26. Bias and Control Exercise

For each study description below, list possible confounding variables that might be present in the study based on the description provided.

1. A researcher wanted to determine whether different forms of exercise improve memory and problem-solving skills, with the hope of helping treat elderly people with cognitive impairments. She recruited 10 members of the swim team and 10 members of the track team at a local college to be tested on two types of tasks. Each group received a memory task, which involved memorizing a list of 10 words and recalling them, and a problem-solving task that involved solving anagrams of these same 10 words (an anagram is a jumbled word that needs to be rearranged, like HBCEA for BEACH). The swim team received the memory task followed by the problem-solving task, and the track team received the problem-solving task followed by the memory task. Each group was tested 15 minutes after its respective team practices (either swim or track). The results showed a significant interaction in that members of the swim team performed significantly better on the problem-solving task than the track team, and the members of the track team performed significantly better on the memory task than the swim team members. The researcher concluded that to help elderly people with their problem-solving skills, they should swim more, and to help with their memory, elderly people should take up running or jogging.

2. Tsapelas, Aron, and Orbuch (2009) recently conducted a study to examine the effects of boredom on marital satisfaction. Participants included 123 couples. Couples were questioned separately in their homes after 7 years of marriage and after 16 years of marriage. At each session, couples were asked to rate how much they felt their marriage was "in a rut" and how satisfied they were with their marriage. Results of the study indicated that boredom with marriage at 7 years was related to a decrease in martial satisfaction at 16 years.