

QUESTIONS FOR THE DEFENCE EXAM

BIOLOGICAL BASES FOR BEHAVIOUR

1. What is drive conflict? How do animals cope in this situation and how do they resolve it?
2. What is an elementary form of behavior? Give examples and describe the neural mechanism of retraction behaviors such as limb withdrawal in response to an aversive stimulus.
3. Present the functional organization of the cerebral cortex and methods used to study it.

COGNITIVE PSYCHOLOGY

1. Which aspects of cognitive processing depend on language? What is the name of the hypothesis that indicates such a relationship and who is its author? Provide examples of research results that support this hypothesis and results that could demonstrate a weaker or secondary influence of linguistic factors.
2. Mechanisms of perception: stimulus richness or poverty? Discuss and link two of the following aspects of this issue: (1) theoretical standpoints, (2) characteristic phenomena that illustrate how perception is data-driven vs that illustrate the interpretive/supporting role of the mind, (3) examples of studies, (4) consequences for further cognitive processing.
3. Your favourite research paradigm in cognitive psychology. Describe a research design that is used in cognitive psychology, psycholinguistics, neurocognition and/or studies of cognitive development (theoretical assumptions, basic design, variables and their operationalization, applications, examples of studies that used this paradigm, critique if applicable).

DEVELOPMENTAL PSYCHOLOGY

1. The meaning of close relations between a child and parents for emotional-social development, illustrated by the concept of attachment.
2. Object permanence is a mental capacity that played a major role in the 1980s debate between the then dominant empiricist stage theory of Jean Piaget and a newly developed nativist domain-specificity theory represented by, among others, Renee Baillargeon. Define object permanence and explain why pinpointing the onset of object permanence matters to empiricist-nativist debate. Describe experimental tasks that were used by Piaget and Baillargeon to study object permanence (an A-not-B task, and a drawbridge task), and explain how infants' performance on these tasks supports or challenges the two competing theories.

EMOTIONS & MOTIVATION

1. What research (from social psychology and neuropsychology) supports the theory of nonconscious primary affect?
2. Describe at least one theory of emotion and one theory of motivation.
3. What are the factors influencing the strength of motivation (mechanisms of self-regulation of motivation)? Describe at least 4 factors.

HISTORY OF PSYCHOLOGY

1. Structuralism and functionalism: what characterizes these approaches and what are the most important differences between them?
2. Freud – Adler – Horney: discuss the most significant theses of classical psychoanalysis and the basic differences between Freud's views and the views of Adler and Horney.

INDIVIDUAL DIFFERENCES

1. Describe the development of the 'g' factor (general intelligence)
2. Explain the meaning of temperament in the development of behavioral disorders.
3. Discuss the debate about heritability or environment as the source of individual differences.

INTRODUCTION TO GUIDANCE AND COUNSELLING PSYCHOLOGY

1. List and describe factors that determine the effectiveness of each form of professional psychological aid.
2. List and describe the forms of psychological aid used in healthcare.

LEARNING & MEMORY

1. Compare and contrast episodic and semantic memory.
2. Compare and contrast declarative and procedural memory.
3. What memory disorders can appear after brain injury? What might influence which ones appear and recovery?

PROFESSIONAL ETHICS

1. Professional confidentiality: definitions, legal bases, conditions under which it can be violated.
2. The client's basic rights, and the psychologist's related obligations.
3. The psychological contract -- types, content of a given type of contract.

PSYCHOLOGICAL ASSESSMENT

1. Please list and describe the changes that have taken place in the model of psychological assessment over the years.
2. What assumptions are made by a psychologist who uses projective methods in psychological assessment? What are the recommendations and limitations for using projective methods in psychological assessment?
3. Please list and characterize the competencies a psychologist needs in the process of psychological assessment.

PSYCHOLOGICAL TESTING

1. Definition of a psychological test and requirements for psychological tests.
2. Application of standard measurement error (e.g. of achieved results)
3. Types of norms for test results and examples of norms used for normalization of results of specific tests (or types of tests)

PSYCHOPATHOLOGY

1. Explain how mental processes and behaviors that deviate from the norm are classified, what are their origins, and what therapy is applied in order to assuage the suffering that they cause.
2. Explain how mental processes and behaviors that deviate from the norm are understood in general and specific psychopathology, on the example of two mental disorders (other than social phobia and unipolar depression).
3. List and characterize differences and similarities between social phobia and unipolar depression in terms of their diagnostic criteria, etiology, and treatment.

RESEARCH METHODS

- 1) A researcher plans to study the effectiveness of a new drug for treating psychotic patients who suffer from severe delusions such as paranoia. In accordance with scientific standards a double-blind study is designed. What are at least two ethical issues that are relevant for this study?
- 2) What is the difference between an experimental design and a quasi-experimental design? What are the similarities? What is usually seen as an advantage of a quasi-experimental design?
- 3) What are some things a researcher has to be careful about when preparing survey questions?

SOCIAL PSYCHOLOGY

1. What is causal attribution: models, distortions, and functions.
2. How social psychological theories explain the phenomenon of ingroup bias?
3. Stereotypes: mechanisms, content and possibilities of modification

STATISTICS

- 1) a) What does it mean if the result of a test is statistically significant?
b) Does this mean that when we have two medicines A and B, A which has been shown to work on the basis of results significant at a level of 0.001, and B with results at the 0.03 level, it would be best to treat patients with medicine A?
- 2) a) What does correlation measure?
b) Suppose then that a study has shown that there is a positive correlation of 0.63 between the size of a hospital (measured by the number of beds) and the median number of days that patients remain in hospital. As a consequence the minister of health proposes new regulations to downsize large hospitals and add smaller ones, because then people would on average stay shorter in hospital, and a lot of money could be saved. Do you think that this would be a good idea?
- 3) Suppose that a government uses the following method to monitor the quality of education provided by secondary schools in the country. In each school 30 students are randomly selected and their track record evaluated (marks on tests, exams, quality of assignments, etc). Based on this assessment the school receives a mark that is compared with the minimum required level for that type of school. If the school scores lower than this level, the government will intervene and make sure that the educational level increases. Even with careful hypothesis testing it is possible to draw wrong conclusions; to make mistakes. Which two possible mistakes, or errors could be made in this case? How could they be prevented?