DOMC Data Codebook

Item Scores Data File

* This workbook shows the item scores for each person on each item (grouped by delivery\_id, which is the person identification string).
* All items are shown, even though each examinee only took one form (form\_id column). The remainder of the item scores for each person contain missing data.
* These data are well suited for computing item statistics and reliability (by form and/or by form and item type to avoid missing data from other forms impacting the computations).
* Person variables
  + delivery\_id
    - The examinee ID string.
* Form variables
  + scaled\_score
    - The form score for each test instance scaled to span from 0 to 100.
  + passing\_status
    - If pass/fail information is available this indicates if the examinee passed. An entry of TRUE indicates the test instance received a passing score but an entry of FALSE indicates that the test instance received a failing score.
  + form\_points
    - The total number of items answered correctly, out of the total number of items. This information can be obtained from row sums of the Item Scores data file.
  + form\_total\_seconds
    - The total duration of the test, including time spent on survey items.
  + form\_id
    - The form label.

Full Responses Data File

* These data are well-suited for a more in-depth analysis as they contain specific information about the items, and each component of the items.
* Person level variables
  + delivery\_id
    - The examinee ID string.
* Item level variables
  + item\_id
    - The item label.
  + item\_type
    - The item type (e.g., DOMC or MC).
  + item\_total\_seconds
    - The total duration of the item, including time spent on each item component.
* Item component level variables (e.g., entire multiple-choice item or, for DOMC, options, stems, extra options, etc.)
  + score
    - Score on each item component. Unscored components contain missing data.
  + points\_possible
    - Total possible points for each item component.
  + key
    - Multiple-Choice
      * The order the options appear in, from left to right, is the same option order as in SEI. The key values for each option are 0, representing an incorrect option, or 1, representing a correct option. For example, a key entry of [1,0,0,1,0] indicates that the first and fourth option in SEI for this item are correct options and the other options are incorrect.
    - DOMC
      * The key for the presented option, with 0 representing an incorrect option and 1 representing a correct option.
  + option\_presented
    - This entry indicates the order in which the item options were presented, if applicable.
    - Multiple-Choice
      * The order the options appear in for this entry, from left to right, is the same option order as in SEI. However, the order of the options is randomized for each examinee. The values in option\_presented represent the order in which the response options were presented (after randomization) with 0 representing the first option presented and the highest number representing the last option presented. For example, an option\_presented entry of [4,3,2,1,0] indicates that the first option in SEI was actually presented in the fifth position (value of 4), but the fifth option in SEI was actually presented in the first position (value of 0).
    - DOMC
      * This value corresponds to the SEI item option number that was presented. For example, if the option\_presented value is 0, the option labeled 0 in SEI was presented.
  + response
    - This value indicates the response each examinee gave to each item component, if applicable.
      * Multiple-Choice
        + The response value represents the position of the option in SEI that the examinee chose as correct. For example, a response value of 4 indicates that the examinee has selected the option labeled 4 in SEI as the correct answer. The response entry can be compared with the key entry to determine the score (e.g., if the key entry is [0,1,0,0,0] and the response value is 0, that indicates the examinee chose the option labeled 0 in SEI (the first option, appearing in the leftmost position) and therefore answered the item incorrectly. It is important to note that the response values indicate the chosen option labels from SEI and not the position labels in the option\_presented variable. For example, if the response entry is 0, the key entry is [1,0,0,0,0], and the option\_presented entry is [4,2,3,1,0], a response entry of 0 corresponds to the option labeled 0 in SEI (which appears in the leftmost position of the key and option\_presented variables), which was the correct option and was presented in the fifth position (presented\_option value of 4).
      * DOMC
        + The response value represents if the examinee selected the presented DOMC option as correct/true (1) or incorrect/false (0). If the response entry matches the key entry (e.g., a correct option is marked correct or an incorrect option is marked incorrect), the option score is a 1.
  + item\_component\_type
    - Labels the type of each item component (e.g., final for the entire multiple-choice item or, for DOMC, the options, stems, extra options, etc.)
  + item\_component\_seconds
    - The duration of each item component (difference between start and end times with a high level of precision). Particularly useful for investigating DOMC stem and option times.
  + start\_time
    - The date and time log for the start of the item component.
  + end\_time
    - The date and time log for the end of the item component.

Data Cleaning

* + See Excluded Participants and Reasons.txt