(b) Discuss methodological issues involved when researching intelligence.

(15 marks)

There are many potential methodological issues when conducting research when investigating intelligence. For example, those centring on the validity of intelligence tests and internal reliability, such as split-half reliability are particularly pertinent. It could be argued that the methodology used by Van Leeuwen et al (2008) is strong due to the reliability of the findings. For example all participants undertook the Ravens Progressive matrices tests which are seen to be a reliable measure of intelligence. Hence, all participants' trials were consistent as all children answered 60 questions and all adults 40 in the matrices in the matrices. This improves reliability as the tests were consistent throughout. Additionally, the same procedure was used by the confederates explaining the tests, ensuring that all participants could merely have told the researcher that they understood how to do all the tests when in reality they were unsure. This would reduce the reliability as not all participants would start at the same level. However, using the Raven Progressive Matrices to measure intelligence can be seen as reliable and valid. This is because items on the tests are of similar difficulty for the individuals' cognitive ability when using either the standard or advanced matrices tests. As a result, scores can be compared on each question is weighted depending on the difficulty to give a more accurate representation of intelligence level. However, this may be difficult to administer in reality as a standard test may be more suitable for an adult than advanced, depending on the condition, and this must be accounted for. Another issue when measuring intelligence is the ecological validity and cultural biases especially in IQ tests. For example in Gould's (1982) review of Yerkes study on intelligence found that IQ tests administered were heavily biased towards members of western society. For example, the instructions were in English and required participants to be able to read and write. This means that Africans completing the test were more likely to score lower than the Americans as they were not fairly tested. Hence this reduces the validity of IQ tests when not considering cultural variations. Moreover, the Van Leeuwen et al (2008) study was conducted using data from Dutch families which may also be biased. However, Raven Progressive matrices could be seen as an alternative as it only uses shapes/images, requiring no knowledge of the language. As a result, it can not only be administered across different cultures, but also to younger children. This allows intelligence to be measured on a larger scale rather than only for English speaking adults. This would remove many cultural issues and in turn increase the validity of the testing.