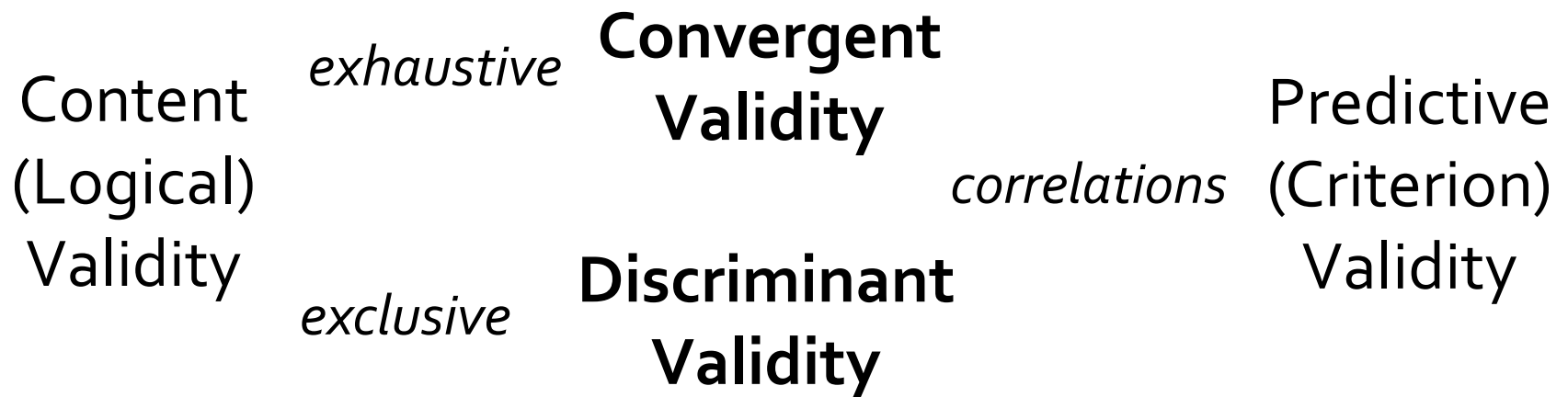


# the Two Sides of Construct Validity



# Typical Approach to measure development

- Convergent-validity Phase  
verify  $+ .70$  or better correlations with existing measures of the same construct  
when a failure occurs
- Discriminant-validity Phase  
verify correlations within  $.20$  of zero with existing measures of different constructs  
when a failure occurs

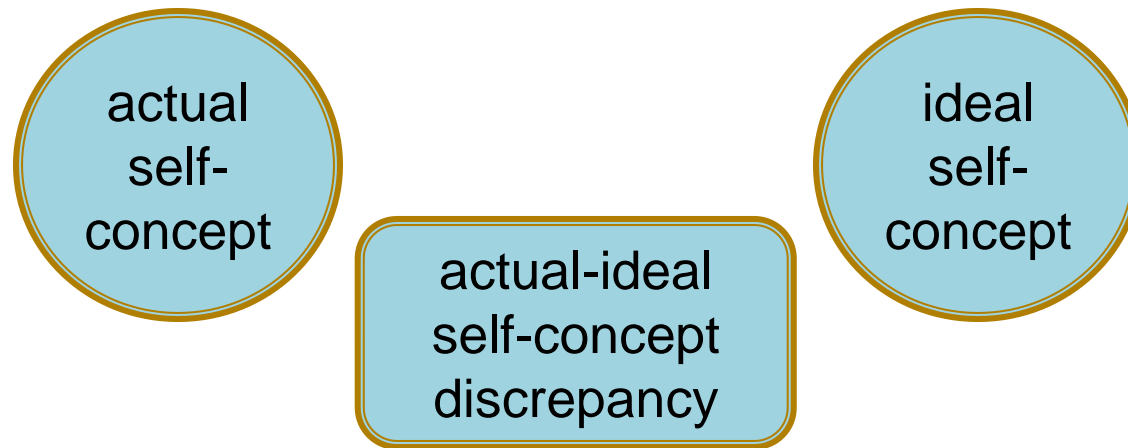
# Reliability vs. Construct Validity

- test/retest reliability only concerns the observable data from using the measure  
vs. construct validity also involves unobservable, target theoretical construct that you're trying to estimate
- there's (really) only one kind of reliability  
vs. construct validity has two sides
- there's no "excuse" for low reliability  
vs. there are some reasons for low construct validity

# Threats to Construct Validity

- What does it mean when a new measure “fails” a test for convergent validity?
  - (a) the new measure does **not** provide an exhaustive estimate of the theoretical construct ... ☹
    - need to add or expand some items
  - (b) the theoretical construct is *ad hoc* (instead of “real”) and the new measure fails to activate it ... OK

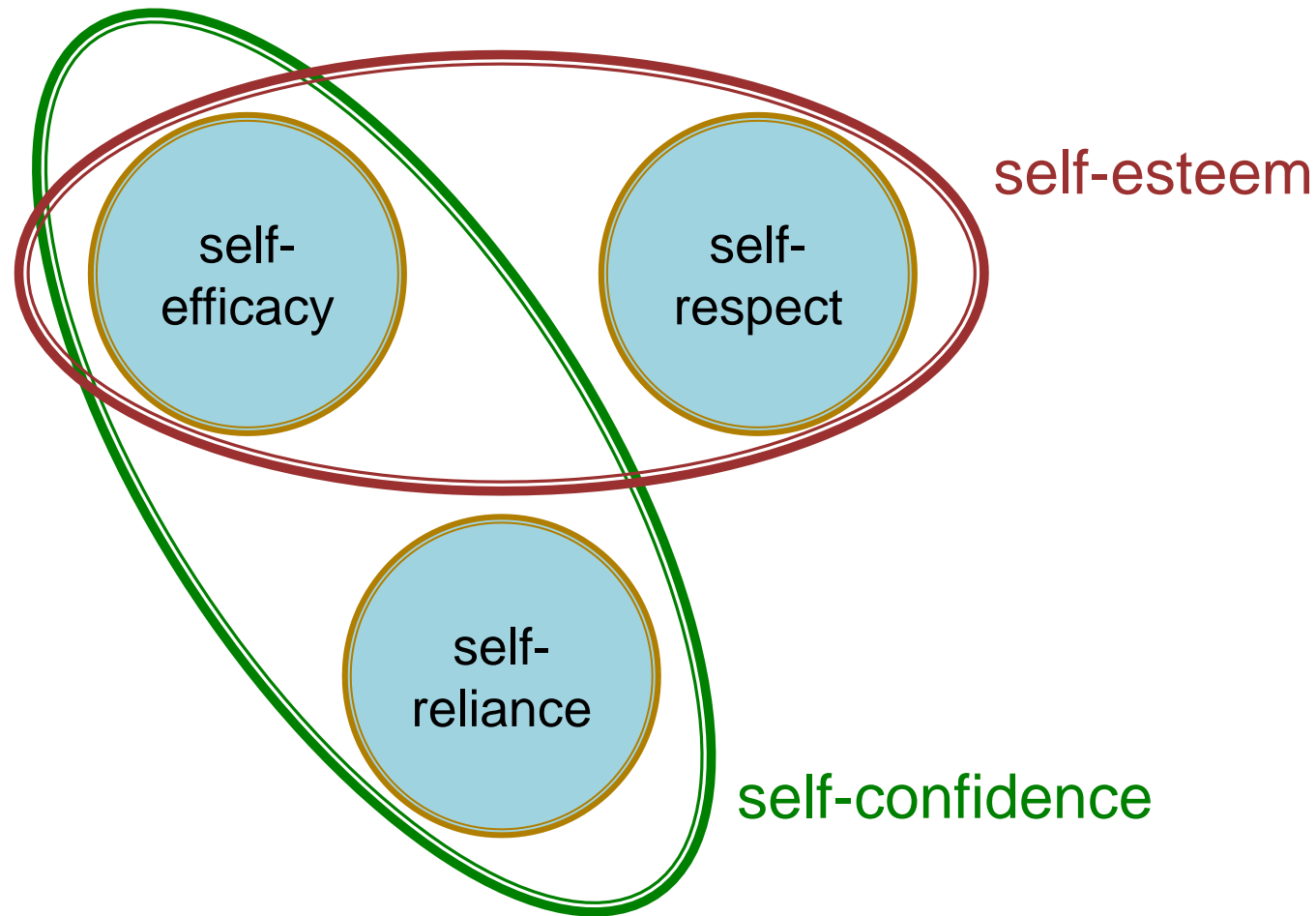
# Threats to Construct Validity



# Threats to Construct Validity

- What does it mean when a new measure “fails” a test for discriminant validity?
  - (a) the new measure does **not** provide a selective estimate of the theoretical construct ... ☹
    - need to delete or refine some items
  - (b) the theoretical construct is distributed (instead of unitary) and the new measure taps one or more of the same elements as the existing measure of something else ... OK

# Threats to Construct Validity



# Threats to a “Validated” Measure

- Reactivity – *any change in the behavior of subjects due to the fact that they are being measured*  
this can be “triggered” in several ways  
example: evaluation apprehension – *fear of being judged negatively (for socially-unacceptable behavior)*
- *why is this a threat to construct validity?*  
if the subjects “react,” then they cease to provide the needed data  
example: you are now measuring what the subjects think is socially acceptable, instead of their behavior