

Stress and Cardiovascular Disorders



This activity will help you to:

- Understand research into the link between stress and cardiovascular disorders*
- Assess the link between stress and heart problems*
- Summarise psychological findings (AO1 skill)*
- Comment on the implications of research findings (AO2 skill)*
- Criticise research studies (AO2 skill)*

What You Need To Do...

Below are three descriptions of studies into the relationship between stress and cardiovascular disorders. They are far more detailed than you would manage to write in an exam, and there is no commentary to go with them. You need to do two things:

- Extract from each study the important information you would use in an essay about stress and cardiovascular disorders
- Write some commentary & criticisms (AO2) to go with each study

Write three paragraphs, one about each study. Use the following format for each paragraph:

- [The researchers] found that [a brief account of the main findings]...
- This shows/suggests/supports the view that [explain the implications of the findings]...
- However, [outline a criticism or limitation of the findings]...

Studies of Stress and Heart Disease

Kivimaki et al (2002) studied 800 Finnish workers in a longitudinal study lasting 25 years. Stress was defined in terms of 'effort-reward mismatch', with those workers with the biggest discrepancy between the effort they put in and the rewards they got out (e.g money, status, job security and opportunities) receiving the highest stress scores. Kivimaki et al found that employees with the highest stress scores were twice as likely to die from heart disease as those with the lowest scores. Employees with low control over their work also ran a higher risk of heart disease. The researchers found that highly stressed workers were also more likely to be overweight.

Sheps et al (2002) gave 196 heart patients (all of whom suffered from narrowing of the arteries) a mildly stressful task (a short talk on an assigned topic) whilst their cardiac functioning was monitored. In 20% of cases, abnormalities in the heart's ability to pump blood were detected. A follow up study over the next five years showed that these patients were nearly three times more likely to die of heart problems than the 80% whose hearts functioned normally.

Steptoe et al (2005) carried out a longitudinal study of stress and cholesterol levels. Initially, all participants were given a test of stress-proneness and their blood-cholesterol levels were assessed. These measures were repeated three years later. In all the participants, cholesterol levels had risen over time. However, those who were most prone to stress in the initial study were three times more likely to have dangerous levels of 'bad' cholesterol in their blood.