质性研究的效度与研究者的伦理

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Reliability, Validity, Generalizability and Replicability: Do they apply to qualitative research?

信度是研究结果所显示的一致性、稳定性程度，也是对研究结果一致性和稳定性的评价标准。效度是一个研究程序的性质和功能，也是对研究结果正确性的评价标准。

我们通常从信度（credibility）、效度(validity)、可概括性(generalizability)、可复制性(replicability)这四个标准来评价一个研究是否有说服力。

质性研究的"可靠性"（**trustworthiness**）

由于质性研究的目的是构建意思（meaning construction），而构建意思通常是主观的过程，因此通常实验研究的信度（credibility）、效度(validity)、可概括性(generalizability)、可复制性(replicability)这四个标准并不适用于质性研究。

质性研究者已经摸索出不同的确保质性研究有效性的标准，其中最常用的是Lincoln & Guba (1985)总结出的四大标准。因此，质性研究者更倾向于使用"可靠性"讨论（trustworthiness）(Lincoln & Guba, 1985)来取代信度（credibility）和效度(validity)的讨论。

"可靠性"的四大标准（Lincoln & Guba, 1985)

(1) Credibility 可信度

(2) Dependability可靠性

(3) Confirmability 可确认性

(4) Transferability 可转换性

* **<u>Credibility</u>** – refers to confidence in the truth of the findings, good research design & practice.

* **<u>Dependability</u>** – refers to data stability over time and over conditions. – you are advised to keep a complete record of the research process so it can be 'audited'.

* <u>Transferability</u> – refers to the extent to which the findings from the data can be transferred to other settings or groups = similar to the concept of generalizability. you could expect to see similar (if not exact) processes under similar circumstances.

* <u>Confirmability</u> –refers to the neutrality of the data. Researcher must account for the fact that their own biases may influence the results, sometimes this is also referred to as reflexivity.

建立可信度（credibility）的技巧:

* Prolonged engagement 长期投入

* Persistent observation 持久的观察

* Triangulation 三角测量法

* Negative case analysis 相异个案分析

* External checks - peer debriefing & member checks 外部检验，包括邀请研究同行讨论和数据的再验证

* Researcher credibility 研究者的可信度

Prolonged Engagement

* Spending sufficient time in the field to learn or understand **the culture**, **social setting**, or **phenomenon of interest.**

* This involves spending adequate time observing various aspects of a setting, speaking with a range of people, and developing relationships and **rapport** with members of the culture.

* Development of **rapport** and **trust** facilitates understanding and co-construction of meaning between researcher and members of a setting.

The observer should be there long enough to:

* become oriented to the situation so that the context is appreciated and understood

* be able to detect and account for distortions that might be in the data (e.g. researcher begins to blend in; respondents feel comfortable disclosing information that no longer 'tows the party-line')

* The researcher can rise above his or her own preconceptions

* The researcher builds trust

Persistent Observation

* "the purpose of persistent observation is to identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail. **If prolonged engagement provides scope, persistent observation provides depth**" (Lincoln & Guba, 1985, p. 304).

Triangulation

* Triangulation involves using multiple data sources in an investigation to produce understanding.

* A single method can never adequately shed light on a phenomenon. Using multiple methods can help facilitate deeper understanding.

* Qualitative researchers generally use this technique to ensure that an account is rich, robust, comprehensive and well-developed.

四种三角测量法 (Patton, 2002):

* **Methods triangulation** - checking out the consistency of findings generated by different data collection methods.
  * It is common to have qualitative and quantitative data in a study
  * These elucidate complementary aspects of the same phenomenon
* **Triangulation of sources** - examining the consistency of different data sources from within the same method. For example:
  * at different points in time
  * in public vs. private settings
  * comparing people with different view points

四种三角测量法(Patton, 2002):

* **Analyst Triangulation** - using multiple analyst to review findings or using multiple observers and analysts
    * This can provide a check on selective perception and illuminate blind spots in an interpretive analysis
    * The goal is <u>not</u> to seek consensus, but to understand multiple ways of seeing the data
* **Theory/perspective triangulation** - using multiple theoretical perspectives to examine and interpret the data

Peer debriefing

* "It is a process of exposing oneself to a **disinterested** peer in a manner paralleling an analytical sessions and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln & Guba, 1985, p. 308)

* 主动和与本研究不相关的人员讨论研究细节，目的在于容易被研究者忽视的细节或研究者尚不明晰的细节。

Purpose of debriefing:

* 1. Through analytical probing a debriefer can help uncover taken for granted biases, perspectives and assumptions on the researcher's part;

* 2. Through this process the researcher can become aware of his/her posture toward data and analysis.

* 3. This is an opportunity to test and defend emergent hypotheses and see if they seem reasonable and plausible to a disinterested debriefer and provide the researcher with an opportunity for catharsis (净化)

Negative case analysis（相异个案分析法）

* This involves searching for and discussing elements of the data that do not support or appear to contradict patterns or explanations that are emerging from data analysis.

* Deviant case analysis is a process for refining an analysis until it can explain or account for a majority of cases.

* Analysis of deviant cases may revise, broaden and confirm the patterns emerging from data analysis.

*

Referential adequacy

* This involves identifying a portion of data to be archived, but not analyzed. The researcher then conducts the data analysis on the remaining data and develops preliminary findings. The researcher then returns to this archived data and analyzes it as a way to test the validity of his or her findings.

Member-checking

* This is when data, analytic categories, interpretations and conclusions are tested with members of those groups from whom the data were originally obtained.

* This can be done both formally and informally as opportunities for member checks may arise during the normal course of observation and conversation.

* Typically, member checking is viewed as a technique for establishing the validity of an account.

* Lincoln and Guba posit that this is the most crucial technique for establishing credibility. However, this technique is controversial. *Why?*

The Positive Aspects of Member-checking

* Provides an opportunity to understand and assess what the participant intended to do through his or her actions

* Gives participants opportunity to correct errors and challenge what are perceived as wrong interpretations

* Provides the opportunity to volunteer additional information which may be stimulated by the playing back process

The Positive Aspects of Member-checking

* Gets respondent on the record with his or her reports

* Provides an opportunity to summarize preliminary findings

* Provides respondents the opportunity to assess adequacy of data and preliminary results as well as to confirm particular aspects of the data

The Drawbacks and Problems with Member-checking

* Member checking relies on the assumption that there is a fixed truth of reality that can be accounted for by a researcher and confirmed by a respondent

  * From an interpretive perspective, understanding is co-created and there is no objective truth or reality to which the results of a study can be compared

  * The process of member-checking may lead to confusion rather than confirmation because participants may change their mind about an issue, the interview itself may have an impact on their original assessment, and new experiences (since the time of contact) may have intervened

The Drawbacks and Problems with Member-checking

* Members struggle with abstract synthesis

* Members and researchers may have different views of what is a fair account

* Members strive to be perceived as good people; researchers strive to be seen as good scholars. These divergent goals may shape findings and result in different ways of seeing and reacting to data

* Members may tell stories during an interview that they later regret or see differently. Members may deny such stories and want them removed from the data

The Drawbacks and Problems with Member-checking

* Members may not be in the best position to check the data. They may forget what they said or the manner in which a story was told

* Members may participate in checking only to be 'good' respondents and agree with an account in order to please the researcher

* Different members may have different views of the same data

实现可转换性（**transferability**）的研究技巧：深度描述（**Thick description**）

* By describing a phenomenon in sufficient detail one can begin to evaluate the extent to which the conclusions drawn are transferable to other times, settings, situations, and people.

* The term thick descriptions was first used by Ryle (1949) and later by Geertz (1973) who applied it in ethnography.

* **Thick description** refers to the detailed account of field experiences in which the researcher makes explicit the patterns of cultural and social relationships and puts them in context (Holloway, 1997).

实现可靠性（dependability）的研究技巧：Inquiry audit

* External audits involve having a researcher not involved in the research process examine both the process and product of the research study.

* The purpose is to evaluate the accuracy and evaluate whether or not the findings, interpretations and conclusions are supported by the data.

* *Comments on this technique:*

The Positive Aspects of External Auditing

* External audits are conducted to foster the accuracy or validity of a research study.

* External audits provide an opportunity for an outsider to challenge the process and findings of a research study. This can provide:

> an opportunity to summarize preliminary findings

> an opportunity to assess adequacy of data and preliminary results

> important feedback that can lead to additional data gathering and the development of stronger and better articulated findings

The Drawbacks with External Auditing

* External auditing relies on the assumption that there is a fixed truth or reality that can be accounted for by a researcher and confirmed by an outside auditor
  * From an interpretive perspective, understanding is co-created and there is no objective truth or reality to which the results of a study can be compared
  * This process may lead to confusion rather than confirmation. An external auditor cannot know the data as well as researchers immersed in the study and may not share the same point of view. This may lead to different understandings of the data. How to manage these different ways of seeing can be problematic.
* An external auditor may disagree with researchers' interpretations. Then the question of whose interpretation should stand becomes an issue.

实现可确认性（confirmability）的研究技巧：

* Confirmability audit 确认性审视
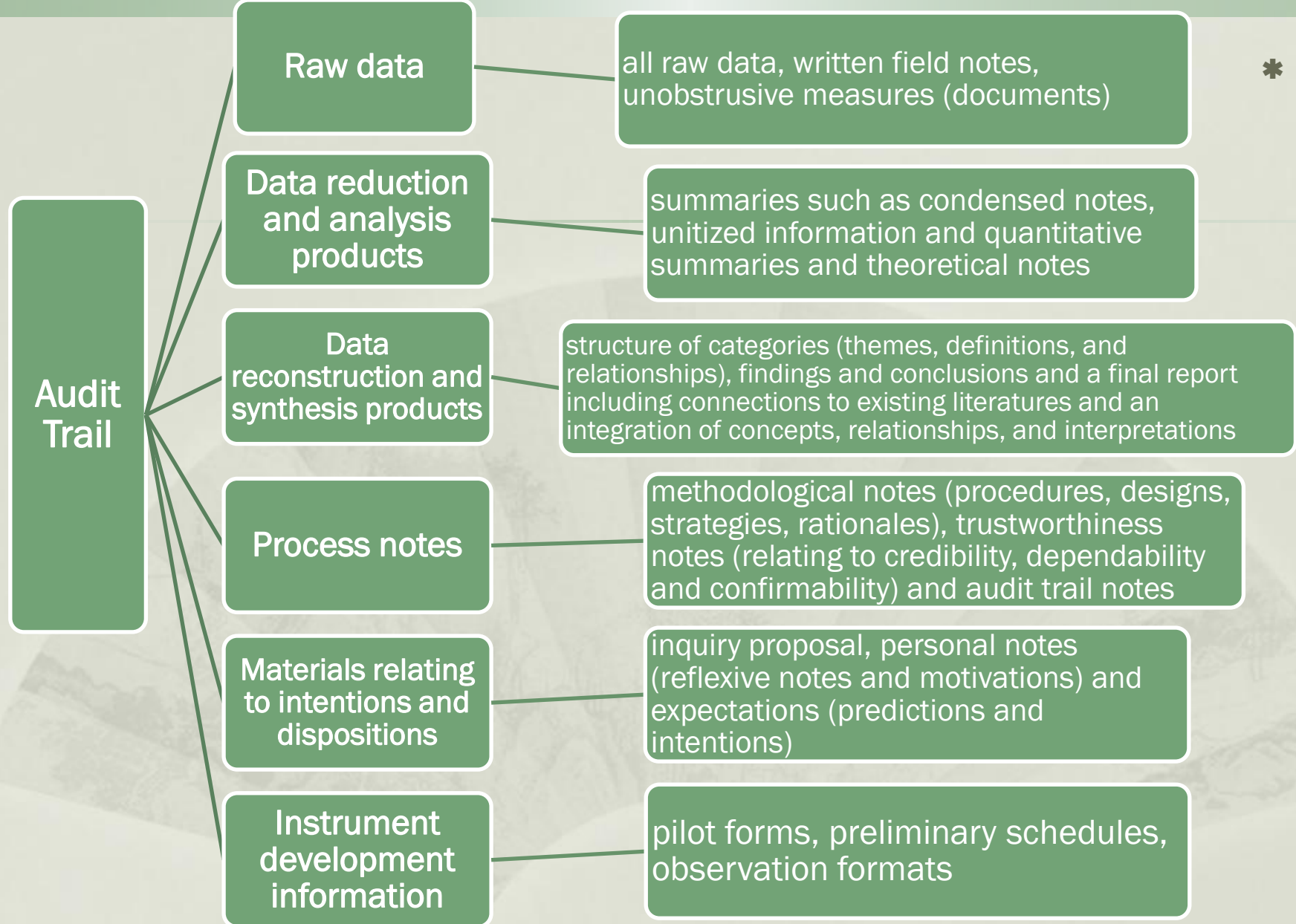* audit trail 审视研究轨迹
* Triangulation 三角测量法
* Reflexivity 反身性
*

Audit Trail

* An audit trail is a transparent description of the research steps taken from the start of a research project to the development and reporting of findings. These are records that are kept regarding what was done in an investigation.

Audit trail: Six types of data

* **Raw data** - including all raw data, written field notes, unobstrusive measures (documents)

* **Data reduction and analysis products** - including summaries such as condensed notes, unitized information and quantitative summaries and theoretical notes

* **Data reconstruction and synthesis products** - including structure of categories (themes, definitions, and relationships), findings and conclusions and a final report including connections to existing literatures and an integration of concepts, relationships, and interpretations

* **Process notes** - including methodological notes (procedures, designs, strategies, rationales), trustworthiness notes (relating to credibility, dependability and confirmability) and audit trail notes

* **Materials relating to intentions and dispositions** - including inquiry proposal, personal notes (reflexive notes and motivations) and expectations (predictions and intentions)

* **Instrument development information** - including pilot forms, preliminary schedules, observation formats

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Lincoln and Guba (1985, p. 319-310)

Reflexivity（反身性）

* Reflexivity is an attitude of attending systematically to the context of knowledge construction, especially to the effect of the researcher, at every step of the research process.

* "A researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions" (Malterud, 2001, p. 483-484).

* *The perspective or position of the researcher shapes all research - quantitative, qualitative, even laboratory science.*

* *Qualitative researchers' reflexivity is an indispensable part of the qualitative data.*

Beliefs about research bias

* There is an assumption among researchers that bias or skewedness in a research study is undesirable. As Malterud (2001) writes: "*Preconceptions are not the same as bias, unless the researcher fails to mention them*" (p. 484).

* Different researchers will approach a study situation from different positions or perspectives. This might lead to the development of different, although equally valid, understandings of a particular situation under study.

Beliefs about research bias

* While some may see these different ways of knowing as a reliability problem, others feel that these different ways of seeing provide a richer, more developed understanding of complex phenomena.

* Understanding something about the position, perspective, beliefs and values of the researcher is an issue in all research, but particularly in qualitative research **where the researcher is often constructed as the 'human research instrument.'**

Steps to foster reflexivity and reflexive research design

Designing research that includes multiple investigators

↓

Develop a reflexive journal

↓

Report research perspectives, positions, values and beliefs in manuscripts and other publications

1. Designing research that includes multiple investigators

* This can foster dialogue, lead to the development of complementary as well as divergent understandings of a study situation and provide a context in which researchers' - often hidden - beliefs, values, perspectives and assumptions can be revealed and contested.

* *It is worth noting that the idea of involving multiple investigators in a study and fostering a reflexive dialogue is most often not to reach consensus and foster reliability.*

2. Develop a reflexive journal

* This is a type of diary where a researcher makes regular entries during the research process. In these entries, the researcher records methodological decisions and the reasons for them, the logistics of the study, and reflection upon what is happening in terms of one's own values and interests. Diary keeping of this type is often very private and cathartic.

3. Report research perspectives, positions, values and beliefs

* Many believe that it is valuable and essential to briefly report in manuscripts, as best as possible, how one's preconceptions, beliefs, values, assumptions and position may have come into play during the research process.

Part II:

Ethical Issues in Qualitative Research

Nuremberg Code 1948
《纽伦堡法案》

* # 人体试验行为规范

* "The voluntary consent of the human subject is absolutely necessary."

Kant's Categorical Imperatives
康德的 "(绝对)范畴律令"

Categorical Imperative I

* "I ought never to act except in such a way that I can also will that my maxim should become universal law."

* 永远使得你的意志的准则能够同时成为普遍制订法律的原则

Categorical Imperative II

* "One must act to treat every person as an end and never as a means only."

* 人永远只能作为目的而不能作为手段。

Ethical issues in qualitative research

* Ethical principles guiding public health research are built on a foundation of medical ethics, developed in the first instance to regulate the conduct of clinical research.

Basic Assumptions about How Research Should be Conducted

* Subjects should be protected from harm.

* Subjects should have their identity protected.

* Subjects should be fully informed about the research study.

* Participation is voluntary.

* Study procedures should show respect for cultural values and beliefs.

Some studies can potentially harm participants. Potential harm can include:

* Pain or physical danger.
* Emotional arousal or stress
* Observation or release of findings can cause embarrassment or social distress.
* Observation can involve misinformation or deception. Participant observation techniques should be used cautiously.

Institutions for protecting research participants:

* In order to make sure that participants are protected, all studies must be reviewed by human subjects/ethics review committee.

* In the United States, research projects must be reviewed and approved of by Institutional Review Board (IRB) before they are conducted.

We are especially concerned about the following participants :

* Children under 18 (consent must be obtained from parents).

* Involuntary clients

* Any participants likely to be vulnerable to coercion or undue influence.

Steps to be taken to protect participants from harm:

* Confidentiality must be protected. We must not identify people who participate in the study.

* If the study is likely to cause emotional arousal, we must make provisions to refer participants to a mental health professional for counseling.

Methods for Protecting Confidentiality Include:

* Responses must be anonymous (as feasible).

* All information that can be attributed to individuals is kept confidential. Fictional names are often used in qualitative analysis or code numbers are assigned to individuals for conducting the analysis. Respondents may be referred to using terms that do not indicate name/characteristics of individuals such as "respondent" or "participant"). In small samples, care should be taken not to reveal much about personal characteristics of respondents such as ethnicity or job title if it would help readers identify individual respondents.

Methods for Protecting Confidentiality Include:

* A coding system can be used to track returned surveys or case records. However, the coding system should be kept in a secured location separate from the responses.

* The responses are also kept in a secure location; only the researcher will have access.

* Any instruments that could identify a respondent should be destroyed after data analysis if it can not be kept in a secure location. This includes tape recordings.

* Information about individual respondents should not be shared with agencies or supervisors.

Methods used to verify consent to participate

* Return of surveys implies consent (surveys should be distributed with letters that contains information about the study and human subjects protections).

* Participation in phone interview implies consent.

* Signed consent forms from participants (in some cases it may be sufficient to provide verbal information).

IMPORTANT!!! Consent forms are needed for all research-related interviews other than interviews with public officials. No consent forms are needed for brief interviews in public settings

* Public behavior (observations) generally does not require consent.

Consent forms should contain the following information:

* A description of the purpose of the study.
* An explanation as to how participants were selected.
* A statement that participation is voluntary and that participants may withdraw at any time.
* A description about procedures and what will be required from participants.
* Emotionally sensitive issues that might be exposed and/or follow-up resources that are available if required.
* A description of how information will be recorded if videotaping or audiotape is required.
* A description of any discomforts and any known risks.
* An explanation of who will have access to the data and information about the identity of respondents.
* A description of how the data will be made public or of any other persons who may make use of the data
* Contact information (for the researcher or the researcher's institution) if the participant has any questions.

Ethical Issues in Qualitative Research

* Researchers must state values and biases in writing reports.
* Researchers must take steps to ensure that accurate accounts of participant perceptions are written
* Researchers have a responsibility to use the data to enhance social change.
* Consent is sometimes obtained through personal interaction with individuals or communities (entry). The researcher must establish trusting relationships.
* Participants may be viewed as partners in the research process and always as the social equal of the researcher.

Overarching ethical principles

All researchers are responsible for ensuring that participants

* are well-informed about the purpose of the research they are being asked to participate in

* Understand the risks they may face as a result of being part of the research

* Understand the benefits that might accrue to them as a result of participating

* Feel free to make an independent decision without fear of negative consequences

Issues in Qualitative Research

* Protection of participants through the informed consent process favors formalized interaction between researcher and participant.

* Strength of qualitative research methods often lies in the informality of the communication as well as the iterative nature of the research process.

* How can we reconcile these two conflicting dynamics?

* We will practice how to apply ethical principles to a range of qualitative research scenarios.

Case I: Structured Observation

* You are interested in documenting patterns of social activity at different types of bars in preparation for developing an intervention to reduce sexual risk taking associated with drinking. You propose to do an inventory of all legal bars in a given neighborhood and start visiting them. You will visit bars at different hours of the day and record your observations (how many people are there, whether there are sex workers present, what people are drinking, general observations of the environment). You record these observations on a form and plan to eventually use these data in your publication.

Questions for Case I:

* Who are the research participants?

* What are the risks?

* How will you minimize the risks?

* Who needs to provide informed consent?

* As an IRB member, what are your main concerns?

Case II: Participant Observation

* You go to the bar and have a drink! You make friends with bar patrons and start hanging out there on a regular basis. You talk informally to bar patrons about their drinking patterns and sexual lives. You take field notes about these conversations and include details about these individuals (without identifying them). You plan to use these data in your publication.

Questions for Case II:

* Who are the study participants? What are your obligations to offer an informed consent process to them?

* What information would you provide? When?

* What are the risks to participants?

* How would you minimize the risks?

* As an IRB member, what are your concerns?

Guidelines:

* The obligation to inform people that they are part of a research project is universal, no matter what your methods!

* Always be honest about who you are, what your research is about, why you want to talk, and what you will do with the information.

* Depending on your methods, written informed consent may not always be necessary and may, in fact, negatively impact the quality of your research. Always consult the IRB for guidance and work with them to come to mutually agreeable solutions to protect the participants as well as the integrity of your research process.

Guidelines:

* Establish clear procedures that reduce risk and maximize confidentiality:

* Ensure your field notes and transcripts do not contain personal identifiers.

* Keep raw and processed data locked and/or password protected

* Share data only with those who are part of the study team (investigators) and who have received research ethics training

Guidelines:

* If you are supervising a team to collect data, conduct thorough ethics training of EVERYONE.

* Establish clear chain of custody procedures to ensure data is not diverted or lost.

* Conduct regular audits of yourself and your team to ensure compliance

Case III: In-depth Interview

* You are doing a study on perceptions of HIV testing in South Africa. You find that many young women you interview bring up stories of sexual trauma they have experienced, including rape. There are several cases in which the interview becomes very upsetting for both the participants and the interviewers. You have already received IRB approval and your informed consent form talks about the risk of feeling uncomfortable with some of the questions. But the responses are more overwhelming than you expected.

Questions for Case III:

* What are your obligations to the participants in terms of reducing harm related to anxiety during the interview?

* Should you stop the interviews and revise your consent form?

* Should you report any of this to the IRB?

* As an IRB member, what are your concerns about in-depth interviews?

Case IV: Focus Group Discussion

* You are conducting a series of focus group discussions with women who have survived abusive relationships. You are interested in asking these women to describe the types of abuse they survived and how they made the decision to leave the abusive relationship. Each group will have about 5 women.

Questions for Case IV:

* What possible risks may occur to these women as a result of participating in your study?

* How could you help minimize those risks?

* As an IRB, what are your concerns about focus group discussions in general and this one in particular?

Case V: Special Issues

* You have interviewed VCT (艾滋病自愿咨询检测) clinic staff members. The clinic has low uptake of testing and a lot of staffing problems. The hospital administrator calls you into his office and wants to know the results of your interviews. You don't want to violate participants' confidentiality but you also think the administrator should have some feedback from the research.

Questions for Case V:

* How do you balance the two responsibilities?

* As an IRB member, what are your concerns about how the results of research are fed back to participants and other stakeholders?

Guidelines:

* Talking can stir emotions, this is not necessarily bad or risky, though could be in extreme cases.

* Plan ahead by providing adequate referral services to participants and have a crisis management plan in place for participants and staff members.

* When in doubt, stop data collection and make a report to the IRB and ask for guidance.

Guidelines:

* FGDs are typically best used for topics that are less sensitive, where loss of confidentiality is not a substantial risk.

* Dissemination of qualitative research results is important. Make every effort to report results in a way that protects participant confidentiality and disallows retribution. This requires conducting good groundwork with authorities before beginning fieldwork.

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