

CORRECTION OF SECOND SEMESTER EXAM (2020/2021)

Level: 3rd year **Module:** Cognitive Psychology **Teacher:** Ouahid ATIK ZID

Date: Sunday, June 6th, 2021 **Time:** 09.45 – 10.45 **Duration:** 1h

Instruction: Choose four (4) questions and answer them thoroughly. Rewrite the question on your answer sheet. (5 marks for each question)

1) One of the major concerns of psycholinguistics is to investigate how human process language. Explain.

Language processing refers to the cognitive operations by which humans perceive, recognise, understand and remember sounds, words, and sentences. In other words, language comprehension and language production. **Language comprehension** is the receptive process of understanding what is spoken and what is written. It looks into the ways we use to interpret speech in order to understand what is said to us, following a bottom-up flow of information that involves perception (of sounds or letters), recognition (of words), parsing (of sentence structure), and interpretation (of message). **Language production** is the productive process of choosing what to say or write based on what we mean. It investigates the processes we go through from thought (idea in mind) to output (spoken or written language), following a top-down flow of information that entails intention (idea in mind), planning (sentence structure), lexicalisation (selection of words), and articulation (of sounds or letters).

2) What is the difference between linguistic competence and linguistic performance?

Linguistic competence is the system of linguistic knowledge possessed by native speakers of a language that provides a basis for pairing sound and meaning. That is, the knowledge of the language syntax, morphology, phonology, etc., that enables speakers to produce and understand an infinite number of sentences in their language, and to distinguish grammatical sentences from ungrammatical sentences. **Linguistic performance** is the way a language system is used in communication. In other words, the ability to use such knowledge in the actual processing of sentences, by which we mean their production and comprehension. The former is described by linguists and the latter is described by psycholinguists.

3) What is brain damage and what are its causes and consequences?

Brain damage refers to the destruction or degeneration of brain cells. Many **causes** lead to brain damage such as trauma (shock), stroke, neurological illnesses, poisoning, infection, blockage in a blood vessel, etc. Brain injury may **result** in short-term or long-term impairment or disabilities, depending on the location and extent of damage. Certain types of brain damage affect the way we process language; aphasias like Broca's' aphasia (language production) and Wernicke's aphasia (language comprehension).

4) Broca's aphasia is a different language disorder from Wernicke's aphasia. Explain.

Broca's aphasia involves difficulty in speaking caused by a damage to the posterior portion of the lower frontal lobe in the left hemisphere. It is mainly characterised by the speaker's

inability to produce correct syntactic utterances, a phenomenon referred to as *agrammatism*. **Wernicke's aphasia** involves difficulty in comprehension caused by damage to the upper part of the left temporal lobe in the left hemisphere. It is mainly characterised by patients' inability to extract meaning from context. They can produce correct grammatical sentences with relatively few content words. This accounts for their interlocutor's inability to understand what they mean.

5) Is dyslexia an acquired language disorder? Why or why not?

No, it is not. Because an **acquired** language disorder occurs only due to a damage to brain, something that may happen to anyone at any stage of age after the full establishment of the first language. A stroke, for example, may lead to a partial or complete loss of one of the language abilities (speaking, comprehending, etc.). Whereas **dyslexia**, which involves a delayed acquisition of the reading skills, is a developmental language disorder that can be observed within children during the process L1 acquisition, especially when they go to school. Typically, it is the result of some dysfunction of the brain or central nervous system.

6) Why is aphasia called acquired dysphasia?

Dysphasia (developmental disorder) refers to a delay in the acquisition of speech skills due to cognitive factors. As is the case, aphasia (acquired disorder) is referred to as **acquired dysphasia** because it marks the loss (delay) of the language after it has been fully established. In other words, it is an acquired delay of speech although it came after full mastery of the language.

7) Substitution and distortion are two features of articulation disorders. In what way(s) do they differ?

Articulation disorders refer to problems in pronouncing sounds correctly that involve, among other features, substitution and distortion. These two features are generally confused by people although they refer to different concepts. **Substitution** is to replace one sound with another sound, for example, "wed" for "red" or "dut" for "duck". **Distortion** is to produce a sound in an unfamiliar manner, for example, "pencil" (nasalized—sounds more like an "m") for "pencil" or "sun" (lisped—sounds "slushy") for "sun".

8) Define stuttering and explain the characteristics of stutterers.

Stuttering is a speech disorder in which the flow of speech is disrupted by involuntary **repetitions** and **prolongations** of sounds, syllables, words, or phrases as well as involuntary silent **pauses** or **blocks** in which the person who stutters is unable to produce sounds. Stutterers are characterised by the use of speech fillers (like *emm*) to cover gaps in speech; they know what to say but have difficulty producing speech; they use circumlocution and general terms to avoid difficult words; their rhythm, intonation, and stress may be greatly affected by the hesitancy of speech, etc.