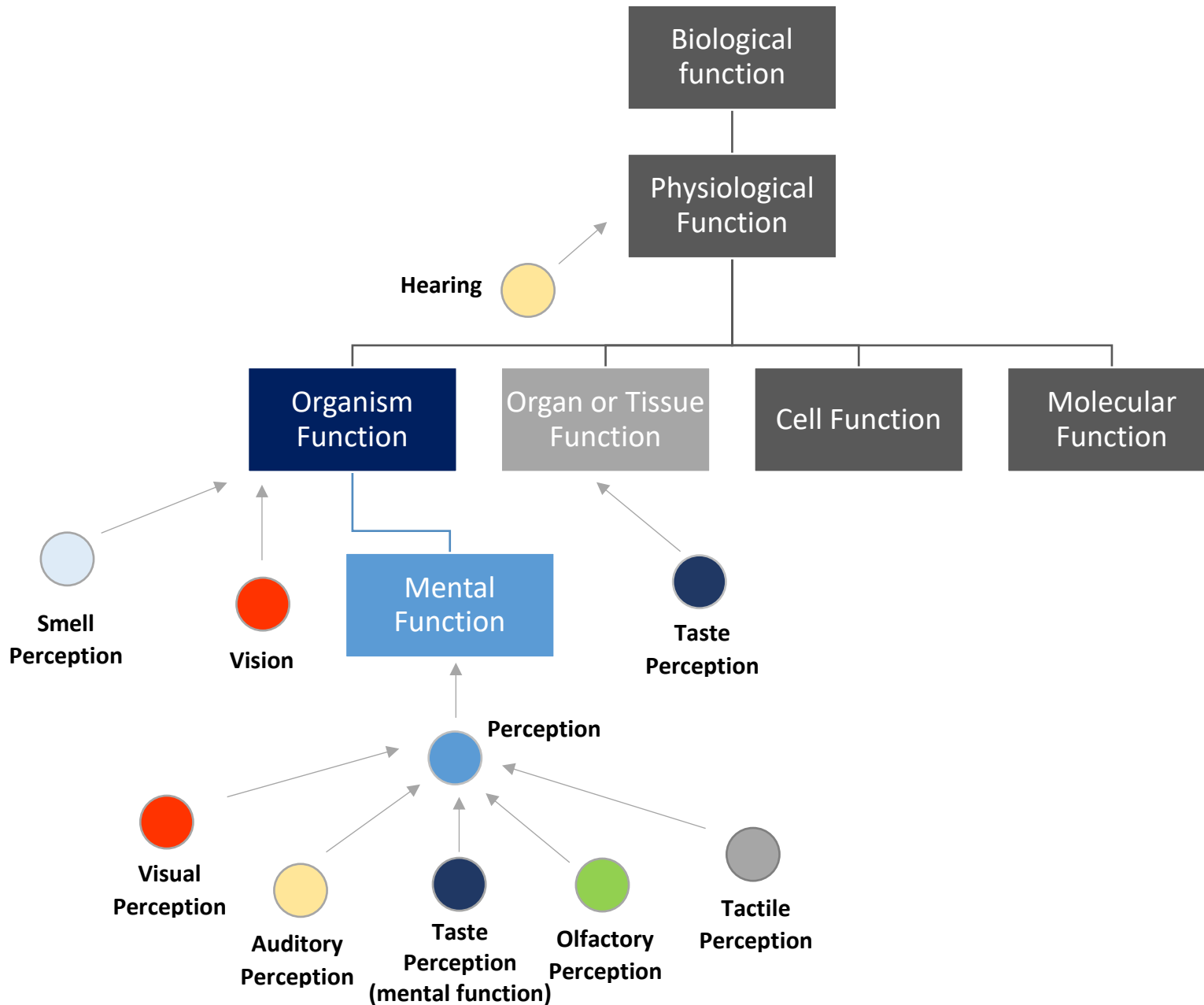


Perception: UMLS Representation



UMLS Definitions

Notes

Note the conflation of sensory and perceptual functions, even in cases where there is clearly an attempt to create distinct concepts for sensory and perceptual functions. Use the semantic types (*mental process* versus *physiological function*, etc) to determine whether the construct being defined was intended to define sensory function, perceptual function, or an integrated sensoriperception function. Note the terms used in the definitions demonstrating the conflation of perceptual (cognitive) functions ('process of producing an internal conscious image', 'recognizing', 'interpreting', 'discriminating', 'nature and meaning' etc.) and sensory functions ('signal', 'stimuli', 'convert to a molecular signal', etc.)

Data

The following raw data was copied verbatim from the UTS Terminology Services Metathesaurus (<https://uts.nlm.nih.gov/metathesaurus.html>) on 11/15/2018. Notes in red are added annotations.

Perception

Perception (mental process) Note the conflation of sensory and perceptual processes; these definitions are appropriate for the concept 'Sensoriperception' – functions involving both sensory and perceptual functions

The process of producing an internal, conscious image through stimulating a sensory system; it involves the recognition that stimulation has occurred, and the ability to discriminate various aspects of the stimulus. (CSP)

Specific mental functions of recognizing and interpreting sensory stimuli. (ICF)

Specific mental functions of recognizing and interpreting sensory stimuli. (ICF-CY)

The process by which the nature and meaning of sensory stimuli are recognized and interpreted. (MSH)

The process of producing an internal, conscious image through stimulating a sensory system; it involves the recognition that stimulation has occurred, and the ability to discriminate various aspects of the stimulus. (NCI)

Conceptually broad term referring to the process of obtaining cognitive or sensory information about the environment. Use a more specific term if possible. (PSY)

Visual perception

Visual Perception (mental process) Note that this concept is attempting to define visual perception, but conflates visual sensation and visual perception functions.

Conscious mental registration of a visual stimulus. (CSP)

Mental functions involved in discriminating shape, size, colour and other ocular stimuli. (ICF)

Mental functions involved in discriminating shape, size, colour and other ocular stimuli. (ICF-CY)

The selecting and organizing of visual stimuli based on the individual's past experience. (MSH)

An individual's interpretation of the visual stimuli in their environment. (NCI)

Vision (organism function) Note that this concept appears to be defining the sensory aspects of vision (note use of term 'sense' and 'sensory function'), but again conflates sensory functions with visual functions.

Sense of sight. (CSP)

The series of events required for an organism to receive a visual stimulus, convert it to a molecular signal, and recognize and characterize the signal. Visual stimuli are detected in the form of photons and are processed to form an image. (GO)

Sensory functions relating to sensing the presence of light and sensing the form, size, shape and colour of the visual stimuli. (ICF)

Sensory functions relating to sensing the presence of light and sensing the form, size, shape and colour of the visual stimuli. (ICF-CY)

The process in which light signals are transformed by the PHOTORECEPTOR CELLS into electrical signals which can then be transmitted to the brain. (MSH)

The faculty of vision, the perception of objects by the eye. (NCI)

Act or power of sensing with the eyes. (OMS)

Auditory perception

Auditory Perception (mental process)

Mental functions involved in discriminating sounds, tones, pitches and other acoustic stimuli. (ICF)

Mental functions involved in discriminating sounds, tones, pitches and other acoustic stimuli. (ICF-CY)

The process whereby auditory stimuli are selected, organized, and interpreted by the organism. (MSH)

Awareness, detection, or identification of sounds. (PSY)

Hearing (physiologic function)

Sensation of sound. (CSP)

Process whereby auditory stimuli are selected, organized and interpreted by the organism. (CSP)

The series of events required for an organism to receive an auditory stimulus, convert it to a molecular signal, and recognize and characterize the signal. Sonic stimuli are detected in the form of vibrations and are processed to form a sound. (GO)

Sensory functions relating to sensing the presence of sounds and discriminating the location, pitch, loudness and quality of sounds. (ICF)

Sensory functions relating to sensing the presence of sounds and discriminating the location, pitch, loudness and quality of sounds. (ICF-CY)

The ability or act of sensing and transducing ACOUSTIC STIMULATION to the CENTRAL NERVOUS SYSTEM. It is also called audition. (MSH)

The auditory faculty, the perception of sound by the ear. (NCI)

Perception of sound by the ears. (OMS)

Olfactory perception

Olfactory Perception (mental process)

Mental functions involved in distinguishing differences in smells. (ICF)

Mental functions involved in distinguishing differences in smells. (ICF-CY)

The process by which the nature and meaning of olfactory stimuli, such as odors, are recognized and interpreted by the brain. (MSH)

Smell Perception (organism function)

Sensation or perception of scents or odors; sense of smell. (CSP)

The series of events required for an organism to receive an olfactory stimulus, convert it to a molecular signal, and recognize and characterize the signal. Olfaction involves the detection of chemical composition of an organism's ambient medium by chemoreceptors. This is a neurological process. (GO)

Exploring objects by bringing them to the nose or the nose to objects. (ICF-CY)

The ability to detect scents or odors, such as the function of OLFATORY RECEPTOR NEURONS. (MSH)

The faculty of smell. (NCI)

The sense of smell. (NCI)

Taste perception

Taste perception (mental process)

Mental functions involved in distinguishing differences in tastes, such as sweet, sour, salty and bitter stimuli, detected by the tongue. (ICF)

Mental functions involved in distinguishing differences in tastes, such as sweet, sour, salty and bitter stimuli, detected by the tongue. (ICF-CY)

The process by which the nature and meaning of gustatory stimuli are recognized and interpreted by the brain. The four basic classes of taste perception are salty, sweet, bitter, and sour. (MSH)

Taste perception (organ or tissue function)

Sense effected by the gustatory receptors in the tongue; primarily sweet, sour, salty and bitter. (CSP)

The series of events required for an organism to receive a gustatory stimulus, convert it to a molecular signal, and recognize and characterize the signal. Gustation involves the direct detection of chemical composition, usually through contact with chemoreceptor cells. This is a neurological process. (GO)

The series of events involved in the perception of taste in which a gustatory chemical stimulus is received and converted into a molecular signal. (GO)

Sensory functions of sensing qualities of bitterness, sweetness, sourness and saltiness. (ICF)

Exploring the taste of food or liquid by biting, chewing, sucking. (ICF-CY)

Sensory functions of sensing qualities of bitterness, sweetness, sourness and saltiness. (ICF-CY)

The ability to detect chemicals through gustatory receptors in the mouth, including those on the TONGUE; the PALATE; the PHARYNX; and the EPIGLOTTIS. (MSH)

The faculty of taste, distinguishing substances by means of the taste buds. (NCI)

Tactile perception

Touch Perception (mental process)

Mental functions involved in distinguishing differences in texture, such as rough or smooth stimuli, detected by touch. (ICF)

Mental functions involved in distinguishing differences in texture, such as rough or smooth stimuli, detected by touch. (ICF-CY)

The process by which the nature and meaning of tactile stimuli are recognized and interpreted by the brain, such as realizing the characteristics or name of an object being touched. (MSH)