

Reading and Presenting Stanovich

Stanovich's book *How to Think Straight about Psychology* provides a very clear and entertaining defense of psychology as research-based discipline. It challenges many popular criticisms of the claim that you cannot really study people scientifically and outlines how best to do such research.

I have already reviewed chapter 1 and will ask you to finish reading the book by next week. To help accomplish this, we will review each chapter during class next week. A group of 2 students will present each chapter. Each presentation should take **ABOUT 10 MINUTES** (no kidding) and accomplish two things: A) outline the critical ideas from the chapter and B) spur class discussion.

Outline critical ideas from the chapter

The idea here is to give an account of the general point of the chapter. You should define key terms and review important points -- or as I like to describe it -- the TAKE HOME POINT. Try hard to figure out what bottom-line message the author was trying to leave with the reader. In each chapter, Stanovich enjoys giving many examples of the point he is trying to make. Be sure to carefully distinguish the TAKE HOME POINT from the many examples and make sure your presentation includes the TAKE HOME POINT. These take home points are about science and how it applies to psychology. To give you a general feel of what I am talking about, I will outline generally the THP of each chapter:

Ch. Take Home point

1. What unifies psychologists is the use of the scientific method, with its emphasis on systematic empiricism, public verifiability, and solvable problems.
2. Solvable problems means dealing with testable theories -- theories which can be falsified by evidence -- unlike many very popular pseudoscientific theories (like Freud's).
3. For science to be publicly verifiable, scientists must specify how they measure the concepts (personality, IQ, etc.) that they want to study, but without getting caught up in worrying about the concept's timeless or essential definition.
4. Testimonials and case studies provide very weak evidence for explanations because while the evidence may support a particular explanation, it fails to rule out other explanations.
5. Observations of a correlation between variables can provide only very weak evidence for causal explanations since such evidence does not guarantee that the effect was produced by the cause alone.
6. The strongest evidence for an explanation rules out all other possible explanations and the only way to achieve that is through experimental manipulation and control rather than observations, testimonials, or case studies.
7. Experimental manipulating and control means doing psychology in a laboratory. The generalization from the lab to real life is often not important when testing theories (pure research) but it is when doing research on real life problems (applied research).

8. One study does not create a conceptual breakthrough: These only occur when there is convergence among separate, unique, individually flawed studies on the same topic.
9. Studies which provide evidence of the influence of different factors may not be competing explanations of the same phenomenon but interacting aspects of one broader explanation.
10. Central to understand the nature of psychological research is appreciating probability. However, people are poor in reasoning probabilistically resulting in misunderstandings of the research.
11. The central role of chance in scientific psychology is explored. People are seen as limited in detecting chance events and trying instead to explain them, resulting in unreliable predictions.
12. Pseudoscience, Pop Psychology, Parapsychology, and our everyday Personal Psychology all masquerades as central parts of the discipline, giving Psychology an undeserved reputation as being unscientific.

Remember, you will be tested on Stanovich, so these presentations matter to everyone!

Spur class discussion

The second goal of the presentation is to spur some class discussion by the comments, questions, or opinions you may have about what you read. Here are a few examples of what I mean:

1. You may have opinions that address some of the examples in the chapter which Stanovich uses to illustrate the TAKE HOME POINT he has made.
2. You may want to comment on how the chapter made you think differently about things than you did previously.
3. You may be confused about the meaning of a point and so have some questions that you want to raise.
4. You may want to challenge Stanovich by presenting your own ideas about psychology as a science.

Remember when you are listening to other presentations, they will hope that you engage in their discussion as much as you are going to hope that the presenters will engage in your discussion. I expect that all students will be involved in all the discussions.