

# Analysing longitudinal data

## Test your knowledge - quiz

- 1) Which of the following types of study collect longitudinal data? (Select all that apply)
  - A. Panel studies
  - B. Cross-sectional studies
  - C. Cohort studies
  - D. Repeated cross-sectional studies
  
- 2) Choosing an appropriate analytical technique depends on...? (Select all that apply)
  - A. The number of left-handed participants in your study
  - B. The research question you are seeking to answer
  - C. How your data are structured
  - D. Which software program you have available
  
- 3) Which of the following are benefits of using regression analysis? (Select all that apply)
  - A. We can make predictions about the value of an outcome from the values of one or more independent variables
  - B. We can take into account variability at individual and group level
  - C. We can examine how early-life circumstances or characteristics relate to outcomes in adulthood, middle age or later life
  - D. We can summarise the relationship between variables using a line of best fit
  - E. We can assess the probability of experiencing an event by a specified time point

- 4) Students at twenty schools are asked to take part in a study, during which they take their temperature every day for a week. The resulting multi-level dataset comprises how many nested levels?
- A. One
  - B. Two
  - C. Three
  - D. Four
- 5) Which of the following statements describe growth curve analysis? (Select all that apply)
- A. It is an extension of multi-level modelling
  - B. It models change over time
  - C. It can only be undertaken with data on young people to examine how they grow up
  - D. It can examine the likelihood of experiencing an event by a given time point
  - E. It explores the characteristics or circumstances that influence patterns of longitudinal change
- 6) Which of the following techniques should be used to analyse time-to-event data?
- A. Regression analysis
  - B. Survival analysis
  - C. Growth curve analysis
  - D. Multi-level modelling
- 7) In survival analysis, some participants can be referred to as 'censored'. This means...?
- A. They are under 18
  - B. We do not know when they experience the event of interest
  - C. They have asked for their data not to be included in the analysis
  - D. We have to eliminate them because they do not experience the event of interest

## Answers:

- 1) A and C
- 2) B and C
- 3) A, C and D
- 4) C
- 5) A, B and E
- 6) B