Selection Decision Making

- Clinical vs Mechanical Data colleciton and combination

Clinical Data Collection

- Clinical data collection: involves forming an overall impression of the "whole person." A common example is the use of **unstructured interviews**
- clinical data combination techniques remain popular among hiring managers.
  - Managers often feel a loss of control over the process when mechanical data combination systems are used
- broken legs:
  - people are very poor judges of what constitutes a "broken leg." As such, deviating from mechanical prediction in search of broken legs ultimately hurts prediction

Mechanical data collection

- Mechanical data collection: involves systematically collecting data on each construct of interest using standardized methods and scoring. Examples include **structured interviews** and **standardized tests**
- mechanical data collection methods are far more effective than clinical methods.
  - increasing standardization during data collection improves both reliability and validity.

Combination

- Clinical data combination involves reviewing predictor scores and forming an overall impression. (based on instinct or gut feeling)
- Mechanical data combination involves applying rules to combine predictors that are consistent across applicants.
- even if data are collected using mechanical methods, they might still be combined using clinical methods.
- Clinical data combination methods introduce inconsistency and error.
- any mechanical data combination method will result in more accurate predictions than clinical methods

- Avoid relying on “gut feelings” or “intuition” both when collecting and combining predictor data
- Mechanical methods consistently result in higher quality selection decisions.

Compensatory vs Non-Compensatory models

- Many different weighting schemes are possible, two most common (compensatory)
  - Unit-weighting
  - Optimal-weighting
- once the composite score is computed then top-down selectioncan be applied (sorted from highest-to-lowest)
- non-compensatory models require applicants to earn a passing score on all or some of the predictors to be considered further
  - high scores on one predictor cannot compensate for low scores on another
- two primary non-compensatory decision-making methods
  - multiple cut-offs
  - multiple hurdles

Unit-weighting

- When unit-weighting is used, all predictors are given equal weights (each predictor would be equally important in determining the composite predictor score)
- for small sample sizes unit-weighting is preferred

Optimal-weight

- When optimal-weighting is used, each predictor is given its own specific weight.
  - weights are determined by using a statistical procedure called multiple regression (MR).
- optimal-weighting methods are most appropriate when sample sizes are large

Multiple cut-offs - get all rounds and get rid of the one which is below cut-offs(no matter how good for the other round)

Key points

- All applicants complete all predictor measures
- Applicants must receive passing scores to be hired
- Cut-offs usually set using expert judgment of the minimum qualifications needed to perform the job

Other key points

- multiple cut-off method can be combined with top-down selection
  - applicants with scores below the cut-off are removed from consideration
  - the remaining applicants are rank-ordered and top-down selection is applied.
- multiple cut-off approach all applicants complete all predictors,

Multiple hurdles - one round succeed then proceed to next round

- Applicants complete predictors in order
- Must pass first predictor to move on to second
- Applicant pool gets smaller at each step
- Used to keep costs of selection down
  - less expense early (e.g. tests)
  - more expense later (e.g. interviews)
- with the multiple hurdle approach, applicants only complete predictors after passing the previous hurdle
  - personality inventories and GMA tests are inexpensive, the organization might administer these measures first

Method of selection-making

Banding

- Banding takes measurement error into account when making selection decisions.

$$SEM = s\sqrt{1 - r_{xx}}$$

where s is the standard deviation, r_{xx} is the reliability of the test.

- find the "band" within the scores are equivalent (multiply the SEM by 2)
  - band = 2* SEM
  - range = top score - band

range, top score considered statistical equivalent

- If there were more job openings that the number of people in the top band, all people in the top band are hired, and the band simply moves down to the next highest score
- here are fewer job openings than the number of people in the band, then hiring decisions should be made using a different predictor
  - we would not simply rank order within the band – all scores within the same band are considered equivalent