Post-lecture Questions IV.1 – Paradigms and Mixed Multiple Measures

Study Questions

How does a paradigm measure differ from a plain measure?

Which two types of validity are involved in a paradigm measure?

What two questions should you ask yourself before accepting a paradigm as validated?

1. Paradigm measures involve which two kinds of validity?

- (A) Construct and External.
- (B) Construct and Internal.
- (C) Internal and External.
- (D) External and Statistical Conclusion.

2. The instructions or methods for using a paradigm measure always include ______.

- (A) a manipulation
- (B) a measure
- (C) *both of the above*
- (D) *neither of the above*

Answers to Study Questions

A plain measure does not require a manipulation: you apply the measure to the subject in whatever condition that they are already in and it gives you a measure of something about them (right now). A paradigm measure requires at least two separate measures, taken in two different conditions. Most paradigm measures are then based on the difference in the data between the two conditions.

Because paradigm measures are measures of some hidden psychological construct, they rely on an operational definition and, therefore, have some level of construct validity. Because paradigm measures require that data be collected in at least two conditions, there must be a manipulation to create the conditions and all manipulations have some level of internal validity (i.e., the extent to which they create one and only one difference between conditions).

See above. With regard to construct validity, you should ask whether the paradigm measure is providing an exhaustive and exclusive estimate of what you are interested in. With that said, and in contrast to plain measures, much more effort is put into the discriminant side of construct validity. In other words, we accept that some paradigm measures fail to cover all of the target construct, but we're pretty careful about not including things that we're not supposed to include. (For example, before accepting the exogenous spatial cuing paradigm as a way of testing for attentional capture, you should ask if there are any other reasons why valid-cue trials might produce faster responses than invalid-cue trials.) With regard to internal validity, as always, you should ask if there are any other differences between the conditions (besides the intended) that could be producing a difference in behavior between the conditions. In the case of the original Stroop paradigm, for example, you should make sure that the amount of ink on congruent and incongruent trials is the same (on average).

1. Paradigm measures involve which two kinds of validity? Construct and Internal, it's B.

2. The instructions or methods for using a paradigm measure always include a manipulation and a measure, so it's C: *both of the above*