
- Taste stimuli tongue Gustatory sensation tasting
- Tactile stimuli skin tactile sensation Feeling of touch

Sensation

Sensation is the immediate result of a sense organ being acted upon by appropriate stimuli.

Perception

Perception is a psychological process in which the sensory inputs received from the sense organs are processed, organised and interpreted based on the past experiences of the organism so that the nature of the stimuli are meaningfully understood.

Perception = Sensation + Meaningful Interpretation.

Determinants of Perception

Gardner Murphy speaks of the following four factors of perception:

- i) Sensations
- ii) Nervous structure capable of or sensitive to differences in nature and strength of these sensations
- iii) Our previous experiences
- iv) Mental set at the time of experiencing sensations.

Laws of Perceptual organisation

Following are the important laws governing perceptual organisation.

- i) Law of Pragnanz: According to Gestalts, perceptual organisation is governed by the law of pragnanz. 'Pragnanz' means 'compact but significant'.
- ii) Law of Proximity
- iii) Law of Similarity
- iv) Law of Closure
- v) Law of Continuity

Hallucination

Hallucination is false perception; it is different from illusion in that, it has no sensory basis and it is a dream like image often mistaken for perception. For example, the phenomenon, of 'Mirage', spotting a ghost on the tamarind tree in the outskirts of a village, hearing the tapping sound of the house door, hearing the anklet sound of an angel etc. are all due to hallucination.

Meaning of 'Memory'

A layman may define memory simply as the capacity to reproduce what is learnt. Psychologists prefer the word 'remembering' to 'memory'. Remembering refers to 'retention' of what is 'learnt' and 'retrieving' it when it is required for subsequent use.

Remembering consists of three stages or phases. They are:

- i. Learning or memorizing (known as assimilation)
- ii. Retention or storing
- iii. Retrieving or gaining access to it (Recall or recognition)

Kinds of Memory

- 1. Memory can be incidental or intentional. Intentional memory which involves closer attention paid to the material memorized, is superior to a casual remembrance of observed events which is incidental memory.
- 2. Memory can also be classified in terms of degree to which it resembles the original perception, as vivid memory or indistinct memory.
- 3. Memory can be observational memory or rote memory. Observational memory is for concrete objects and events (e.g. Evidence of a witness to bomb explosion) and rote memory is for words and symbols. Generally by memory we seem to refer to rote memory and verbal learning implies this aspect.
- 4. Memory can also be classified in terms of duration of the retention period as Short term memory (STM) or Long term memory (LTM).

Short and Long Term Memories

Short term memory, also called primary or working memory, lasts for 15 to 30 seconds. We remember a telephone number till we get the connection to that number. We have to look at the telephone directory, if we are to phone after a few hours.

Information is being transformed to long term memory for more permanent storage. The multiplication tables we have learnt, the poem we have memorised, our date of birth, wedding day, our telephone number, residential address etc. Are permanently remembered because of our long term memory.

While the capacity for STM is limited, the capacity for LTM is unlimited. There appear to be different brain processes for STM and LTM. The transfer from STM to LTM takes place not only because of rehearsal and repetition but because of coding which is the process of analysing information and compressing it into abbreviated form.

Factors Affecting Memory

Psychological factors also play vital part in retentive capacity for learned material. The conditions under which some material is learned, affect retention. Such conditions include scope of learning material, learning time, number of repetitions, distribution of learning, age of memory content and unforeseen interruption to learning task. Motivational factors like fatigue, attitude, concentration, interest, degree of anxiety, achievement motivation, etc. Also influence retentivity.

Signs of Good Memory

- 1. Rapidity: One is said to have good memory, if he could recollect his past experiences very quickly.
- 2. Accuracy: If one could bring back the learned materials without any distortion, he is said to have good memory.
- 3. Length of Time: How long one could retain the learned materials in memory before retrieving them is also taken as a measure of good memory.
- 4. Promptness of retrieval: If one is able to bring back the learned materials instantly with ease without requiring any help, he is said to have a good memory.
- 5. Serviceableness: This refers to the recall of right thing at the right place.

Techniques of Promoting Better 'Memory'

- i. Have the desire or motivation to learn, whatever is learnt.
- ii. Meaningful material is learnt quickly and retained longer.
- iii. Follow SQ3R method while learning (survey, questioning, recite, repeat and review)
- iv. Spacing the learning periods appropriately will help effective learning.
- v. Multisensory learning is more effectively remembered (T.V. Advertisements are remembered better than those of Radio).
- vi. Over-learning (learning beyond the point of forgetting) aids retention.

