# Identifying Threats to Validity (Part 3)

Data scientists want to know if listening to music or podcasts reduce symptoms of stress in individuals. They conducted **a study of 1,000 people who were brought into a laboratory office for testing**. While wearing a heart-rate monitor, participants were asked to listen to either music or a podcast of their choosing while completing a series of complicated puzzles. The data scientists discovered that on average, **participants who listened to music had a 5% lower heart rate while completing the tasks than those who listened topodcasts**.

Before publishing their findings, the data scientists have asked you to review their claim. In the space below, indicate possible **threats to validity** faced by this study.

*These materials were developed partly through support of the National Science Foundation, (awards 1042210, 1535276, 1648684, and 1738598).  Bootstrap by the* [*Bootstrap Community*](https://bootstrapworld.org/community/index.shtml) *is licensed under a* [*Creative Commons 4.0 Unported License*](https://creativecommons.org/licenses/by-nc-nd/4.0/)*. This license does not grant permission to run training or professional development. Offering training or professional development with materials substantially derived from Bootstrap must be approved in writing by a Bootstrap Director. Permissions beyond the scope of this license, such as to run training, may be available by contacting* [*contact@BootstrapWorld.org*](https://www.bootstrapworld.org/materials/spring2021/en-us/courses/reactive/mailto:contact@BootstrapWorld.org)*.*

Last updated 2021-12-09 14:35:50 -0500