

## Information on the online selection test, including example test items

The selection test is a general test on your knowledge of all topics that can be expected to be treated in general Bachelor of Psychology programmes. The selection test consists of 60 questions, lasts 90 minutes and will be administered in English. We will administer the selection test to all applicants that have been found admissible. The selection test will take place on-site in Groningen. Only students who are completing or have completed a bachelor's degree outside the EEA and still live outside the EEA are eligible for an online selection test, which will be administered under online supervision.

### The selection test

The test will consist of 5 questions on each of the domains Biopsychology and psychophysiology, Cognitive Psychology, Personality Psychology and Individual differences, Test theory/Psychometrics and practice of testing and assessment, Psychological Research Methodology, and Statistical Techniques and 10 questions on each of the domains Developmental Psychology, Clinical Psychology and Clinical Neuropsychology.

The questions can be expected to be on Bachelor level, and will usually exceed the introductory level, but are not supposed to be too advanced. Nevertheless, it is only to be expected that an individual student will not be fully knowledgeable on all domains, but of course little or lack of knowledge on some domains can be compensated by superior knowledge on different domains. So, you should not be worried or frustrated if there will be questions on topics about which you have no knowledge.

### Question format and answering strategy

All questions will be multiple choice questions with three answer alternatives. Please note that you should always give an answer, even if it would just be based on guessing, and also, please note that, if you don't know which is the correct answer, but can distinguish the answers as to how suitable they seem to you, then please choose what is in your opinion the most suitable or 'best' answer. The questions are categorized into 9 domains. Everyone will receive the same questions, but both the questions and answers are presented in a randomized manner. Make sure you divide your time evenly across the 60 questions.

### Preparation

It has often been asked how one can prepare for the test. Of course, it may help to refresh your knowledge on various psychology domains, but we do not expect that you will revisit all material covered in your Bachelors. The idea of using this test for selection is to assess your *currently retained* knowledge of all these domains. You are not allowed to consult books, the internet or any electronic devices during the test, except the computer on which you take the test.

We realize this test will be quite stressful, so a good preparation should help you not to panic when you enter upon hard questions, and to solidly work on the exam in such a way that you can finish it within the 90 minutes allotted to it. Below you find 35 example questions for the test.

## Example questions for the test

### Domain: Test theory / Psychometrics and practice of testing and assessment

1. A psychologist administered a cognitive ability test to determine the cognitive abilities of a client called Mark. The test consists of 30 items and the scores are standardized so that  $M = 100$  and  $SD = 15$ . Mark's resulting score was  $X = 85$ , with a 95% confidence interval of 71.8 – 98.2. Which of the following scenarios would most likely result in a narrower confidence interval around Mark's test score?
  - a. Administering a test with more heterogeneous item content.
  - b. Administering a test that consists of more difficult items.
  - c. Administering a test that consists of more items.

### Domain: Test theory / Psychometrics and practice of testing and assessment

2. For most psychological tests, we expect variance in test scores when we administer them among a representative sample of the population. Why do we expect test scores to vary?
  - a. Because we assume individual differences in most traits and skills we measure in psychological testing.
  - b. Because most psychological tests do not provide perfectly reliable measurement of the traits and skills they are designed to measure.
  - c. Because most psychological tests do not provide perfectly valid measurement of the traits and skills they are designed to measure.

### Domain: Test theory / Psychometrics and practice of testing and assessment

3. A psychologist developed a test to measure advanced math abilities in school-aged children. The test consists of 80 multiple-choice items. She administered the test among a representative sample of 500 children to investigate the quality of the test. The average item difficulty was  $p = .25$  and Cronbach's alpha equalled  $\alpha = .90$ . Which statement is correct?
  - a. The test is easy and has high reliability.
  - b. The test is difficult and has low reliability.
  - c. The test is difficult and has high reliability.

### Domain: Statistical Techniques

4. A study found that the correlation between age and Beck's depression inventory was .03 for a sample of 1200 subjects with age ranging from 12 to 99 years. This means that
  - a. the average degree of depressiveness is virtually the same for all age groups in the sample.
  - b. this contradicts the hypothesis that the average degree of depressiveness is relatively high for people in the middle age group (45-55 years old) compared to the other age groups.
  - c. prediction of the degree of depressiveness by means of linear regression on age accounts for less than 1% of the variance in this sample.

### Domain: Statistical Techniques

5. Analysis of Covariance is a method for
  - a. comparing group means while controlling for quantitative third variables.
  - b. comparing the covariances of two variables with quantitative third variables.
  - c. comparing the variances of two variables in relation to quantitative third variables.

**Domain: Statistical Techniques**

6. Suppose one has a random sample of intelligence scores from the Dutch population of psychology students. When one wishes to test whether the mean intelligence in this population is 100 or higher, and one knows that in this population the standard deviation is 15 and scores are distributed normally, what would be the most appropriate test procedure?
- An F-test.
  - A T-test.
  - A Z-test.

**Domain: Developmental Psychology**

7. What is a typical task that scientists have used to uncover whether infants can perceive differences?
- Conservation task.
  - (Cross-)Habituation task.
  - Egocentrism task.

**Domain: Developmental Psychology**

8. What is the largest threat to the validity of developmental studies when a longitudinal design is adopted?
- Measurements are confounded with possible differences between generations.
  - Measurements are confounded with possible historical events or societal trends that occur during the time that data was collected.
  - Measurements are confounded with contextual influences on task-performance.

**Domain: Developmental Psychology**

9. What is a typical finding regarding the development of intelligence across the life-span?
- Crystalized intelligence tends to increase, while fluid intelligence tends to decrease from adolescence until old age.
  - Crystalized intelligence tends to decrease, while fluid intelligence tends to increase from adolescence until old age.
  - Crystalized intelligence and fluid intelligence tend to be stable from adolescence until old age.

**Domain: Clinical Neuropsychology**

10. Why is it often difficult to measure executive dysfunction?
- As executive dysfunction only recently became a topic of interest, no adequate test has been developed yet.
  - Standardized neuropsychological tests often provide too much structure.
  - Executive dysfunctioning is always related to basic perceptual disorders.

**Domain: Clinical Neuropsychology**

11. The amygdala plays an important role in
- the interpretation of relevant movement-related information.
  - integrating sensory and neurocognitive information.
  - the automatic screening of information for social and affective relevance.

**Domain: Clinical Neuropsychology**

12. Which cognitive impairments are common in people suffering from chronic depression?

- a. Impairments in declarative memory.
- b. Language impairments.
- c. Impairments in spatial cognition.

**Domain: Biopsychology and psychophysiology**

13. Multiple Sclerosis is a \_\_\_ central nervous system disease that is hallmarked by demyelination of the myelin sheath, a layer that is important for \_\_\_ action potentials.

- a. progressive; propagating
- b. regressive; disrupting
- c. sudden onset; insulating

**Domain: Biopsychology and psychophysiology**

14. Compared to humans, animals that have a higher rods-to-cones ratio in their retinas are \_\_\_ than humans are.

- a. able to see more colors
- b. better able to detect other animals in the dark
- c. able to see finer details

**Domain: Biopsychology and psychophysiology**

15. Which of the following statements is *false* with regard to the workings of the blood-brain barrier?

- a. The blood-brain barrier does not function properly in people with Alzheimer's disease.
- b. The blood-brain barrier makes it difficult to get medication for brain cancer into the brain.
- c. Psychoactive drugs require an energy consuming process of active transport to cross the blood-brain barrier.

**Domain: Cognitive psychology**

16. Jon's girlfriend always wears a particular perfume. After a while, whenever Jon smells this perfume on the street, he experiences a positive feeling. The link between his positive feeling and the perfume is most likely the result of \_\_\_ \_\_\_.

- a. semantic memory.
- b. classical conditioning.
- c. affective conditioning.

**Domain: Cognitive psychology**

17. If a participant is asked to repeat a list of words that he or she has just heard, the words appearing later in the list are better recalled than the items in the middle of the list. The "classical explanation" of this so-called recency effect holds that it is driven by:

- a. long term memory.
- b. short term memory.
- c. echoic memory.

**Domain: Cognitive psychology**

18. While proofreading a text, one often misses misspellings in words that are:

- a. highly expected given the context.
- b. generally considered as being difficult to spell.
- c. generally considered as being easy to spell.

**Domain: Psychological Research Methodology**

19. What is the main aim of *preregistration*?

- a. To distinguish between prediction and postdiction.
- b. To allow for better discovery of scientific fraud.
- c. To discourage exploratory research.

**Domain: Psychological Research Methodology**

20. Which of the following three statements about confounds is true?

- a. Within-subject designs sometimes confound the independent variable with order of presentation.
- b. Confounds are usually only a worry in correlational designs.
- c. The primary consequence of the presence of confounds is reduced external validity.

**Domain: Psychological Research Methodology**

21. You are testing whether being a recent immigrant in a new country increases feelings of guilt after the consumption of a sweet snack. You test native Dutch participants and participants who recently moved to The Netherlands on their feelings of guilt after consuming a stroopwafel (a Dutch sweet treat) and find a significant difference between the two groups' feelings of guilt. However, a colleague points out that Dutch participants are familiar with stroopwafels and immigrant participants are unlikely to be.

- a. This describes a violation of the *ceteris paribus* assumption.
- b. This describes the *winner's curse* phenomenon.
- c. This describes the problem of a *detached validation claim*.

**Domain: Clinical Psychology**

22. A primary assumption of the cognitive model developed by Aaron T. Beck is that...

- a. ...distorted interpersonal relationships underlie problematic responses.
- b. ...distorted and dysfunctional thinking are common to all psychological disorders.
- c. ...problematic behavior is learned and can be unlearned.

**Domain: Clinical Psychology**

23. In the problem formulation of behavioral assessment in the context of psychotherapy, the primary emphasis is placed on...

- a. ...the development of problems over time.
- b. ...factors that currently maintain the problem.
- c. ...identifying predisposing factors.

**Domain: Clinical Psychology**

24. Which of the following statements is true?

- The DSM (Diagnostic and Statistical Manual of Mental Disorders) \_\_\_\_\_.
- a. classifies disorders on the basis of their underlying causes.
  - b. emphasizes the dimensional nature of mental disorders.

- c. enables a common language among professionals working in the field of mental health.

**Domain: Personality Psychology and Individual differences**

25. Nowadays scientific evidence on personality differences is typically summarized in terms of
- a. 1 general adaptation factor.
  - b. 5 broad trait domains.
  - c. 16 personality types.

**Domain: Personality Psychology and Individual differences**

26. Which influences make two children in the same family as different from one another as are pairs of children selected randomly from the population?
- a. Non-shared environments.
  - b. Shared genes.
  - c. Shared environments.

**Domain: Personality Psychology and Individual difference**

27. Repetitive lies and deception of others for one's own pleasure and benefit are characteristics of
- a. histrionic personality disorder.
  - b. antisocial personality disorder.
  - c. borderline personality disorder.

**Domain: Personality Psychology and Individual differences**

28. We can describe high extraversion best as
- a. sensitivity to needs
  - b. unconventionality
  - c. sociability

**Domain: Biopsychology and psychophysiology**

29. Artists often say that there are three primary colors: red, yellow, and blue. Yet light corresponds to electromagnetic radiation, and no particular frequency of electromagnetic radiation is more primary than another. Are artists wrong about this?
- a. Artists are wrong. There is no such thing as a primary color.
  - b. Artists are neither right nor wrong. Any color can be created by mixing red, yellow, and blue light. However, the same is true for mixing red, green, and blue light, as well as for many other combinations of colors.
  - c. Artists are correct. Red, yellow, and blue correspond to the peak sensitivities of the three types of cone photoreceptors.

**Domain: Cognitive psychology**

30. In a study by Kahneman and Tversky, subjects read the following description: "Steve is very shy and withdrawn, invariably helpful, but with little interest in people or in the world of reality. He is quiet and he has a need for order and structure and a passion for detail". After reading this description, participants were asked whether Steve was more likely to be a teacher or a librarian. The majority of the subjects indicated they thought that Steve was more likely to be a librarian. This judgment can be explained in terms of:
- a. the availability heuristic
  - b. the representativeness heuristic
  - c. the congruence heuristic

**Domain: Clinical Neuropsychology**

- 31. People with apraxia resulting from a stroke
  - a. have difficulty carrying out voluntarily complex or target-oriented motor actions
  - b. usually have a lesion in the premotor cortex
  - c. often also have a hemiparesis

**Domain: Clinical Psychology**

- 32. According to cognitive models for panic disorder, \_\_\_\_\_ play a role in the maintenance of panic disorder.
  - a. catastrophic misinterpretations of bodily sensations
  - b. global, internal, and stable attributions of causality
  - c. beliefs about the lack of control over worrying

**Domain: Developmental Psychology**

- 33. During the Piagetian \_\_\_\_\_ stage of development, individuals lack the ability to use symbols.
  - a. concrete operations
  - b. preoperational
  - c. sensorimotor

**Domain: Test theory / Psychometrics and practice of testing and assessment**

- 34. As part of an admission procedure for a very popular and selective Master’s program, applicants’ *conscientiousness* is assessed. Applicants are asked to respond to statements like the ones below, and to pick the answer that best describes them.

I am someone who...	Strongly disagree					Strongly agree				
Is a reliable worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makes plans and follows through with them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tends to be lazy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is a likely threat to the validity of the resulting test scores in this scenario?

- a. Socially desirable responding
- b. Careless responding
- c. Acquiescent responding (the tendency to respond with ‘agree’)

**Domain: Psychological Research Methodology**

- 35. In 2011, Daryl Bem published an article arguing that his participants were cognitively and emotionally affected by events that had yet to take place. What was the most important outcome of this publication?
  - a. The article’s statistical and methodological flaws became emblematic of similar pervasive flaws in psychological science and contributed to the reform discussion.
  - b. Bem’s work made convincing arguments that, though it is impossible for people’s *emotions* to be influenced by future events, they can reason about them very effectively.
  - c. It solidified our understanding that a person’s emotional state partly contributes to the likelihood that a future event will take place.

**ANSWERS**

1c, 2a, 3c, 4c, 5a, 6c, 7b, 8b, 9a, 10b, 11c, 12a,  
13a, 14b, 15c, 16b, 17b, 18a, 19a, 20a, 21a, 22b, 23b, 24c,  
25b, 26a, 27b, 28c, 29b, 30b, 31a, 32a, 33c, 34a, 35a