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.



ecampus.oregonstate.edu/podcast

Research in Action - Episode 7

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 Dr. Joshua Weller, an assistant professor of psychology at Oregon State University. Dr. Weller received his Ph.D. in Psychology from the University of Iowa. His research broadly focuses on how affective and cognitive processes contribute to decision-making and risk perceptions and, more particularly, on the development of psychological scales to quantify individual differences in risk taking tendencies and decision-making competence. His research has been funded by the National Science Foundation, the American Automobile Association Foundation, and the National Institute of Drug Abuse. Dr. Weller teaches courses on Judgment and Decision Making, Personality, and Psychometrics.

Segment One [00:00-15:28] - In this segment, Josh describes the components of psychometrics (the scientific study of the attributes of tests) and offers some examples of how psychometrics are used in research and instrument design.

Segment Two [15:29-35:49] - In this segment, Josh shares more about his research in risk-taking and how psychometrics have contributed to this research.

Bonus Clip # 1 [00:00-11:34]: Statistics and Fantasy Baseball

Show notes and a transcript for this episode can be found at:

http://ecampus.oregonstate.edu/research/podcast/e 7/

Learning Outcomes

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

- Define psychometrics
- Describe ways tests are measured for reliability and validity
- Illustrate examples of construct validity
- Identify some challenges in measuring construct validity
- Discuss considerations for constructing tests
- Give examples of causation versus correlation
- Discuss considerations for building valid test measurements/instruments
- Cite resources for learning about psychometrics and statistics

Guiding Questions for Listening

- What is psychometrics?
- What is the concept of reliability and what are some ways it is measured?
- How is reliability different from validity?
- What are some examples of construct validity?
- What are some of the challenges in labeling constructs?
- When constructing and administering a test, what are some important considerations regarding audience?
- What is correlation and causation with regard to psychometrics?
- How is theory involved in building valid instruments or measurements?
- According to Josh Weller, what are some considerations to keep in mind when building valid instruments or measurements?
- What are some of the "basics" Josh recommends for learning about psychometrics?
- What is rotisserie baseball? (see also, Bonus Clip)
- What is a sabermetrician? (see also, Bonus Clip)

Possible Activities

- Assign students an article discussing the validation process for an instrument or measurement and ask them to apply what they learned in the episode to a discussion of the article.
- Ask students to visit the show notes for this episode (<u>http://ecampus.oregonstate.edu/research/podcast/e7/</u>) 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 (<u>http://ecampus.oregonstate.edu/research/podcast/e7/</u>) 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 or the content of the episode's bonus clips. What would they ask Josh Weller if they could?

Suggested Citation (APA, 6th edition)

Linder, K. (Producer/host). (2016, May 16). Dr. Josh Weller on Psychometrics [Audio podcast]. Retrieved from <u>http://ecampus.oregonstate.edu/research/podcast/e7/</u>

Notes

"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 <u>Dr. Katie Linder</u>, research director for Oregon State University Ecampus.

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

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

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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