

Data Collection and Instrument Selection

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Common Methods

- **Survey questions**
- **Interviews**
- **Mail surveys**
- **Ethnography**
- **Focus groups**



Survey Questions

- **Questions are reliable and valid**
 - **Reliability = consistently measuring in the same manner, generating consistent answers**
 - **Validity = degree of correspondence between measure used and what is being measured**



Survey Questions

- **5 basic characteristics**
 - **Questions need to be consistently understood**
 - **Consistently administered or communicated**
 - **Framework of adequate answer consistently communicated**
 - **All respondents have access to same info needed to answer accurately**
 - **Except when measuring knowledge**
 - **Respondents willing to provide info**



Survey Questions

- **Question Objective**
 - **Defines the information that is needed**
 - **Then actual question is designed**



Factual Data Questions

- **Definition of concepts & terms**
- **Knowing and remembering**
 - **Lack of knowledge**
 - **Recall**
 - **Placing events in time**
- **Form of the answer**



Factual Data Questions

- **Effect of social desirability**
 - **Stress confidentiality**
 - **Emphasize importance of accuracy**
 - **Use self-administration rather than interviewer administration**
 - **Explain purpose so subjects understand why questions are appropriate**
 - **Frame questions to reduce perception of negative interpretation of answers**



Subjective States Questions

- No right or wrong answer
- Typically about perceptions or feelings
- Place answers on a continuum
 - What is to be rated
 - What dimension or continuum to use
 - Characteristics of continuum offered



Survey Questions

- **General rules for designing good survey instruments**
 - **Ask people about their firsthand experiences, feelings & perceptions**
 - **Avoid hypothetical questions**
 - **Beware asking perceptions of causality**
 - **Ask one question at a time**
 - **Avoid asking two questions at once**
 - **Avoid imposing unwarranted assumptions**
 - **Do not include hidden contingencies**



Survey Questions

- **Phrase it so all are answering the same question**
 - Use words with common meanings
 - Provide definitions for uncommon words
 - Time periods should be unambiguous
- **If interviewer administered**
 - Phrase question so no further explanation is needed
 - Give definitions before question
 - End verbal with actual question



Survey Questions

- **All should understand type of adequate answer that is expected**
 - **Avoid beginning with adverbs (how, when, where, why, to what extent, etc.)**
 - **Specify number of acceptable responses if more than one answer is possible**
- **Tasks of reading, following instructions and recording answers should be as easy as possible**



Interviews

- **Planning the interview project structure**
 - **Participant acquisition/selection**
 - **Sample size**
 - **Method of data collection**
 - **Organization cooperation**
 - **Preparation of consent forms**
 - **IRB**
 - **Interview locations**
 - **Interview format**
 - **Data entry and data management**



Interviews

- **Interviewer training**
 - **Project regulations**
 - **Interviewer safety**
 - **Contact with participants**
 - **Handling refusals**
 - **Preparing for the interview**
 - **Study goals, terminology, consent**
 - **Role and uniformity of techniques**
 - **Practicing and observing others**
 - **Closing the interview**



Mail & Email Surveys

- **Good choice when**
 - **Have limited human resources**
 - **Closed-end style questions**
 - **Sample has moderate+ investment in topic**
 - **Research objectives are modest in length**



Mail & Email Surveys

- **Basic elements**
 - **Good respondent cover letter**
 - **Return postage (US Mail)**
 - **Confidentiality/anonymity**
- **Non-response error**
 - **Strive for a very high response rate**
 - **Learn about non-responders**



Mail & Email Surveys

- **Reminders**

- **For a goal of 75% return rate, send 4 mailings: initial & 3 reminders**
- **Reminders sent about two weeks apart**
 - **40% + 20% + 10% + 5% = 75%**
- **Total period about 8-9 weeks**
- **1st and 3rd mailing receive full packet**
- **2nd and 4th mailing receive postcards**
 - **Include a response postcard with 1st mailing to identify who might need a reminder**



Mail & Email Surveys

- **Incentives**
- **Length of the questionnaire**
- **Clarity of instructions**
- **Pre-notification**
- **Outgoing postage**
- **Survey sponsorship**
- **Personalization**
- **Deadlines**



Mail & Email Surveys

- **Schedule**
- **Quality controls**
 - Spelling, proofreading
 - Addressing, stuffing envelopes
- **Aesthetics**
 - Balance
 - Type style and size
 - Format of questions
 - Format of response categories
 - Physical dimensions of the form



Ethnography

- **The art and science of describing a group or culture**
 - **Focus on routine, daily lives**
 - **Fieldwork; researcher as instrument**
 - **Participant observation**
 - **Interviewing**
 - **Surveys**
 - **Analysis**
 - **Thinking, triangulation, patterns**
 - **Writing, ethics**



Focus Groups

- **Stimulate an in-depth conversation of a topic about which little is known**
 - **Favored by marketers, policy analysts, consultants, social scientists**
 - **8 to 12 individuals typically**
 - **Discussion under direction of a professional moderator**
 - **Promotes interaction**
 - **Assures discussion remains on topic**




EXPLORING OUR CHOICES

- **The challenge we face in helping our mentee learners is selecting the best choice for the best results – given the questions that we have selected.**
- **The challenge the learner faces is sensing that each of us is prepared to “go to the mat” to guide them in being effective in the passionate research that they have chosen to conduct**



EXPLORING OUR CHOICES


- **We must consider issues that often block performance:**
 - **1. Speed**
 - **2. Cost Leadership**
 - **3. Capacity Development**
 - **4. Accountability**
 - **5. Customer/Audience Focus**
 - **6. Effective Partnerships**
 - **7. Superior Products**
- **We must consider what works best for the learner, the school and the nature of the research**



Being Authentic and Accountable

- **Our Choices are in the realm of four capitals:**
 - **Human Capital** – The effective management and leadership of people.
 - **Resource Capital** – The effective management and leadership of the money, equipment and time.
 - **Community Capital** – The effective management and leadership of the customer and users of the data, information, knowledge, meaning, system and wisdoms revealed by the results.
 - **Political Capital** – The effective networking of the systems that enhance or impede the impacts of the results.

All four Capitals MUST exist for the research to work!



Being Authentic and Accountable

- **All research should support an enhancement of Leadership**
 - **Decision Theory**
 - **Systems Theory**
 - **Process Improvement and Re-engineering Theory**
 - **Congruence Theory**
 - **Meta-Theory**
 - **Management Theory**
 - **Change Management Theory**
 - **Cognition and Motivation Theory**
 - **Developmental Theory**



Expanding Capacity

- **Give the Learner Options for discovering Capacity:**
- **Use more than what is known so that the unknown is considered.**
- **Push the boundaries of their research paradigm to explore what is possible.**
- **Consider all options from mining the data to software that can guide....from SPSS, SAS, N6, Atlas and all other packages that can yield meaning beyond the known.**



SIMULATIONS

- **Joyce wants to assess decision making styles of managers. She reports to you that she is considering a research design that focuses on phenomenological inquiry, focus groups, survey instruments, and a case study. When finished with the findings, she intends to create a program to change the actions of managers within her agency.**
- **What do you see, what would you do, what works and doesn't work for Joyce?**
- **In groups of four, develop a strategy for helping Joyce make better choices. Include your rationale!**



SIMULATION

- **Bobby has determined that a quantitative study is necessary to determine the effectiveness of training as a vehicle for change. He has decided to use a Delphi technique to guide “future projections” for his findings. He reports that he wants to use SAS and N6.**
- **In groups of four, identify what will work for Bobby’s study and what should be done with his analysis. Be as specific as you can, ensuring that your actions lead to learning for Bobby.**



CONCLUSION

- **We can make or break the success of our learners. Often, it is us who need to expand in capacity – just as the learner is expanding. How we frame success WITH the learner can be just as important as the research.**



THOUGHTS --- COMMENTS

We hope that this session has challenged your thinking! If so, we believe that behavior will follow!