"Research in Action" Podcast Instructor Guide

Use the following episode description, learning objectives, guiding questions and activity suggestions to more easily include "Research in Action" podcast episodes as a supplemental resource for your course.

Oregon State
University

Podcast and Episode Information

"Research in Action" is a weekly podcast about topics and issues related to research in higher education featuring experts across a range of disciplines.

On this episode of the podcast, the guest is Patrick Aldrich. Patrick received his bachelor's degree in Wildlife biology and a minor in Entomology from the University of California, Davis. After graduation, he spent 5 years in various field biology positions, studying a wide array subjects from Bowerbird mating systems in Australia to integrated pest management of ground squirrels in Northern California. He subsequently decided to return to school to pursue a PhD at the University of Hawaii, Manoa, where he studied the spatio-temporal variation of pollination networks in Hawaiian tropical dry forests. Following his graduate work, he was the project director for a project that used spatial analyses to study the random correspondence of fingerprint patterns. Through his work, he has acquired extensive experience in biostatistics. He is currently the data manager and statistician for the Oregon Quality Rating and Improvement System for early childhood and other projects at The Research Institute at Western Oregon University. He continues to apply parametric, non-parametric and likelihood methodologies to analyze various datasets associated with early childhood and educational research.

Segment One [00:00-18:52] - In this segment, Patrick discusses the differences between parametric and non-parametric statistical tests and the best practices for using non-parametric tests.

Segment Two [18:52-33:31] - In this segment, Patrick discusses how he uses non-parametric statistical tests in his research and how other researchers have used them.

Show notes and a transcript for this episode can be found at:
http://ecampus.oregonstate.edu/research/podcast/e109/

Learning Outcomes

By listening to this episode, students will be able to:

• Define mean and median within statistical testing

• Explain parametric and non-parametric testing

• Discuss an example of a non-parametric test

• Review best practices for using non-parametric tests

Guiding Questions for Listening

• How does Patrick Aldrich define mean and median in statistical testing?

• What does Patrick Aldrich explain are some of the important differences between the mean and median within statistical testing?

• How does Patrick Aldrich define parametric and non-parametric tests?

• What does Patrick Aldrich explain are the differences between parametric and non-parametric tests?

• What example does Patrick Aldrich provide as a way to illustrate the appropriate use of a non-parametric test?

• According to Patrick Aldrich, what are some of the best practices for deciding when to use non-parametric tests?

• What does Patrick Aldrich explain is the role of statistical power within parametric and non-parametric tests?

• How does Patrick Aldrich explain the use of a non-parametric multivariate analysis?

Possible Activities

- Ask students to visit the show notes for this episode (http://ecampus.oregonstate.edu/research/podcast/e109/) and look at an additional resource that is linked in connection with this episode. Students can write a short review of that resource to share with their peers.

- Ask students to visit the show notes for this episode (http://ecampus.oregonstate.edu/research/podcast/e109/) and post an additional resource connected to the content of the episode in the comments section.

- Have students share questions that are raised for them based on the content of this episode. What would they ask Patrick Aldrich if they could?

Suggested Citation (APA, 6th edition)

Linder, K. (Producer/host). (2018, April 30). *Dr. Mary Ellen Dello Stritto & Patrick Aldrich on Non-parametric Statistics* [Audio podcast]. Retrieved from http://ecampus.oregonstate.edu/research/podcast/e109/

Notes

About the Research in Action Podcast

"Research in Action" (RIA) is a podcast about topics and issues related to research in higher education featuring experts across a range of disciplines. Episodes are posted weekly and include guest interviews and occasional solo episodes. Guests are from a range of higher education institutions and share their expertise on qualitative, quantitative and mixed methods as well as their personal experiences as researchers, research and writing practices, organizational and productivity strategies, and much more. Some weeks, bonus content will also be posted.

"Research in Action" is hosted by Dr. Katie Linder, research director for Oregon State University Ecampus.

Visit the podcast website to view show notes and transcripts for each episode, explore our episode guide, learn more about how to contact us, or suggest a future guest or topic.

You may subscribe to the "Research in Action" RSS feed or access the podcast via iTunes, Soundcloud or Stitcher. "Research in Action" is also listed on MERLOT.

The "Research in Action" podcast is a resource funded by Oregon State University Ecampus – ranked top ten in the nation for online education two years running by U.S. News & World Report. OSU Ecampus has more than 45 degree programs and more than 1,000 classes online.

Contact

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