Cardiovascular System

Arrhythmia

As our bodies age, the heart's electrical system can become disrupted, leading to irregular heart rhythms known as arrhythmias. Instead of maintaining a steady, predictable beat, the heart may beat too quickly, too slowly, or irregularly, reducing its ability to pump blood effectively throughout the body. This can result in symptoms such as palpitations, dizziness, fatigue, shortness of breath, and feelings of anxiety or loss of control. Unlike purely physical conditions, arrhythmias also have neurological and emotional effects, as their unpredictable rhythm can cause cognitive stress and discomfort. In this simulation, you will perform guided movements while experiencing externally controlled, irregular cues that disrupt your sense of timing and coordination. This is designed to mimic the loss of rhythm and predictability associated with arrhythmias.

The goal of this simulation is to highlight how unsettling and mentally distracting irregular heart rhythms can be. This activity reflects instability and uncertainty that individuals with arrhythmias often experience. Although the simulation may feel chaotic or uncomfortable, it is effective and intended to build empathy for those living with these conditions.

Materials

- A quiet, safe space free from distractions
- This video
- A laptop, or any device
- **Optional**: headphones for a more immersive experience

Procedure

Disclaimer: Please be mindful of your physical and mental comfort during this activity. Stop immediately if you feel dizzy, overwhelmed, or distressed.

1. Sit or stand in a comfortable position in a quiet environment.
2. Begin the simulation video and follow the instructions provided on the screen
3. Try tapping together with heart rhythm as you read text on the screen
4. Notice how the irregular rhythm affects your coordination, focus, and emotional response.

Reflection Questions:

1. What physical or emotional responses did you experience as the rhythm became irregular?
2. How did the added cognitive task affect your ability to maintain rhythm?
3. How might living with an arrhythmia impact a person's daily life and sense of control?