Evaluate the methodology used by Raine et al

While the experiment conducted by Raine et al had many positive points there are some weaknesses in their methodology. While Raine et al used matched pair design, which gives more reliable results, they did not take into account factors such as handedness. This means that there are EVs and CVs that Raine et al did not factor into the experiment, making their results slightly less reliable.

Raine et al’s study was a quasi-experiment, meaning the independent variable was an existing thing (criminality of the participant) and thus was not directly manipulated by the experimenters. This means that we cannot be sure that the biological factors (localisation of brain function and differences between the murderers and control group’s brains) were the only reason the murderers acted as they did. Raine et al say in their report that they believe that psychological, cultural and situational factors play a part in the murderers’ predisposition to violence. This supports the diatheses-stress model, which states that both biological predispositions and environmental factors are both required for behaviour such as aggression and violence.

This causes a problem – if readers of the report misinterpret it and assume that only biological factors affect the murderous behaviour. This is a problem with the methodology of Raine et al.

Another issue of this study is that it has poor generalisability. This is because violent criminals are a very small group of people within the population, and murderers who plead NGRI are an even smaller sample of this small minority. This means that this study cannot be generalised to all violent criminals, let alone the general population. On the other hand the study is easy to replicate as it is a laboratory experiment carried out under highly controlled conditions with a specific group of people obtained using opportunity sampling. This means that we can say that the study is highly reliable but lacks validity, and that it is very easy to replicate however it lacks any kind of generalisability as the group of people tested is so specific.

There are also ethical issues with the methodology of Raine et al. One of these issues is valid consent. All of the 49 murderers had plead NGRI. This means that they were unaware of their actions and that their were not at fault. This raises a question – if these individuals were not able to understand what they were doing by murdering someone were they really able to understand the experiment and were they mentally competent enough to give valid consent? If they weren’t then this raises a big ethical issue, as they may have been caused psychological harm as they may have found that performing the CPT difficult due to their mental incompetency, therefore lowering their self esteem. This causes an issue with the methodology as without valid consent the experiment should not have gone ahead, as consent is required for the experiment.

The murderers and other participants may also have not understood or simply not been informed of the right to withdraw. Participants in any study or experiment have an active right to withdraw which they can exercise at any time. If the participants were not aware of, or did not understand, this right to withdraw the this is an ethical dilemma with the methodology of Raine et al, as they may have found the PET scan