

Chapter 1 : Social Research Methods - Knowledge Base - Internal Validity

Establishing Validity in Qualitative Research. The following module discusses reliability and validity in qualitative research, with an emphasis on establishing credibility and transferability. Learning Objectives: Define and reliability and validity in qualitative research. Discuss the importance of establishing validity.

The causal analysis of qualitative data poses serious problems. Becker, Bernard points out that the qualitative researcher has become immersed in the setting and may well adopt the perspective of the key informants. In practice, the analyst must switch back and forth between these perspectives, checking for consistencies and inconsistencies among the various informants and observations. This text has defined different kinds of construct validity- measurement and experimental. Both face threats in qualitative research, but measurement construct validity is especially vulnerable. By definition, participant observation does not use standardized tests. As a result, observations have a special proneness to random measurement error and, thus, unreliability. Measurement validity cannot exceed measurement reliability. By their non-quantitative nature such observations do not lend themselves to reliability estimates. Because the participant observer often works in varying circumstances and with varying categories, we cannot assume she or he has good consistency over occasions. Even with good reliability over time in the observations of a single researcher, qualitative data still face problems with interrater reliability and, in turn, measurement construct validity. The measuring instrument in qualitative research consists of an individual without the support of standard instruments or baseline criteria. The observer must use his or her feelings, curiosity, hunches, and intuition to explore and understand the setting. Consequently, two observers may arrive at results quite different from each other. As an example Derek Freeman came to a very different analysis of the Samoan culture than did Margaret Mead. The qualitative observer also runs the risk of being biased by the feelings, loyalties, or antagonisms generated by the setting and the actors in it. To achieve access to the most secret behaviors and perceptions of the actors, - the observer must seem trustworthy and likable. Most people would find it difficult to gain the necessary trust and friendship without returning some genuine affection. As a result of these feelings, the observer may leave the neutral role of scientist and adopt the role of committed member in the setting, a role shift called going native. In practice, going native poses little threat to published research since it usually terminates the study unless the observer elects to publish a propaganda piece. Experimental construct validity has less relevance in qualitative studies since the researcher seldom tries to make experimental manipulations in the natural setting. On the other hand, the observer may welcome the chance to see the outcome of naturally occurring changes. However, the entry of observers at or near the time of a natural experiment may change the meaning of the natural event, as illustrated in *When Prophecy Fails*. Near the time that the cult was expecting a major event, the researchers brought in several new observers. Thus, not only can the setting bias the observer but also the observer can change the setting, thereby distorting the results. A good analyst must reflect on the ways that the observers have distorted the natural setting. Qualitative research can at most approximate quasi-experimental designs, with all the threats to internal validity. More often, qualitative studies resemble correlation designs, with no manipulation of the independent variable. In correlation designs, causal inferences depend on the association of two variables. However, an association requires that both variables take different values. Qualitative research sometimes does not meet this requirement, for example, when it describes two aspects of behavior one of which does not vary. Do these data imply any connection between a Catholic upbringing and cult membership? While we might make up some theory that fits such a link, these made-up data do not support such a causal claim. Neither of our two variables, former religious experience and current cult membership shows any variability. We do not know how many no cult members come from a Catholic background. Perhaps the community had only Catholics until recently and all residents, cult and no cult alike, were reared Catholic. More qualitative researchers are expressing their data in quantitative terms. With the data in this form, analysts can apply inferential statistics. However, most qualitative data do not lend themselves to inferential statistical analysis. As a result, we usually cannot assess the validity tested by such statistics. This inability to make an inferential leap from a sample to a population

does not trouble many qualitative researchers. Often, the qualitative researcher has little interest in generalizing to a larger population. Researchers with an ethnographic perspective want only to describe in the deepest and most detailed possible way a unique group of people. Such researchers have no desire to make any claim about people outside of the studied setting. For the same reason, qualitative researchers may have even less concern about external validity-generalizing to people in other populations, places, or times. All researchers have problems in assessing external validity. We have no statistical procedure in quantitative research for checking generalizations beyond the studied samples. Thus qualitative research has no disadvantage compared to other methods in this respect.

Chapter 2 : Establishing Validity in Qualitative Research - Center for Innovation in Research and Teaching

Depending on their philosophical perspectives, some qualitative researchers reject the framework of validity that is commonly accepted in more quantitative research in the social sciences. They reject the basic realist assumption that there is a reality external to our perception of it.

Truth Value Credibility is one method used by qualitative researchers to establish trustworthiness by examining the data, data analysis, and conclusions to see whether or not the study is correct and accurate. For qualitative researchers, credibility is a method that includes researchers taking on activities that increase probability so that there will be trustworthy findings. The following are procedures qualitative researchers can use to increase credibility in qualitative studies: Prolonged engagement is an activity qualitative researchers use to learn traditions and customs of the participants and build trust. Persistent observation is used to examine credibility by looking in-depth at what the researchers are examining and investigating factor in detail. Triangulation is an activity used to examine a substantial amount of various sources i. Several different investigators are used to examine if one researcher is more or less honest from other team members. Multiple theories are examined because theories can be interrelated, and findings could result in a function of the similarity of theories. Contextual validation plays a role in triangulation because it examines the validity of a piece of a study by comparing it with other kinds of evidence on same points to find a similar characteristic style or distortion in a source. Peer debriefing is used to help make sure none of the researchers are using their biased opinion. This method consists of researchers asking a colleague or another person to look over the study for credibility and determine if the results seem to align from the data. Negative case analysis is used to show that not all the data will provide the same result. This improves the credibility of a study because it shows that the researchers are looking over the cases thoroughly, and it allows researchers to present information from a study that does not align with other themes, patterns, and overall results. Referential adequacy is a method used to store raw data in records to examine later and compare to other future studies to show the credibility of data. Members checking is used for participants to review the data, analytic categories, interpretations, and conclusions tested with the participants. This allows qualitative researchers to examine the overall accuracy of the study, and verifying data results. In contrast to qualitative researchers credibility methods, quantitative researchers use internal validity methods to establish trustworthiness. Quantitative researchers evaluate trustworthiness by how well the threats to internal validity have been controlled, and the validity of the instruments and measurements used in a study. These researchers analyze data through using statistical test measures. Internal validity is supported when changes in the dependent variable happen from only the independent variable, not from other confounding variables. It is important for quantitative researchers to remember the following possible threats to internal validity: Applicability Transferability is another method used by qualitative researchers to establish trustworthiness. In qualitative studies, transferability means applying research results to other contexts and settings in order to get at generalizability. In contrast to transferability, quantitative researchers use the method of external validity to establish trustworthiness. External validity is used to generalize from the research sample to the larger population. It is crucial for quantitative researchers to examine the sampling technique in determining the trustworthiness of a study. Researchers use external validity in the form of such things as statistical confident limits to make reasonably accurate statements. Quantitative researchers must look into the following factors that could affect external validity and generalizability: Consistency Dependability is a method qualitative researchers used to show consistency of findings. Qualitative researchers describe in detail the exact methods of data collection, analysis, and interpretation. This is so the study could be auditable to describe the situation, and for another researcher to follow the study. The following are ways to show dependability: There can be no validity without reliability, and no credibility without dependability. This approach requires an inquiry team of at least two people or more who can be separated into two inquiry teams. The two teams deal with data sources separately and perform their studies apart from one another. Then, the results between the two teams are compared. Inquiry audit for a researcher auditor to examine the process of the study and determine its

acceptability to the dependability of the study. The researcher auditor looks into the data, findings, interpretations, and recommendations and looks into whether the study is supported by data and is trustworthy. For quantitative researchers, reliability is a method used to establish trustworthiness. Quantitative researchers use reliability by examining the consistency of a group of measurements or measuring instruments used in a study also known as internal consistency. Researchers also use the test-retest method also known as stability to prove reliability by administering one measure to one group of individuals, wait for a certain amount of time, and then readminister the same instrument to the same group. Equivalence is a measure that can be used to administer two forms of the same test to one group of individuals and then correlate the scores from the two administrations. Equivalence and stability estimate is another way to examine reliability by administering one form of an instrument and then a second form of the instrument after a certain amount of time to the same group of individuals. Agreement is another way reliability is measured by raters observing the same behavior and examining whether or not they have similar and consistent results to one another. Reliability is important to quantitative researcher because it is a basis for validity, and measures whether or not a study obtains the same results each time. Neutrality Confirmability is a method used by qualitative researchers to establish trustworthiness. Confirmability includes an audit trail that includes raw data, such as electronically recorded materials, written field notes, documents, and records. This method is used for another researcher to be able to verify the study when presented with the same data. Confirmability is achieved when findings of a study reflect from the participants of the study and make sure the data speaks for itself, and is not based on biases and assumptions of the researchers. Unlike qualitative researchers method of using confirmability to establish trustworthiness, quantitative researchers use the method of objectivity. Objectivity is used through the methodology of measurements, data collection, and data analysis through which reliability and validity are established. Objectivity is performed through methodological procedures such as instrumentation and randomization. Quantitative researchers focus on the facts. Objectivity also refers to the appropriate distance between a researcher and participants that lessens bias. The objective researcher is distant so that the researcher is not influenced by the participants, and does not influence the study. This method is a kind of diary in which both qualitative and quantitative researchers can use on a daily basis or as needed for records of a variety of information. The method of using a reflexive journal can also be useful for quantitative researchers because they can provide information about methodological decisions made and reasons for choosing certain methods, instruments, and data analyses of the study.

Chapter 3 : External validity - Wikipedia

In qualitative research we do not adopt terms from quant research and try to fit our studies to match these. We do have ways to address issues of rigour in qualitative research. We consider issues of plausibility and systematic data collection.

Key Issues in Quantitative Research Key Issues in Quantitative Research The purpose of this module is to examine the key issues related to quantitative research that must be addressed to ensure a quality research study that is valid, reliable, generalizable and reproducible. Define validity, reliability, falsifiability, generalizability, and reproducibility as they relate to quantitative research. Explain the importance of each in a quantitative study. If the results of quantitative research are to be considered useful and trustworthy, there are several key issues that must be considered and addressed as part of the experimental design and analysis. Following is a description of these issues: **Validity** The term validity refers to the strength of the conclusions that are drawn from the results. In other words, how accurate are the results? Do the results actually measure what was intended to be measured? There are several types of validity that are commonly examined and they are as follows: **Conclusion validity** looks at whether or not there is a relationship between the variable and the observed outcome. **Internal validity** considers whether or not that relationship may be causal in nature. **Construct validity** refers to whether or not the operational definition of a variable actually reflects the meaning of the concept. In other words, it is an attempt to generalize the treatment and outcomes to a broader concept. **External validity** is the ability to generalize the results to another setting. There are multiple factors that can threaten the validity in a study. They can be divided into single group threats, multiple group threats, and social interaction threats. For more information, on the threats to validity [click here](#). **Reliability** Reliability is defined as the consistency of the measurements. To what level will the instrument produce the same results under the same conditions every time it is used? Reliability adds to the trustworthiness of the results because it is a testament to the methodology if the results are reproducible. The reliability is often examined by using a test and retest method where the measurement are taken twice at two different times. The reliability is critical for being able to reproduce the results, however, the validity must be confirmed first to ensure that the measurements are accurate. Consistent measurements will only be useful if they are accurate and valid. **Falsifiability** The term falsifiability mean that any for any hypothesis to have credence, it must be possible to test whether that hypothesis may be incorrect. If a theory or hypothesis cannot be tested in such a way that may disprove it, it will likely not be considered scientific or valuable to those in the field. **Generalizability** Generalizability refers to whether or not the research findings and conclusions that result from the study are generalizable to the larger population or other similar situations. The ability to generalize results allows researchers to interpret and apply findings in a broader context, making the finding relevant and meaningful. **Replication** Replication is the reproducibility of the study. Will the methodology produce the same results when used by different researchers studying similar subjects? Replication is important because it ensures the validity and reliability of the results and allows the results to be generalized. Consideration of all of these issues is important to the results of a research study. For further details and specific examples, see the [Resources Links](#) on the right side of this page. Validity is seen by many as being the primary issue that should be examined. The following [Slideshare presentation](#), *General Issues in Research Design*, discusses validity in further depth, along with other issues that should be addressed in research studies. A shared standard for qualitative and quantitative research. The generalizability of empirical research results. Qualitative and quantitative approaches. Basics of social research. A comparative discussion of the notion of validity in qualitative and quantitative research. The qualitative report, 4 3 , 4.

Chapter 4 : Quantitative vs. Qualitative Methods to Establish Trustworthiness (Blog #8) | Malakoff's Blog

The concept of validity is explained by a variety of terms in qualitative studies. This concept isn't a single, fixed or universal concept. This concept isn't a single, fixed or universal concept.

The estimate obtained will be bias-free even when Z and Y are confounded—that is, when there is an unmeasured common factor that affects both Z and Y. Attempts to increase internal validity may also limit the generalizability of the findings, and vice versa. This situation has led many researchers call for "ecologically valid" experiments. By that they mean that experimental procedures should resemble "real-world" conditions. They criticize the lack of ecological validity in many laboratory-based studies with a focus on artificially controlled and constricted environments. Some researchers think external validity and ecological validity are closely related in the sense that causal inferences based on ecologically valid research designs often allow for higher degrees of generalizability than those obtained in an artificially produced lab environment. However, this again relates to the distinction between generalizing to some population closely related to concerns about ecological validity and generalizing across subpopulations that differ on some background factor. Some findings produced in ecologically valid research settings may hardly be generalizable, and some findings produced in highly controlled settings may claim near-universal external validity. Thus, external and ecological validity are independent—a study may possess external validity but not ecological validity, and vice versa. Qualitative research[edit] Within the qualitative research paradigm, external validity is replaced by the concept of transferability. Transferability is the ability of research results to transfer to situations with similar parameters, populations and characteristics. Some claim that many drawbacks can occur when following the experimental method. By the virtue of gaining enough control over the situation so as to randomly assign people to conditions and rule out the effects of extraneous variables, the situation can become somewhat artificial and distant from real life. There are two kinds of generalizability at issue: If background factor X treatment interactions exist of which the researcher is unaware as seems likely, these research practices can mask a substantial lack of external validity. Dipboye and Flanagan, writing about industrial and organizational psychology, note that the evidence is that findings from one field setting and from one lab setting are equally unlikely to generalize to a second field setting. It depends in both cases whether the particular treatment effect studied would change with changes in background factors that are held constant in that study. It is only if an experiment holds some background factor constant at an unrealistic level and if varying that background factor would have revealed a strong Treatment x Background factor interaction, that external validity is threatened. As noted above, this is in the hope of generalizing to some specific population. Realism per se does not help the make statements about whether the results would change if the setting were somehow more realistic, or if study participants were placed in a different realistic setting. If only one setting is tested, it is not possible to make statements about generalizability across settings. There is more than one way that an experiment can be realistic: The similarity of an experimental situation to events that occur frequently in everyday life—it is clear that many experiments are decidedly unreal. In many experiments, people are placed in situations they would rarely encounter in everyday life. If however, the experimenters were to tell the participants the purpose of the experiment then such a procedure would be low in psychological realism. In everyday life, no one knows when emergencies are going to occur and people do not have time to plan responses to them. This means that the kinds of psychological processes triggered would differ widely from those of a real emergency, reducing the psychological realism of the study. Therefore, describing an experimental situation to participants and then asking them to respond normally will produce responses that may not match the behavior of people who are actually in the same situation. Generalizability across people[edit] Social psychologists study the way in which people in general are susceptible to social influence. Several experiments have documented an interesting, unexpected example of social influence, whereby the mere knowledge that others were present reduced the likelihood that people helped. The only way to be certain that the results of an experiment represent the behaviour of a particular population is to ensure that participants are randomly selected from that population. Samples in experiments cannot be randomly

selected just as they are in surveys because it is impractical and expensive to select random samples for social psychology experiments. It is difficult enough to convince a random sample of people to agree to answer a few questions over the telephone as part of a political poll, and such polls can cost thousands of dollars to conduct. Moreover, even if one somehow was able to recruit a truly random sample, there can be unobserved heterogeneity in the effects of the experimental treatments. A treatment can have a positive effect on some subgroups but a negative effect on others. The effects shown in the treatment averages may not generalize to any subgroup. Some social psychologist processes do vary in different cultures and in those cases, diverse samples of people have to be studied. Researches will often use different methods, to see if they still get the same results. When many studies of one problem are conducted, the results can vary. Several studies might find an effect of the number of bystanders on helping behaviour, whereas a few do not. To make sense out of this, there is a statistical technique called meta-analysis that averages the results of two or more studies to see if the effect of an independent variable is reliable. A meta analysis essentially tells us the probability that the findings across the results of many studies are attributable to chance or to the independent variable. If an independent variable is found to have an effect in only one of 20 studies, the meta-analysis will tell you that that one study was an exception and that, on average, the independent variable is not influencing the dependent variable. If an independent variable is having an effect in most of the studies, the meta analysis is likely to tell us that, on average, it does influence the dependent variable. There can be reliable phenomena that are not limited to the laboratory. For example, increasing the number of bystanders has been found to inhibit helping behaviour with many kinds of people, including children, university students, and future ministers; [20] in Israel; [21] in small towns and large cities in the U. Basic dilemma of the social psychologist[edit] When conducting experiments in psychology, some believe that there is always a trade-off between internal and external validityâ€”having enough control over the situation to ensure that no extraneous variables are influencing the results and to randomly assign people to conditions, and ensuring that the results can be generalized to everyday life. Some researchers believe that a good way to increase external validity is by conducting field experiments. A field experiment is identical in design to a laboratory experiment, except that it is conducted in a real-life setting. The participants in a field experiment are unaware that the events they experience are in fact an experiment. Some claim that the external validity of such an experiment is high because it is taking place in the real world, with real people who are more diverse than a typical university student sample. However, as real-world settings differ dramatically, findings in one real world setting may or may not generalize to another real world setting. Social psychologists opt first for internal validity, conducting laboratory experiments in which people are randomly assigned to different conditions and all extraneous variables are controlled. Other social psychologists prefer external validity to control, conducting most of their research in field studies, and many do both. Taken together, both types of studies meet the requirements of the perfect experiment. Through replication, researchers can study a given research question with maximal internal and external validity.

Chapter 5 : Key Issues in Quantitative Research - Center for Innovation in Research and Teaching

Internal validity is something that can affect dissertations that are guided by a quantitative, qualitative or mixed methods research design [see the section of Research Designs if you are unsure which research design your dissertation follows].

In this case determining validity of the measuring instrument questionnaire holds utmost importance Drost The reason behind determining validity lays in the plethora of threats a research faces. This includes history, maturation, testing, instrumentation, selection, mortality, diffusion of treatment and compensatory equalisation, rivalry and demoralisation. Importance of determining validity in a research Traditionally, establishment of instrument validity was limited to the sphere of quantitative research. Rooted in the positivist approach of philosophy, quantitative research deals primarily with culmination of empirical conceptions Winter Does it actually have a high degree of anxiety? Therefore, construct validity deals with determining the research instrument and what is intended to be measured. Further, it uses three different parameter to check validity: Convergence; the research instrument measures concepts which are similar to other instruments, in order to determine the convergence is results. Theoretical evidence; when the findings are in sync with the theoretical evidence. Face validity is a sub-set of content validity. In face validity, experts or academicians are subjected to the measuring instrument to determine the intended purpose of the questionnaire. Criterion validity to compare different measuring instruments Criterion validity helps to review the existing measuring instruments against other measurements. This is to determine the extent to which different instruments measure same variable. In case of convergent, the results predict high correlation with the existing instrument i. In such cases the measuring instrument should be changed. For example, if one of the instrument measures anxiety and the other instrument measures IQ level then there will be divergence. The following table show different validity applied in a research. Determining validity in quantitative research Source: Drost, ; p The entire research process should establish validity. This is important in order to ensure the capability of the instrument survey, interview, etc. Determining Validity in Qualitative Inquiry. Theory Into Practice, 39 3 , pp. Validity and Reliability in Social Science Research. Education Research and Perspectives, 38 1 , pp. The Qualitative Report, 4 4. Validity, reliability, and generalizability in qualitative research. Journal of family medicine and primary care, 4 3 , pp. Department of Education, p. Rigour, reliability and validity in qualitative research. Clin Eff Nurs, 4, pp. Verification strategies for establishing reliability validity in qualitative research. Int J Qual Res, 1, pp. The Qualitative Report, 8 4 , pp. Issues of validity and reliability in qualitative research. Evidence Based Nursing, 18 2 , pp. Rigor or rigor mortis: Adv Nurs Sci, 16, pp. Enhancing the truthfulness, consistency, and transferability of a qualitative study: Nurse Res, 7, pp. Test validity, Hilldale, NJ:

Chapter 6 : "Understanding Reliability and Validity in Qualitative Research" by Nahid Golafshani

In research, internal validity is the extent to which you are able to say that no other variables except the one you're studying caused the result. For example, if we are studying the variable of.

Threats to internal validity Timeline: The opinions of respondents depend on the recall time to gather opinions. Then the validity of their answers will increase. However, in case the research is conducted after a long duration then the opinions can be biased and misleading. Effective changes in instrumentation or in the criteria of recording behavior can be cause threats to validity. For example, performance of 2nd graders starts decreasing after 1 hour due to variable factors, like fatigue, stress, tiredness etc. However, some respondents may drop out. This will change the defined sample size. Especially studies which have long timelines face this threat to their validity. This threat to validity could be when sample is selected to study extreme behaviour in respondents. For example if a researcher needs to study consumption of mangoes. Then the threat to validity would be when the collection of data is in a peak consumption season. External threats to validity Impact of pre-testing: Most often researchers conduct pre-tests or pilot tests to determine efficacy of the measuring instrument. However, pre-tests might impact the sensitivity and responsiveness to the experimental variable. For example, researcher conduct a pre-test on a sample of 25 respondents. Effect of inclusion and exclusion criteria: Effect of selecting a sample based on specific selection criteria. This can impact the outcomes of study which would not have been the case, if there was random sampling. This happens in case of test subjects who have been exposed to same experiment multiple times. In such cases the effect of previous findings have an impact on overall results. Reactions to experimental arrangement: This is also known as Hawthorne effect. Experimental and quasi-experimental designs for research. Design and analysis issues for field settings. Research methods for business students fifth edition 3rd ed.

Chapter 7 : Internal validity | LÃ¡rd Dissertation

1 Validity in qualitative research P ivi Kinnunen T/ Methods and results in Computing Education Research 2 By validity in this context I mean.

Establishing Validity in Qualitative Research Establishing Validity in Qualitative Research The following module discusses reliability and validity in qualitative research, with an emphasis on establishing credibility and transferability. Define and reliability and validity in qualitative research. Discuss the importance of establishing validity. List strategies used by researchers to improve reliability and validity. Qualitative research is based on subjective, interpretive and contextual data, making the findings are more likely to be scrutinized and questioned. Therefore, it is critical that researchers take steps to ensure the reliability and validity of their research findings. The findings must be believable, consistent, applicable and credible if they are to be useful to readers and other researchers. Reliability refers to consistency with which the research will produce the same results if repeated. Validity refers to accuracy or correctness of the findings. The following video provides an excellent introductory overview to reliability and validity, including an explanation of terms and specific examples. Qualitative research has become increasingly popular in the past two decades. Therefore, much time has been spent reviewing ways to judge the reliability and validity of qualitative research findings. In order to withstand the scrutiny, researchers should spend time giving serious consideration to the following four aspects: Credibility - Often called internal validity, refers to the believability and trustworthiness of the findings. This depends more on the richness of the data gathered than on the quantity of data. The participants of the study are the only ones that decide if the results actually reflect the phenomena being studied and therefore, it is important that participants feel the findings are credible and accurate. Triangulation is a commonly used method for verifying accuracy that involves cross-checking information from multiple perspectives. The link in Resources Links on the left describes different types of triangulation methods. Transferability - Often called external validity, refers to the degree that the findings of the research can be transferred to other contexts by the readers. This means that the results are generalizable and can be applied to other similar settings, populations, situations and so forth. Researchers should thoroughly describe the context of the research to assist the reader in being able to generalize the findings and apply them appropriately. Dependability - Otherwise known as reliability, refers to the consistency with which the results could be repeated and result in similar findings. The dependability of the findings also lends legitimacy to the research method. Because the nature of qualitative research often results in an ever changing research setting and changing contexts, it is important that researcher document all aspects of any changes or unexpected occurrences to further explain the findings. This is also important for other researchers who may want to replicate the study. Confirmability - A measure of the objectivity used in evaluating the results, describes how well the research findings are supported by the actual data collected when examined by other researchers. Researchers bring their own unique perspectives to the research process and data interpretation can be somewhat subjective in qualitative research. If findings are corroborated or confirmed by others who examine the data, then no inappropriate biases impacted the data analysis. Criteria for assessing interpretive validity in qualitative research. Issues of validity in qualitative research. Reliability and validity in qualitative research. Validity and qualitative research: A practical guide to research methods. Validity in qualitative research. Qualitative health research, 11 4 ,

Chapter 8 : Threats to Internal and External Validity | Knowledge Tank

The use of reliability and validity are common in quantitative research and now it is reconsidered in the qualitative research paradigm. Since reliability and validity are rooted in positivist perspective then they should be redefined for their use in a naturalistic approach.

ABSTRACT With reference to definitions of validity and reliability, and drawing extensively on conceptualizations of qualitative research, this essay examines the correlation between the reliability of effort to find answers to questions about the social world, and the validity of conclusions drawn from such attempts. This is to point out the fundamental position to the role of theory in relation to research; as an inductivist strategy qualitative research tries to confer the correspondence between reality and representation. The problem of validity and reliability in qualitative research is entwined with the definition of qualitative research and the possibility to mirror this in practice to make a qualitative research properly valid and reliable. That presents both challenges and chances to qualitative researchers; yet, with taking into consideration qualitative criteria in social research, achieving validity and as well as reliability in qualitative research is not impossible. Such an abstract definition is all-encompassing that includes various research strategies, designs and methods. Therefore, it does not tell much about the questions and the answers, and the correlation between both in relation to the researched subject matter. The difficulty and disagreement lies in finding answers to questions about a subject matter that is in slow motion and continuous change, to identify and observe a moving target: The debate, currently, is one between two traditions in social research, namely quantitative and qualitative. Each tradition, in turn, has different ontological and epistemological standpoint in relation to the social world. In a metaphorical sense, it is like looking through different lenses, viewing the social world differently; different things seem important and hence seek finding answers to different questions. That is, the quantitative research regards the social world as separate to the observer; such an ontological objectivism subsequently breeds a positivist epistemological alignment to view the social world as a measurable object. The qualitative research, on the contrary, ontologically takes the social world as a construct of the researcher and the researched, and thus, is epistemologically interpretivist. This essay discusses the qualitative research, and its possibility to be valid and reliable, I regard this as central to the social research debate. The core question is can qualitative research be appropriately valid and reliable? Having said this, this essay is an answer to the question, not the answer, and it is an interpretation to the debate. The problem to be addressed is imperative because it aims to examine the correlation between the reliability of effort to find answers to questions about the social world, and the validity of conclusions drawn from such an attempt. In other words, it is pointing out the fundamental position to the role of theory in relation to research, as an inductivist research strategy, to confer the correspondence between reality and representation. This paper argues that the problem of validity and reliability in qualitative research is entwined with the definition of qualitative research, though some scholars argue that qualitative research is not as valid and reliable as quantitative research, this essay argues that it is possible for qualitative research to be properly valid and reliable, taking into consideration qualitative criteria in social research, including its designs and methods. In three sections the essay offers an answer the addressed question; in the first section it defines qualitative research and hence deconstructing the question relies on how qualitative research is defined. The second section addresses the matter of validity and the third section takes the issues of reliability in qualitative research. Finally based on what would be discussed through out, the paper offers a conclusion. The problem with defining qualitative research, however, is that there is more than one type of qualitative research. For example, Gurbrum and Holsten identify four traditions in qualitative research: If one pays close attention to all those four traditions one can observe some common characteristic; that first, centrality of social reality and humans; second, investigating a changing reality; third, interpreting the researched reality in a constructive manner, that the researched contributes meaning to the research and fourth, attempt to understand and seek meaning. In other words, a qualitative strategy can be best understood in relation to a quantitative strategy, by contrasting both. Bryman has highlighted some common contrasts between quantitative and qualitative researches, as the following table shows: It is true that both

qualitative and quantitative strategies are different but they complement each other in the broader spectrum of social research. I believe that managing the tension between reality and representation, is a conclusion that we may arrive at, after identifying our approach and defining our research strategy. As a substantiated strategy to the conduct of social research, qualitative research provides a distinctive framework for data collection and analysis and offers diverse techniques for collecting data. Some examples of qualitative research designs are, experimental, cross-sectional, longitudinal, and case study. As to the qualitative research methodologies, examples are, participant observation, ethnography, interviews, focus groups and conversational and textual analysis see, Lawrence Neuman, ; Bryman Process here is taken as a synonym to change in a given context, and the context is a social one - be it a group or a community that has been researched. Third, epistemologically qualitative research is interpretivist: For example, if one tries to know the meaning of an act performed by a social agent, one needs to ask the performer in order to know the meaning attached to the action by the social agent. This is a dual-task: I will take them as two key ways of evaluating qualitative research. In this section, I offer some conceptualizations of validity within the context of qualitative research. That is, to take validity as an observable criterion in qualitative research and then to argue that it is possible for qualitative research to be properly valid. Further, some scholars have used the same labels and contents of validity in quantitative strategy to evaluate the validity of qualitative research. Again, Sarantakos offers some other concepts associated with validation in qualitative research; cumulative validation, meaning findings be supported by other studies; communicative validation, findings be evaluated by respondents; argumentative validation, conclusion should be followed and tested; and ecological validation, using stable methods and taking into consideration the life and conditions of the researched Sarantakos, Silverman, identifies two other forms of validations that have been suggested as particularly appropriate to the logic of qualitative research Triangulation, meaning comparing different kinds of data quantitative and qualitative and different kinds of methods observation and interview to see whether they corroborate one another and respondent validation taking ones findings back to the subjects, where these people verify ones findings Silverman, All the types of conceptualization of qualitative validity discussed above have two characteristics in common, first to do research in a professional, accurate and systematic manner, second, to state how research is conducted, transparently. That is to say, validity has to do with the association between data and conclusion. Having identified the common characteristics of different types of validity in qualitative study, we can present some definitions, of what validity means, i. Based on the foregoing definitions and classifications, it can be seen that validity means the correct correlation between data and conclusion, but what is more problematic is the achievement of such an accurate relationship. This is not a challenge only to the qualitative study but to the quantitative study as well. He introduces a claim to validate qualitative research, with a chain of inter-related concepts. First, analytic induction, which is to identify some phenomena and to generate some hypothesis then to take a small body of data to examine it. Third is deviant-case analysis, to involve in different parts of the data and to make correlations between them. Fourth comprehensive data treatment, meaning all parts of the data must at some point be inspected and analysed, and finally, using appropriate tabulation, to give the reader a chance to gain a sense of the flavour of the data as whole Thou that is a claim by an authority of the field, one can view the correspondence between the criteria mentioned by Silverman and the very nature of the qualitative research, particularly, in the case of case study and interviewing, in which the researched are a group of people and an individual. For example, when a researcher interviews a participant about a subject matter; answers can be taken as data, and transcripts of the interview make it possible to reinterpret and check the research. Having said this, I argue that to achieve validity in qualitative research is to reduce the gap between reality and representation and the more data and conclusion are correspondent the more a piece of qualitative research is valid. While a qualitative study might attempt to understand what people mean by what they do in their every day behaviour, here the method differs; interviews and focus groups are appropriate. In this section I will offer some interpretations to the concept of reliability and then to present the possibility of establishing reliability in qualitative study. As it was the case with validity in discussing reliability as well scholars differ in using labels and contents. Some scholars use the same label i. On the contrary, some other writers introduce different labels in discussing the issue. For example, Bogumil and Immerfall To put it in

other words, dependability is concerned with the idea whether the findings liable to apply at other times and confirmability, concerns the notion whether researchers allow their values to introduce to a high degree. We do not need to generate a different concept, but rather to understand the concept in a different context. To take Bryman as reference, reliability is about the link between a measure and a concept, and within the context of qualitative study it is about generating a measurable concept. To record the observations consistently is to have a reliable method. Reliability as been discussed and defined within the context of qualitative research is about the methods of conducting a research; it is a methodological concern. Therefore, the technique by which a qualitative study can be evaluated or regarded reliable is to check whether how and to what extent consistent methods and procedures are used. For instance, with proper tabulated participant observation, ethnography, qualitative interviews, focus groups and conversation analysis research, tapes and transcripts are open to supplementary examination by both researchers and readers; this would allow both to verbalize their ideas about the standpoint of the people who have been studied. Also for reliability to be calculated, it is mandatory to the qualitative researchers to document their procedure and to reveal that categories have been used consistently. This to say, it is possible for a qualitative research to be properly reliable. This essay, however, was not a comparison between quality i. In this concluding section, I sum the main points of this paper and state the core argument in relation to the essay question. What can be drawn from content of this essay is that qualitative research should be studied as a separate research strategy, but nonetheless, complementary to the qualitative strategy within the context of social research debate, and on the larger social research spectrum i. We argued that the current debate in the social science research is one between those two distinct strategies, and additionally I argued that the question whether it is possible for qualitative research to be properly valid and reliable, is central to the debate and this interpretation to the question can be regarded as a contribution to the debate. First and foremost, I took research as a dialectical interaction of the researcher with the social world through question and answer. And I identified perceptions and views of the researcher as the underlying premise for such a dynamic engagement with the social world, how to perceive it ontologically, how to understand it epistemologically, and hence how to establish an identified role of theory in relation to research. Qualitative research, as this essay argued, is a proper engagement with the social world, having its constructionist ontology, interperitivist epistemology, and inductivist logic to the role of generating theory in relation to research. Moreover, in this essay I relied on the definitions given by scholars within qualitative research and across the social research context. The reason for this logic was, in order to know what we argue, first we need to define our concepts, and then to understand similar concepts validity and reliability in different contexts quantitative and qualitative. Based on identified interpretation to qualitative research, and common definitions to the notions of validity and reliability, this essay made an attempt to concertize the three concepts and then to make a correlation amongst them. Yet it should be kept in mind, the aim of this essay was not identify the relationship between validity and reliability, but rather to identify the position of each in relation to qualitative study and in my view that is the prime concern of the essay question; as I interpret, the possibility of having a qualitative research properly valid, and the possibility of having a qualitative research properly reliable. Having this in mind, this essay persuasively argued that in qualitative research the possibility of validity rises with effort to reduce the gap between a social reality that have been researched and representation that the research produces, this is, the more data and conclusion in a piece of qualitative research are correspondent the more it is valid. Regarding reliability, I argued that in qualitative research it refers to the methods of research conduct and to what extend the concepts used, appropriately, describe what they ought to describe. In such a context, reliability is entwined with the notion of consistency of a case, which is allocated for the same category by different observers. Thus, this essay confirmed the possibility to achieve a properly reliable qualitative research, and argued that the degree of reliability in a qualitative study can be improved with proper tabulated data of findings that are open to supplementary examination by both researchers and readers to enable them articulate their views about the position of the researched, in relation to the research and the researcher. Therefore to calculate reliability in qualitative research, it is required form the researchers to document their procedure and to show that categories have been used consistently. In this way, with taking into consideration the context of qualitative study, this essay as one interpretation of the question,

persuasively argued that it is possible for qualitative research to be properly valid and reliable. Accounts of Ethnography, Oxford: Social Research Ethics, London: Sage Lawrence Neuman, W. Qualitative and Quantitative Approaches 5th ed. Method und Techniken, Munich: A Guide to Qualitative Observation and Analysis 3rd ed. Theory, Method and Practice, London: An Anthropology of an Injecting Community, Oxford:

Chapter 9 : Social Research Methods - Knowledge Base - Qualitative Validity

Examples of threats to internal and external validity in a research By Shruti Datt on October 20, In my previous article I have discussed how the validity can be ensured with respect to Quantitative and Qualitative analysis.

Transferability Transferability refers to the degree to which the results of qualitative research can be generalized or transferred to other contexts or settings. From a qualitative perspective transferability is primarily the responsibility of the one doing the generalizing. The qualitative researcher can enhance transferability by doing a thorough job of describing the research context and the assumptions that were central to the research. The person who wishes to "transfer" the results to a different context is then responsible for making the judgment of how sensible the transfer is.

Dependability The traditional quantitative view of reliability is based on the assumption of replicability or repeatability. Essentially it is concerned with whether we would obtain the same results if we could observe the same thing twice. In order to estimate reliability, quantitative researchers construct various hypothetical notions. The idea of dependability, on the other hand, emphasizes the need for the researcher to account for the ever-changing context within which research occurs. The researcher is responsible for describing the changes that occur in the setting and how these changes affected the way the research approached the study.

Confirmability Qualitative research tends to assume that each researcher brings a unique perspective to the study. Confirmability refers to the degree to which the results could be confirmed or corroborated by others. There are a number of strategies for enhancing confirmability. The researcher can document the procedures for checking and rechecking the data throughout the study. The researcher can actively search for and describe and negative instances that contradict prior observations. And, after the study, one can conduct a data audit that examines the data collection and analysis procedures and makes judgements about the potential for bias or distortion. There has been considerable debate among methodologists about the value and legitimacy of this alternative set of standards for judging qualitative research. On the one hand, many quantitative researchers see the alternative criteria as just a relabeling of the very successful quantitative criteria in order to accrue greater legitimacy for qualitative research. They suggest that a correct reading of the quantitative criteria would show that they are not limited to quantitative research alone and can be applied equally well to qualitative data. They argue that the alternative criteria represent a different philosophical perspective that is subjectivist rather than realist in nature. They claim that research inherently assumes that there is some reality that is being observed and can be observed with greater or less accuracy or validity. Perhaps there is some legitimacy to this counter argument. Certainly a broad reading of the traditional quantitative criteria might make them appropriate to the qualitative realm as well. But historically the traditional quantitative criteria have been described almost exclusively in terms of quantitative research. No one has yet done a thorough job of translating how the same criteria might apply in qualitative research contexts. For instance, the discussions of external validity have been dominated by the idea of statistical sampling as the basis for generalizing. And, considerations of reliability have traditionally been inextricably linked to the notion of true score theory. But qualitative researchers do have a point about the irrelevance of traditional quantitative criteria. How could we judge the external validity of a qualitative study that does not use formalized sampling methods? And, how can we judge the reliability of qualitative data when there is no mechanism for estimating the true score? No one has adequately explained how the operational procedures used to assess validity and reliability in quantitative research can be translated into legitimate corresponding operations for qualitative research. While alternative criteria may not in the end be necessary and I personally hope that more work is done on broadening the "traditional" criteria so that they legitimately apply across the entire spectrum of research approaches, and they certainly can be confusing for students and newcomers to this discussion, these alternatives do serve to remind us that qualitative research cannot easily be considered only an extension of the quantitative paradigm into the realm of nonnumeric data.