**SURVEY DESIGN**

**Survey Design**

* **Identify goals:** What are your research/program evaluation questions?

**Judging a good question:** Does this question give me the data I need to answer my questions? Which one(s)? Is there a more precise option?

* **Identify data needs:** What (e.g., ratings, yes/no descriptions) is most useful?
* **Identify analysis***:* What types of descriptive and inferential analysis will you want to run (e.g., comparisons of items, means)? Any scales?
* **Identify participants:** Who will complete the survey? Reading level? Know terms?
* **Identify level of anonymity:** Can I not know who answered? If I want to link to other data (e.g., grades, regional data), what identifying info is needed (e.g., student#, postal code)?

**Question Formats**

* **Checkboxes:** can select >1 from the list.The data is treated as yes/no for each of the choices**.**
* **Multiple choice:** typically requires choosing one answer from a list. Data is grouped for the question, with answers treated as levels/values for a single variable.
* **Rank order:** a preset list ofchoices are ordered in terms of their importance, feasibility etc. (e.g., indicate your top 3, rank 1 – 5). Each ranking (1st, 2nd…) is assigned to only one choice.
* **Rating scale/Likert:** gathers participants’ ratings (e.g., importance, agreement) as a categorical or continuous value.
  + Challenge**:** need to choose the number of levels (too few may lead to restricted range data – see data screening), and write end-point or mid-point labels (see Resource 1. for examples).
* **Short Open-ended:** flexible, allows participants to write answers you may not have anticipated. However, differences in spelling or level of specificity can make automatic counting/coding challenging.
  + Tip: have a list of common answers plus “Other, please specify” to reduce having to code the anticipated answers.
* **Long open-ended:** participants can write longer answers with more details in typically a larger multi-line box.
  + **Common use:** Broad questions (e.g., How to improve?), additional comments (e.g., Any additional comments?) or explanations/examples/illustrations (e.g., Please describe one time when…)

**Check that Survey has…**

☐ clear instructions ☐ a reasonable completion time ☐ all choices included in lists

☐1 variable/focus per question ☐ neutral/balanced (vs leading) wording ☐ suitable Likert scale labels

**Multi-item Scale ANALYSIS**

*When using >1 question to measure a single (e.g., happiness) or set of concepts (e.g., intrinsic to extrinsic motivations):*

**1) Recode any reversed questions** (e.g., I am sad all the time) so high ratings are analyzed as low (e.g., 1, 2, 3 -> 3, 2, 1)

**2) Test if the items represent well a single concept intended by the scale.** Cronbach alpha, or data structure analyses such as Exploratory or Confirmatory Factor Analysis can test how well the items go together around a single concept (or specified set of concepts). Use at least one evaluation of multi-item scales before using the scales for analyses.

**3) Create a single scale score that represents each concept** (typically the average of the items, or total sum).

\*If using an **established scale** then follow instructions & compare test results to published results. If **creating a scale**, best practice is to create questions, pilot them, run tests, remove/revise poorly related questions and then re-pilot.

**Data Analysis: See template, process, descriptive statistics, Inferential statistics, & decision tree handouts.**

**Recommended Resources:**

***1. Basics of Survey and Question Design by the U.S. Government***

<http://www.howto.gov/customer-experience/collecting-feedback/basics-of-survey-and-question-design>

Excellent guide for surveys with my favourite list of Likert-scale labels (e.g., “not at all important“ to “very important”)

***2. FluidSurveys how-to videos*** <http://fluidsurveys.com/fluidsurveys-video-tutorials-non-youtube>

FluidSurveys is free at the U of S (<http://www.usask.ca/its/services/websurvey_tool/fluid-surveys/index.php>)

**3. Tabachnick, B. G., & Fidell, L. S. (2007**). *Using Multivariate statistics* (5th ed.). Boston, MA: Pearson Education.