STRESS: BRADY ET AL. (1958)
STRESS AND PHYSICAL ILLNESS

Aim: To investigate whether the stress of receiving electric shocks would lead to stress-related illness in monkeys, and whether this would interact with the degree of control over the shocks.

Procedures:

- Monkeys received electric shocks to their feet at 20second intervals for periods of six hours at a time, with six hours' rest in between
- The electric foot shocks were not signalled
- Monkeys were run in pairs, with one in each pair – the so called "executive monkey" – able to press a lever to postpone shocks for 20 seconds
- The other monkey in the pair could not press the lever, but received all the foot shocks that were delivered (this second monkey in the pair was the 'yoked' animal)

Findings:

- Not all shocks could be avoided on this schedule
- After 23 days the 'executive' monkeys began to die of gastric ulceration
- The yoked control monkeys, who received shocks but could not try to avoid them, remained healthy

Conclusions:

- Brady concluded that the shocks themselves were not severely stressful as the yoked monkeys showed little gastric ulceration; the critical factor was the stress associated with trying to avoid the shocks
- Having *control* was the stressful element in this study, causing gastric ulceration in the 'executive' monkeys

Criticisms:

- Brady used monkeys, so there is a problem of generalising his results to humans. Monkeys have a different physiology to humans and may respond to stress in different ways. However, Brady did show that trying to cope with stressors is highly stressful for monkeys
- Brady also chose monkeys who were the most active bar-pressers as the executives; as a group, they were more active generally than the yoked control group, and this may have made them more sensitive to the stress of the footshocks. This means that the experiment was poorly controlled, as both groups should have been made up of monkeys that were equally active
- Stressing monkeys (or any animals) until they die or become severely ill is highly unethical and would not be permitted today. All researchers are now obliged to follow clear ethical guidelines which ensure that such a study could not be carried out again.