Week 3 -Discussion 1

Program Planning and Modification

How do you determine when a program modification is necessary? What do you believe are the most vital steps to modifying an existing, but inefficient or defunct program? Respond to a minimum of two of your classmates’ posts by Day 7.

Resources

Required Text

Leedy, P.D. & Ormrod, J.E. (2016). *Practical research: Planning and design*(11th ed.)*.* Retrieved from https://redshelf.com

* Chapter 6: Descriptive Research
* Chapter 7: Experimental, Quasi-Experimental and Ex Post Facto Designs
* Chapter 8: Analyzing Quantitative Data

Netting, F.E., O’Conner, M.K., & Fauri, D.P. (2008). *Comparative approaches to program planning*(1st ed.). Retrieved from https://redshelf.com

* Chapter 4: Interpretive Planning and Emergent Approaches

Required References

Falkoski, J. (2012).  [*Burnout, Employee Engagement, and Coping in High-Risk Occupations*](https://ashford.instructure.com/courses/72415/files/13678905/download?wrap=1)**. *Journal of Psychological Issues in Organizational Culture, 2*(4). doi: 10.1002/jpoc.20085

Recommended References

Berghofer, G., Castille, D., & Link, B. (2011). Evaluation of Client Services (ECS): A Measure of Treatment Satisfaction for People with Chronic Mental Illnesses. *Community Mental Health Journal 47*(4),399-407. Retrieved from ProQuest.

Beutell, N.J. (2010). Work schedule, work schedule control and satisfaction in relation to work-family conflict, work-family synergy, and domain satisfaction. *Career Development International, 15*(5) 501-518. Retrieved from ProQuest.

Cao, Y., & Sakchutchawan, S. (2011). Online vs. Traditional MBA: An Empirical Study of Students' Characteristics, Course Satisfaction, and Overall Success. *The Journal of Human Resource and Adult Learning, 7*(2), 1-12. Retrieved from ProQuest.

GUIDANCE

Research basically falls into two categories: experimental research and non-experimental research. The basic difference is that non-experimental studies do not use the experimental method. This does not make them invalid or unnecessary, but rather a choice one must make when looking at the topic you are trying to study. In some cases, it may be the only method you have available (think about historical studies where all you have is written record to go back to).

Let’s examine non-experimental methods first…

Descriptive Methods are meant to describe or characterize something as completely and accurately as possible. You can use different techniques to due this such as archival data which is unobtrusive and has virtually no reactivity. The way you do this type of research is to identify the archival source, select a representative sample, and then code your data. The key issues here are that you don’t know who recording the data to begin with (what was their motivation, who are they, what might they have left out knowingly or unknowingly) and you don’t know about the survival of such records (do you have them all, was there more, how consistent is it with other similar records, etc).

Case studies are by far and away one of the most popular descriptive method study. Why? They can complement a larger study. In human services that focus on patients, we often look at individuals as case studies – each one examined independently. However, as we find trends, we can start to look at them collectively. Keep in mind that with case studies we cannot over-generalize to an entire population and we risk a tremendous potential for bias – there is interpretation bias, causation bias, and generalization bias.

Naturalistic observation is non-obtrusive and can help a researcher develop hypotheses by watching naturally occurring phenomena without intervening. However, it is difficult (if not downright impossible) to determine causality and it can be time-consum

This takes me to a very important concept you need to consider anytime you encounter field studies or observational studies – interobserver reliability. Many times in descriptive research, we think of a single researcher watching a group of people and making notes in their notebook. However, how do we know that what they are seeing and recording is an accurate portrayal of what’s happening? This is where interobserver reliability comes in handy. By having multiple researchers record the same event, the researchers can come together later, go over their notes, and determine where they find agreement on activities. If certainly things were observed differently, that may lead to further research. The items that were observed the same now have some reliability that it was an accurate observation.

At this point, I want to define something for you. Observation is the ability to describe completely and accurately what is happening. This is very different from inference, which is the ability to conclude or deduce from evidence that something has occurred. Why the distinction? Because it is important to point out that researchers in observational studies should never infer anything, just observe. Inference can only be done with an experimental method.

So, let’s talk about Qualitative Research. This is a big element in research and frankly, you can spend whole semesters on just this topic alone (I know, I’ve done it). But to sum it up here, qualitative methodology involves in-depth, case-oriented study of a relatively small number of cases, including the single-case study. It seeks detailed knowledge of specific cases, often with the goal of finding out “how” things happen (or happened). The primary goal is to “make the facts understandable,” and often places less emphasis on deriving inferences or predictions from cross-case patterns. Examples of qualitative studies: How does racism manifest itself? How is social isolation experienced? What does “community participation” involve? How do parents define “good behavior” in their children (as well as how do children define it)?

Ok, so the big question here is WHY? Why do we study things like this in this manner? Couldn’t we find this out through experimental methods? Well, we could but the idea here is to get beyond the simple facts and look at thick descriptions. In other words, qualitative and quantitative research methods should work in harmony. By this I mean that we can do a qualitative study to understand phenomena and then we can break that phenomenon down into parts which we can then study quantitatively. This allows for a more thorough research and it takes a “big” and otherwise unanswerable question and breaks into parts so that it can be understood in the hopes that small answers lead to big ones.

Let’s explore that for a bit… many questions start with the word "Why." "Why" questions tend to be "big" questions, and in this form they are usually un-testable and therefore, from a scientific standpoint, unanswerable. Turn the question into one that is testable by turning it into a descriptive or causal question.

TOO BIG: Why are some people depressed?

ALTERNATIVES:

* What are some of the primary indicators of depression?
* How does depression manifest in certain personality types?
* What are the predictors of depression?
* Can environmental factors enhance or decrease depressive symptoms?

Ah, now the smaller questions start to paint the picture for the bigger issue.

Ok, back to descriptive research. Correlational studies are an important part of research because they tell us how related two variables are. It would be awful to complete and entire study on anger and self-esteem only to find later that the two variables are not in any way related or connected to each other. Correlations are great because they allow for prediction – but they cannot infer (meaning they cannot determine a cause)! I say this because I want you all to be able to recite the following in your sleep:

***Correlation does not imply causation***

I promise you that at some point you come across a piece of research where a research has done exactly that – they have inferred something or stated that X causes Y just because they are correlated. And now you know the answer: ***Correlation does not imply causation***.

**EX POST FACTO**

So let’s consider ex post facto studies and surveys. Ex post facto studies are often done with pre-existing conditions already in place. By definition, the term ex post facto means “after the fact”, therefore it’s reasonable to conclude that these are studies done once the phenomenon has already occurred. This has a very significant drawback in that we can never know what other uncontrolled factors are involved. For that reason, we have to be incredibly cautious in making conclusions.

Ex Post Facto designs are often referred to a “quasi-experimental” design. Why? Because the experimenter does not manipulate the independent variable and the participants cannot be randomly assigned (in fact, they assign themselves). When you are not able to manipulate the independent variable, you have a descriptive technique and because we cannot infer causation (remember: correlation does not imply causation) then in essence, Ex Post Facto studies test the effect of a classification variable. All that said, Ex Post Facto can be combined with experimental if the option is possible.

So how would this work in the real world? In the human services field, we often inherit program that already exist or have been running for some time but need to be reviewed for efficiency and effectiveness. In our world, a true experimental design is nearly impossible and in many cases unethical (would you not provide housing to someone just to do research on program performance?). Because you have no control over the individuals or groups that participate in services, the researcher has essentially two options: 1) they can find a comparative group that did not receive services and try to match them as closely as possible to the beneficiary group (however it should be noted that people who want the services are likely to be more motivated than if randomly selected, which will affects final results); or 2) they can assess those currently in the program against known research and secondary data sources.

It may seem obvious at this point that Ex Post Facto is actually the most common form of human service program research. Therefore, the tools of the trade for Ex Post Facto may sound very familiar to all of us - Surveys, Questionnaires, Tests and Inventories. We won’t go into surveys this week but suffice to say there is no lack of information on these techniques in research literature and textbooks.

Ok, so you can’t randomly assign your research groups nor can you ethically deny someone services. So how do you ensure any level of representativeness? Knowing the elements of sampling can help here and will give you some ideas on how to at least create comparable groups. You are all probably very familiar with sampling, sampling techniques and sampling issues so I only wanted to give you a basic breakdown (primer) of sampling:

Survey Sampling

- A sample is a subset of population

- Representative – characteristics are distributed similarly throughout the population

- Eligibility criteria – the determining characteristics for inclusion

- Inclusion – participants must be eligible to be included

Sampling Methods

     Probability Sampling

* Simple random sampling (everyone has equal chance)
* Stratified random sampling (sample from each subset of the sample)
* Systematic sampling (sampling frame, every 10th person on list)
* Cluster sampling (naturally occurring units)

Non-Probability Sampling

* Convenience (group that is ready and available)
* Snowball (relies on previous members to identify new members)
* Quota (asking so many from each subgroup, 100 males and 100 females)

Sample Size – the higher the sample size, the more representative

Response Rate – the ratio of administered surveys to responses (over 70% is good)

**TWO GREAT CONCEPTS THAT GO GREAT TOGETHER**

I will end this week’s guidance with two concepts that you will need to understand thoroughly as a good researcher: validity and reliability.

***Validity – does something measure what it’s supposed to measure?***

     Types of validity:

Content – does it measure what it should measure?

Face – does it seem to ask all the right questions?

Criterion – how does it compare to future performance?

* Predictive validity – forecasts future performance
* Concurrent validity – when two assessments agree

Construct – does it distinguish between two individuals with different characteristics?

***Reliability – does the measurement retain consistent through multiple administrations***

     Types of reliability:

Test-retest reliability – the correlation between two sets of survey administrations

Equivalence – the degree to which two items measure the same thing

Internal consistency – the degree to which all questions assess the same thing

Inter/Intra rater reliability – two or more people agree with the rating of items