



SOCIAL SCIENCE RESEARCH IN SRH FROM DESIGN TO DISSEMINATION

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Sexual and Reproductive Health Research

Anthropology

Psychology

Communication

Political science

Law



Linguistics

Education

Geography

Economics

Sociology

History

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LEARNING GOALS

By the end of this session you should...

- Be able to describe social science research
- Know the steps to plan a social science study
- Be aware of tools to support implementation

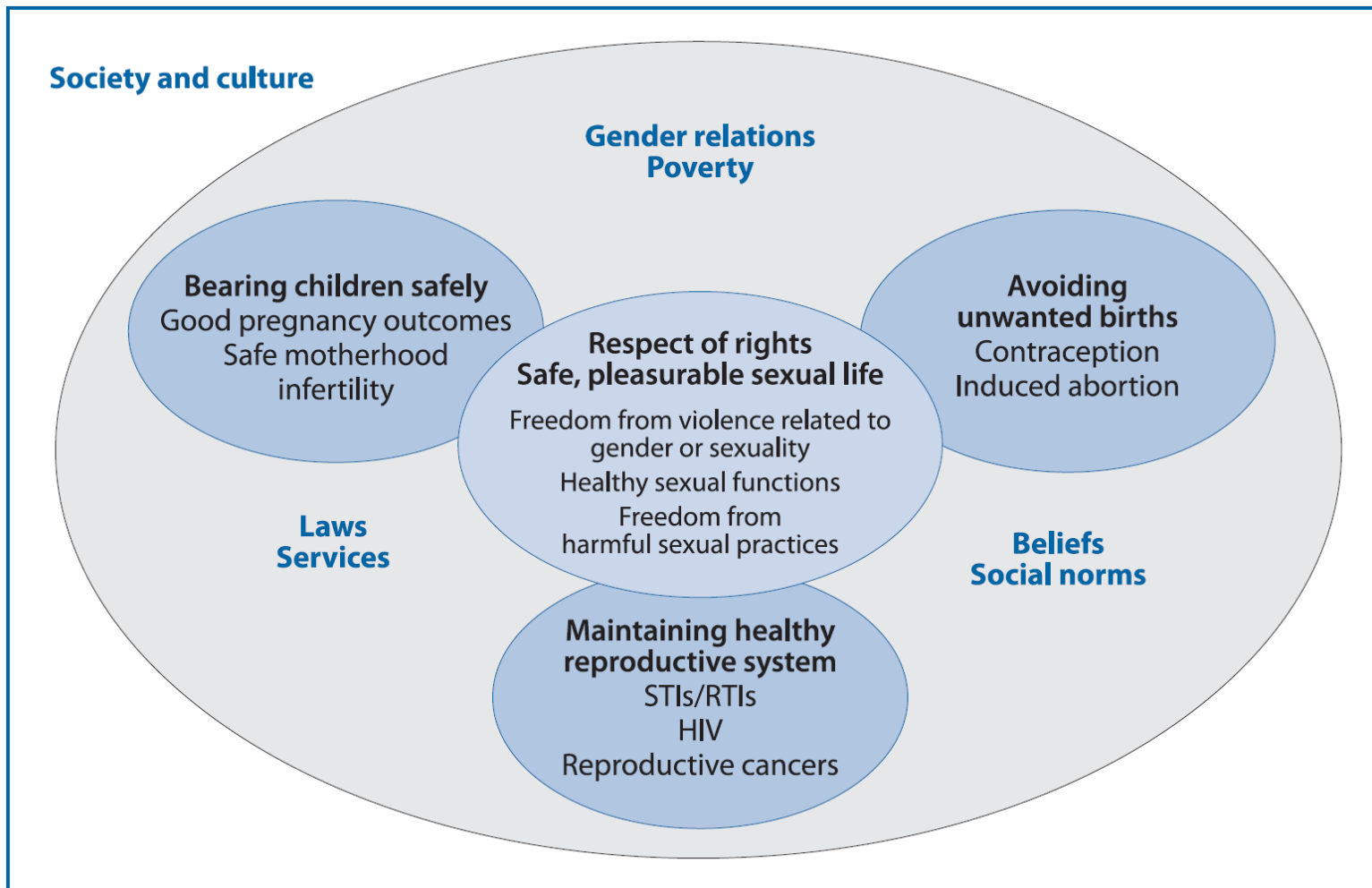
AGENDA

1. Social science research
2. Research design for SRH
3. Data collection and analysis
4. Planning and implementation

Primary source: Collumbien, M., Busza, J., Cleland, J. & Campbell, O., 2012. Social science methods for research on sexual and reproductive health. Geneva: World Health Organization.

Social Science Research in SRH

MAIN DOMAINS OF SEXUAL & REPRODUCTIVE HEALTH



DEFINITIONS

- *Culture ...*

the symbolic and learnt aspects of human society, including learnt patterns of behavior, aspects of culture that act below conscious levels, and patterns of thought and perception that are not biologically determined.

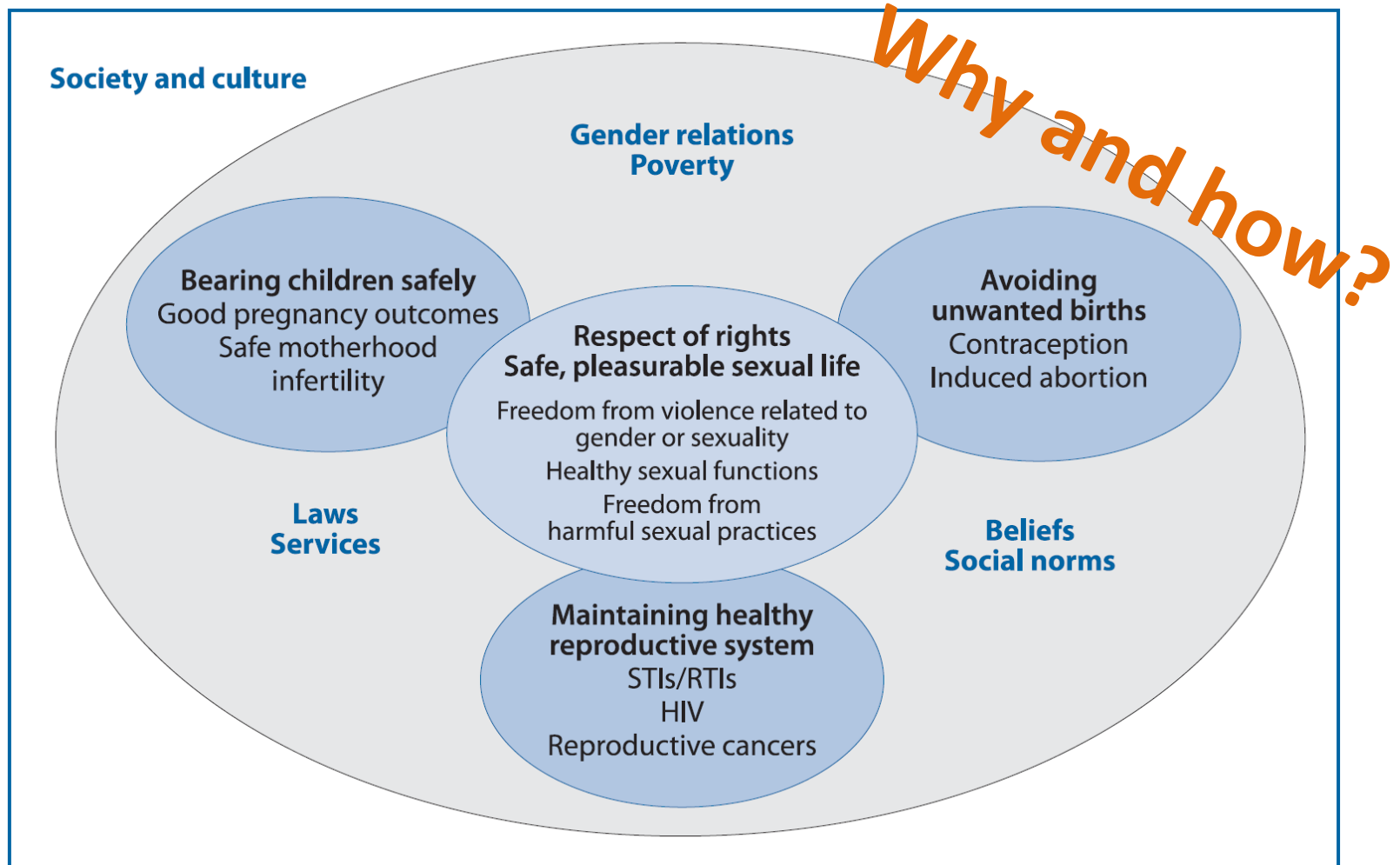
- *Society ...*

a group of people who share a culture, occupy a territorial area, and feel themselves to be a distinct entity.

- *Social norm ...*

a rule that is socially enforced (social sanctioning). Social norms govern the expression of sexuality and sexual behavior in every society, and these norms sanction reproduction.

MAIN DOMAINS OF SEXUAL & REPRODUCTIVE HEALTH



SOCIAL SCIENCE STUDIES CAN BE...

- 1. *Descriptive:*** e.g. to measure incidence of a specified behavior or to describe women's cultural understanding of gynecological morbidities
 - 2. *Explanatory:*** e.g. to identify the determinants of utilization of a service
 - 3. *Assessing an intervention:*** e.g. the effect of domiciliary visits on uptake of contraception
- Multiple objectives are possible
 - Objective of a study determines its design

OBJECTIVES OF SOCIAL SCIENCE FOR SRH RESEARCH

1. Identifying and defining problems by measuring the magnitude and nature of reproductive/sexual behaviour and ill-health; and investigating the determinants and consequences of SRH
 - beliefs and values about sexuality and reproduction
 - sexual practices and meanings
 - risk perception and negotiation
 - biomedically defined versus self-perceived sexual and reproductive morbidity
 - individual experience of SRH problems and solutions
 - psychological, social, cultural and economic consequences
 - socioeconomic and demographic characteristics

OBJECTIVES OF SOCIAL SCIENCE FOR SRH RESEARCH

2. Designing and evaluating culturally appropriate SRH promotion campaigns that encourage and enable individual behavior change
 - drivers of behavior change in a particular setting
 - specific barriers for individuals and groups in adopting health behavior
 - culturally acceptable methods for promoting change
 - evaluating the process and outcomes of interventions

OBJECTIVES OF SOCIAL SCIENCE FOR SRH RESEARCH

3. Improving and supporting intervention programs that attempt to prevent or treat SRH problems
 - decision-making and motivation concerning the use of prevention and treatment services
 - accessibility and acceptability of services
 - costs
 - dynamics of use of services
 - quality of care
 - user and provider perspectives
 - effectiveness of organization

OBJECTIVES OF SOCIAL SCIENCE FOR SRH RESEARCH

4. Understanding, informing, and influencing the policy, legal, or social arena in which SRH concerns arise
 - effectiveness of different types of services
 - value of integrating services
 - policy barriers to implementing sexual and reproductive change
 - institutional and leadership issues surrounding change

Research design

Figure 2.1

STEPS IN THE RESEARCH PROCESS

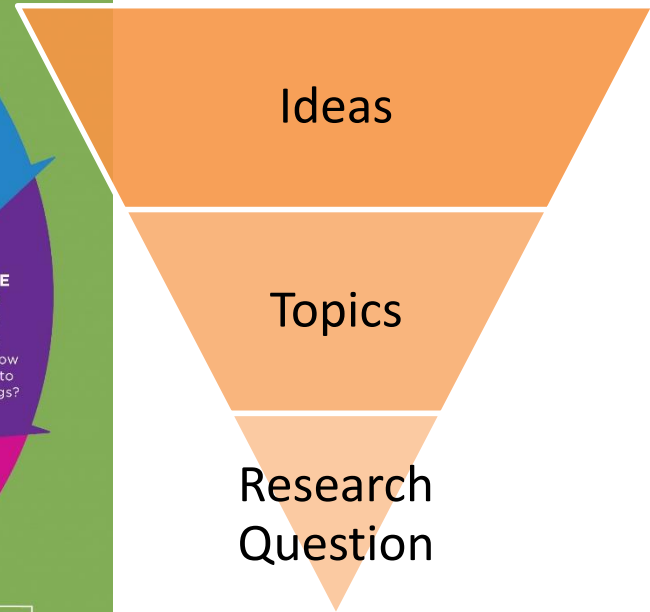
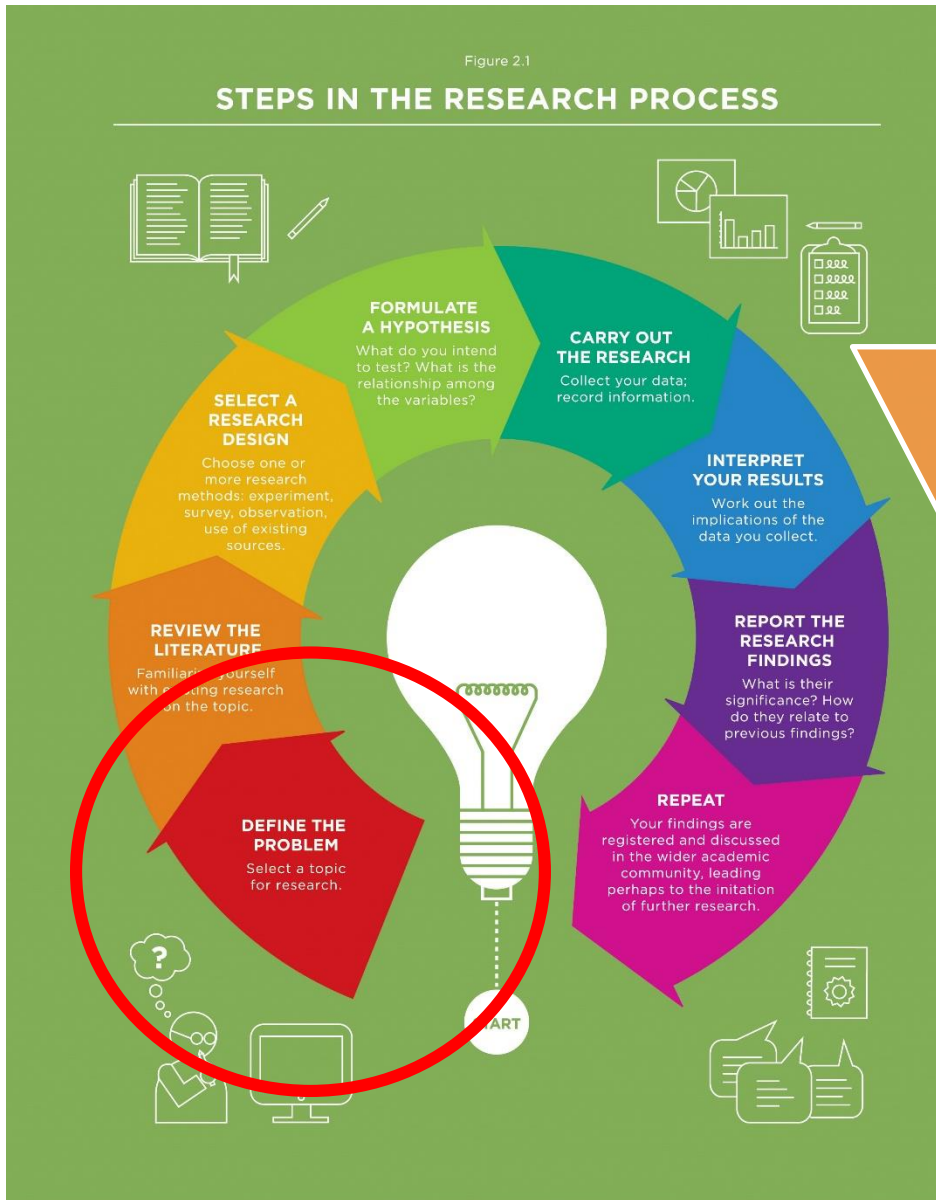


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Figure 2.1

STEPS IN THE RESEARCH PROCESS



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<https://i.pinimg.com/736x/5c/90/a7/5c90a73dfc591d587bfc2935c65cd7f2.jpg>

FORMULATING THE RESEARCH QUESTION

Ask yourself	Example	Note
Is the answer already known, or could it be easily ascertained from a careful review of literature or by a quick and simple field assessment?	E.g., the apparent popularity of a specific contraceptive method may reflect the simple fact that it is the only method available.	Obvious and simple explanations do not require detailed and expensive research studies.
Is the research question sufficiently precise, clear, and bounded, in order to be answered satisfactorily in a single study?	“Why do individuals engage in casual sexual contacts?” or “Why do women who want no more children not use contraception?”	Try not to ask questions that are too vague, complex, or ambitious. Provide precise sets of hypotheses (2nd example: health concerns, intensity of pregnancy-avoidance desires etc.)
Will the answer be relevant to advocacy, policy, or programs?	Practical utility is often difficult to anticipate in advance of the findings. High-quality basic research, as opposed to applied research, may yield unexpected new insights with considerable practical value.	

SETTING RESEARCH OBJECTIVES

Box 3.1 Initial steps in setting research objectives

I. The sociological problem

- A. Present a clear, brief statement of the problem – with concepts defined where necessary.
- B. Show that the problem is limited to bounds that are amenable to treatment or test.
- C. Describe the significance of the problem, with reference to one or more of the following criteria, which require that the problem must:
 1. be timely;
 2. relate to a practical problem;
 3. relate to a wide population;
 4. relate to an influential or critical population;
 5. fill a research gap;
 6. permit generalization to broader principles of social interaction or general theory;
 7. sharpen the definition of an important concept or relationship;
 8. have many implications for a wide range of practical problems;
 9. afford possibilities to create or improve an instrument for observing and analysing data;
 10. provide an opportunity for gathering data that are restricted by the limited time available;
 11. provide the possibility for a fruitful exploration with known techniques.

II. The theoretical framework

- A. Describe the relationship of the problem to a theoretical framework.
- B. Demonstrate the relationship of the problem to previous research.
- C. Present alternate hypotheses considered feasible within the framework of the theory.

III. The hypotheses

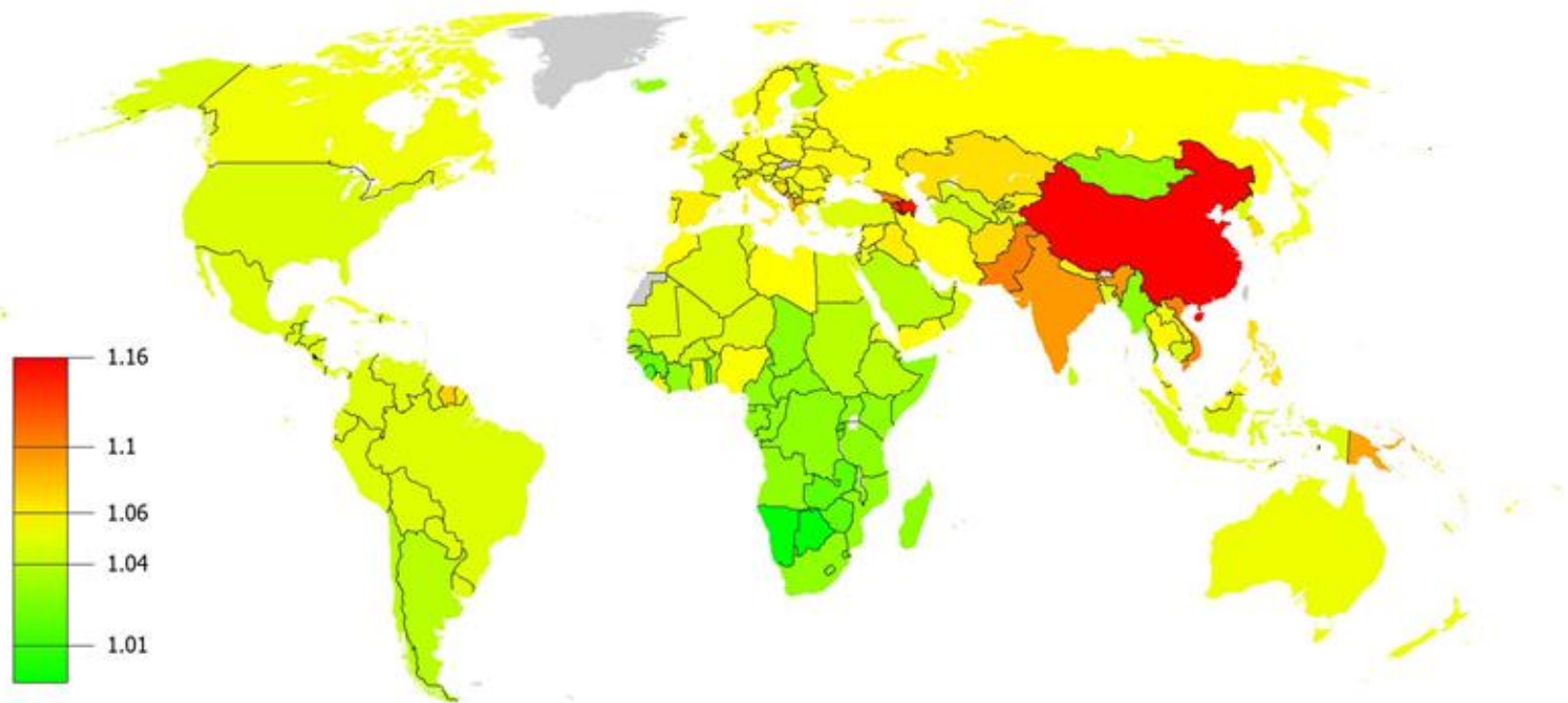
- A. Clearly state the hypotheses selected for testing. (Null and alternate hypotheses should be stated.)
- B. Indicate the significance of test hypotheses to the advancement of research and theory.
- C. Define concepts or variables (preferably in operational terms).
 1. Independent and dependent variables should be distinguished from each other.
 2. The scale upon which variables are to be measured (quantitative, semi-quantitative, or qualitative) should be specified.
- D. Describe possible mistakes and their consequences.
- E. Note seriousness of possible mistakes.

Source: (7)

DEVELOPING A CONCEPTUAL FRAMEWORK

- Systematic and comprehensive representation of types of factors that need to be considered
- Levels at which different factors operate (e.g. individual, household, community, district, nation) need to be specified – along with the directions of pathways of influence

EXAMPLE: PRENATAL SEX SELECTION (SRB 2012)



Source: Hunter, T.M., 2014 (based on data gathered from World DataBank, Gender Statistics, The World Bank and United Nations)

EXAMPLE: CONCEPTUALIZING THE INTERSECTION OF SEX SELECTION AND PUBLIC POLICIES

See...

- **3-M” Model: *why, how and to what extent couples sex select***
© Laura Rahm, forthcoming 2018
- Rahm, L. & Kostenzer, J., forthcoming 2018. Harmful Practices on the Global Agenda: Comparing Female Genital Mutilation and Gender-Biased Sex Selection, Autrepart.

PURPOSE AND STUDY DESIGN

Decisions regarding study design must address the following...

1. **Who**, or what, will be studied?
2. **What** information will be needed?
3. **How** will information be collected?
4. **Where** will information be collected?
5. **When** should information be collected (time span)?
6. **How many** individuals or other units (e.g. health centers, communities) should be studied?

WHO, OR WHAT, WILL BE STUDIED?



Main focus in SRH



WHO, OR WHAT, WILL BE STUDIED? → SAMPLING

Table 3.1 Sampling approaches

Approach	Purpose	When should they be used ?
1. Probability sampling	Representativeness	When a sampling frame exists, and generalizability is a prime consideration
1a. Simple random sample	Generalization from the sample to the population it represents	When it is logistically possible to do fieldwork; subgroups of interest are sufficiently large
1b. Stratified random sample	Increases confidence about representation of important subgroups; and increases sampling efficiency	When it is possible to generate sample frames for important segments of the population; allows for oversampling of small subgroups of interest
1c. Cluster random sample	To reduce logistical costs of doing the fieldwork	When a simple random sample would be too costly
2. Location sampling (venue based)	To reach people with behaviour of interest who congregate at specific places	When there is no sampling frame for probability sampling; when risky practices are concentrated in specific locations
2a. Time–location sampling	To reach different subgroups of people with behaviour of interest who congregate at different times during the day	When there is no sampling frame for probability sampling; when location is the sampling unit
3. Snowball sampling (chain referral)	To identify cases of interest from people who know other people who have the experience/exposure under study	When a behaviour/exposure is rare and/or not easily identifiable from a sampling frame; when people with the same exposure/outcome are in some way networked
3a. Respondent-driven sampling	To identify people of a network	When we want to reduce the bias in snowball sample
4. Purposive sampling	To select “information-rich” cases most likely to illuminate the subject of interest	When doing in-depth research where representation is not the prime concern
5. Lot quality assurance sampling	Monitoring levels of coverage	When it suffices to know whether a certain predetermined level of coverage has been reached

HOW WILL INFORMATION BE COLLECTED?

Wide range of qualitative and quantitative tools can be used (& combined)...

- ***Qualitative data collection precedes the quantitative phase, and is used to sharpen quantitative instruments and identify appropriate local language for the instruments.***
 - This strategy is very common, but the qualitative phase risks being superficial, and unreported;
- ***Qualitative studies follow quantitative data collection, to seek explanation and understanding of the quantitative results.***
 - This combination may take several forms: for instance, a survey may be used to identify cases of particular interest, which are then followed up for more intensive investigation. Alternatively, a survey may reveal unexpected patterns that stimulate an unplanned additional qualitative phase to seek explanations.

WHERE WILL INFORMATION BE COLLECTED?

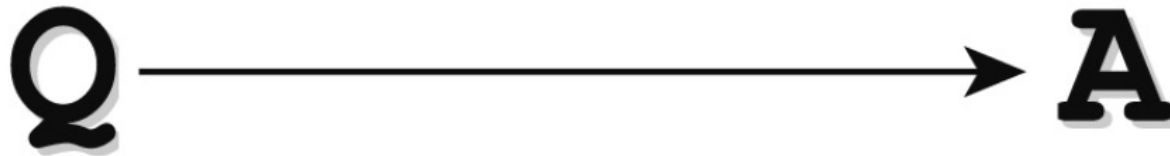
- Choice of geographical scale depends on the research objective and on the funding available
- Many social science investigations are performed at the community level (at home but also at health centers/ the hospital)
- Ensure a reasonable degree of privacy
- Be aware of potential unwillingness to participate in a long interviews

TIME SPAN FOR COLLECTING INFORMATION

Prospective design	Single cross-sectional design
Repeated measures collected during the study (e.g. in obstetrics - pregnant women followed up until delivery)	Information is gathered at one point in time
Advantages: detect changes over time, avoidance of long recall periods, opportunity to collect data by distributing topics among several separate interviews	Advantages: cheaper, logistically/analytically less complex, quicker to complete, valid cross-sectional picture
Disadvantages: cost, long data-collection phase, problems of sample attrition due to follow-up losses, modified attitudes of respondents due to repeated interviewing, complicated processing/analysis of data	Disadvantages: lack ability to analyze process or change, more vulnerable to rationalization

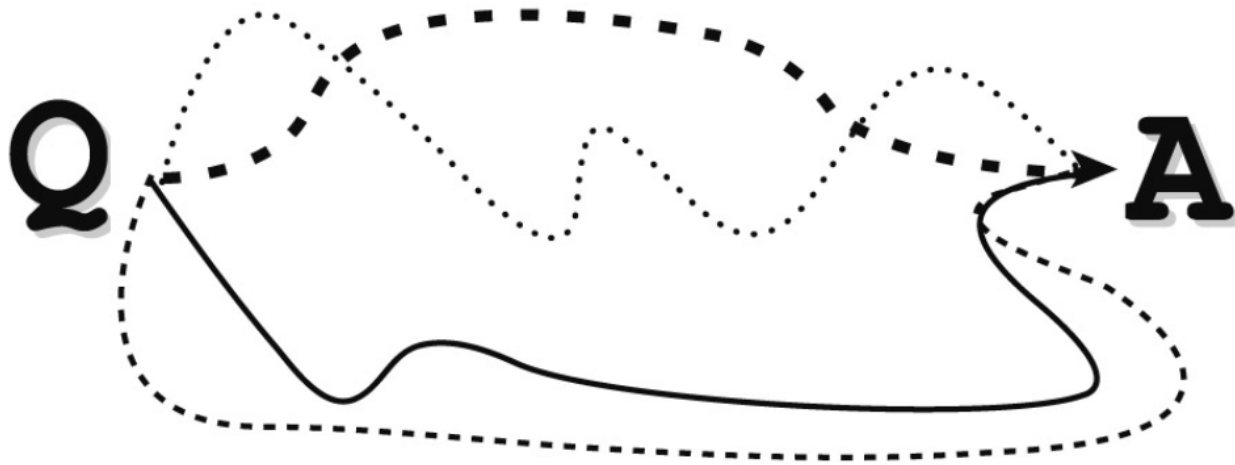
Data collection and analysis

FROM QUESTIONS TO ANSWERS – THE PATH



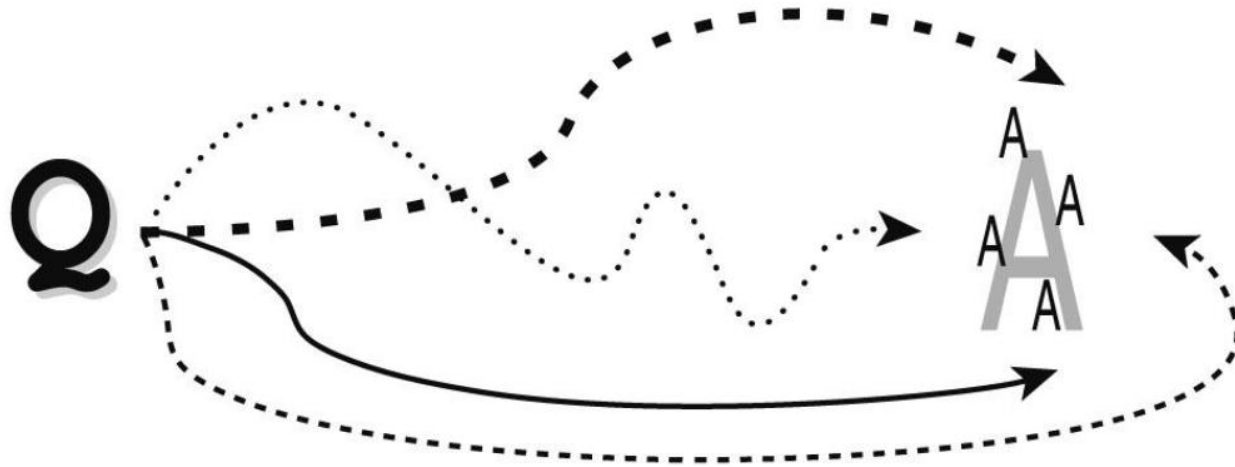
O'Leary, Z., 2004

FROM QUESTIONS TO ANSWERS – MULTIPLE PATHS



O'Leary, Z., 2004

FROM QUESTIONS TO ANSWERS – PATHS AND PERSPECTIVE



Who we are and what we do can influence how we see and what we find

O'Leary, Z., 2004

METHODS OF DATA COLLECTION & ANALYSIS

Problem	Approach	Research technique
To obtain reliable information under controlled conditions	Test people in a laboratory	Laboratory experiment, simulation
To find out how people behave in public	Watch them	Natural observation
To find out how people behave in private	Ask them to keep diaries	Personal documents
To learn what people think	Ask them	Interview, questionnaire, attitude scale
To find out where people go	Chart their movements	Behavioural mapping, trace measures
To identify personality traits or assess mental abilities	Administer a standardized test	Psychological testing
To identify trends in verbal material	Systematic tabulation	Content analysis
To understand an unusual event	Detailed and lengthy investigation	Case-study

Sommers R, Sommers BB. *A practical guide to behavioral research*, 2nd ed. New York, Oxford University Press, 1986:8.

TOOLS AND TECHNIQUES

- Structured interview surveys
- Self-completion methods
- In-depth individual interviews
- Focus-group discussions
- Structured qualitative methods
- Observational methods
- Health-facility records
- Mapping health facilities and services

TOOLS AND TECHNIQUES

- Structured interview surveys
- **Self-completion methods/ diaries**
 - Advantages: avoids embarrassment of face-to-face talks, can guarantee anonymity
 - Disadvantages: little or no explanation; requires literacy
 - Questionnaires should be short, simple, and very easy to follow
 - Useful in collecting data on sensitive topics, e.g. sexual behavior, abortion etc.
- In-depth individual interviews
- Focus-group discussions
- Structured qualitative methods
- Observational methods
- Health-facility records
- Mapping health facilities and services

Box 4.2 Diaries versus questionnaires: sexual behaviour of Gambian sex workers

The occupational behaviour of Gambian female sex workers was investigated by examining the proportion of sexual contacts between sex workers and their clients in which a condom was used. The factors influencing condom use among these groups were also determined. Several different social science methods were used in this study, including a questionnaire, personal interviews, observation, informal conversations, and diaries of sexual contact.

First, a questionnaire was given to 181 sex workers, asking about their work – for example, number of clients, use of condoms. Sexual-contact diaries were later introduced. Fieldworkers visited sex workers daily and compiled diaries for them, in which they recorded the type of sexual contact (with client or boyfriend), the price paid, and whether a condom was used. This technique was used to record 24 000 sexual contacts over a 14-month period.

To cross-check the diaries, fieldworkers waited outside the sex workers' rooms at night and attempted to interview all clients. The men were asked to answer a short anonymous questionnaire, including whether they had used a condom and how much they had paid.

Results showed that in the initial questionnaire, sex workers tended to exaggerate their numbers of clients and that the sexual-contact diaries gave a more accurate picture of their activities. Diaries showed that condom use varied according to the type of partner: 84% with clients versus 4% with regular boyfriends. Condom use decreased from 91% with the first client of the evening to 37% with the tenth client. Condoms were used more often when clients paid higher charges and when clients were in high-class bars. Clients reported lower condom use than the sex workers did in their diaries.

These results have been used subsequently by the Gambian Government and World Health Organization (WHO) projects as background information for their sexually transmitted infection (STI) control programme. This programme includes free condom distribution and health-education campaigns.

Source: (4, 5)

TOOLS AND TECHNIQUES

- Structured interview surveys
- Self-completion methods
- In-depth individual interviews
- Focus-group discussions
- Structured qualitative methods
- **Observational methods**
 - www.youtube.com/watch?time_continue=14&v=ubNF9QNEQLA
- Health-facility records
- Mapping health facilities and services

OBSERVATION

Extract from a structured observation form to assess quality of care in sexually transmitted infection diagnosis/treatment

Identity number

HEALTH FACILITY SURVEY
OBSERVATION

Date

COMPLETE THIS SECTION BEFORE OBSERVATION:

Observer's code

Facility number

Health-care provider (HCP) code

Observation number

Profession of HCP (nurse = 1; doctor = 2)

Sex of HCP (male = 1; female = 2)

Patient characteristics

1. Sex (male = 1; female = 2)

2. Age (less than 30 years = 1; 30 or over = 2)

3. Marital status (married = 1; other = 2)

4. Other relevant circumstances relating to last sexual contacts
(e.g. prostitute, truck driver, victim of assault)
.....

5. Presenting STI complaint

Observation

6. Are the following issues addressed:

Nature of present symptoms? Y N

Onset or duration of symptoms? Y N

History of recent sexual contacts? Y N

7. Are patient's genitals fully exposed, with female patient lying down? Y N

8. Are examination gloves used? Y N

9. Are the external genitalia thoroughly examined for discharge and lesions, i.e.
FOR UNCIRCUMCISED MEN, is the foreskin retracted?
FOR WOMEN, are labia separated and inspected? Y N

(1 of 4 pages of observation checklist) Source: (12)

ANALYSIS AND INTERPRETATION

- Quantitative data
 - Statistical analysis can be conducted using software
 - E.g. STATA, Epi Info, SAS, SPSS, etc.
 - Freeware, e.g.: R
- Qualitative data
 - Content analysis
 - E.g. MaxQDA, Atlas.ti, Nvivo, etc.
 - Freeware, e.g.: FreeQDA

Planning and implementation

PREPARATION OF A RESEARCH PROPOSAL

Item	Intervals of time																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Design qualitative topic guides	x																	
Train qualitative interviewers	x																	
Conduct focus-group discussion		x																
Conduct in-depth interviews		x	x															
Transcribe qualitative data		x	x	x														
Analyse qualitative data			x	x	x	x												
Design questionnaire					x													
Recruit interviewers					x													
Train interviewers					x													
Conduct pilot project						x												
Collect data							x	x	x	x	x							
Enter data								x	x	x	x	x						
Analyse data											x	x	x	x	x			
Write papers/ disseminate data														x	x	x	x	x

...or use a Gantt chart

RESEARCH BUDGETING

Budget categories	Year 1 costs ^a (12 months)	Year 2 costs ^a (12 months)	Total costs ^a
A. Labour costs			
Principal investigator – 1 × 13 months (not charged to study)	—	—	—
Qualitative researcher – 1 × 14 000 per month × 6 months)	14 000	56 000	70 000
Fieldworkers – 15 × 300 per day × 20 days	—	90 000	90 000
Supervisors – 2 × 450 per day × 60 days	—	54 000	54 000
Entry clerk – 2 × 400 per day × 6 months	4000	48 000	48 000
Secretary – 0.5 × 8000 per month × 6 months	—	20 000	24 000
B. Travel			
Pilot study	20 000	—	20 000
Per diem and local travel for fieldworkers – 22 persons × 100 per day × 40 days	—	132 000	132 000
C. Consumables			
Printing/questionnaires	—	6300	6300
Administrative supplies	1700	13 000	14 700
Computer software	—	6000	6000
D. Equipment			
One laptop computer and printer (not charged to study)	—	—	—
E. Dissemination			
Presentation to stakeholders (60 people)	—	700	700
Communication/ mailing reports	2000	40 000	42 000
F. Miscellaneous			
TOTAL	42 700	471 000	513 700

^a Exchange rate: US\$ 1= 25 units of local currency.

LOGICAL FRAMEWORK

	Intervention logic (as planned)	Indicators of achievement (as planned)	Indicator: actual status as at date	Verification (as planned)	Verification: actual status as at date	Deviations & comments	Assumptions	Assumptions (changed)
Overall objective	<i>The broad development impact. To what does the project contribute? (Impact)</i>	<i>What are the key indicators related to the overall objective? (Impact)</i>		<i>Sources of information and methods used to collect and report it (including who and when/how frequently)</i>			<i>No assumptions for the overall objective!</i>	
Specific objectives	<i>What are the specific objectives of the project and how will they contribute to the achievement of the overall objective?</i>	<i>Indicators that demonstrate that the specific objectives have been achieved.</i>		<i>Sources of information and methods used to collect and report it (including who and when/how frequently)</i>			<i>Which factors and conditions outside the project's responsibility are necessary to achieve the specific objectives (external factors and conditions)?</i>	
Expected results	<i>What are the expected results that will lead to the achievement of the specific objectives?</i>	<i>Indicators to measure whether and to what extent the expected results have been achieved.</i>		<i>Sources of information and methods used to collect and report it (including who and when/how frequently)</i>			<i>Which factors and conditions outside the project's responsibility are necessary to achieve the expected results (external factors and conditions)?</i>	
Activities	<i>Which activities will be implemented in order to achieve the respective results? Ad expected result 1 1.1. 1.2. Ad expected result 2.....</i>	<i>No indicators for the activities!</i>						

DISSEMINATION OF RESULTS

- Continuous reporting is key
- Use templates if provided
- Policy makers should receive research briefs that include principal findings of the study in a clear, and easily understandable form - together with practical recommendations.
- Sponsors might require a final report: it contains more details or information than do articles published in scientific journals.
- Disseminate the study's results also among the participating staff
- Publication of key findings in a scientific journal is highly desirable
- Present your findings at conferences
- Use social media to spread your publication news

SOURCES & FURTHER READINGS

- Collumbien, M., Busza, J., Cleland, J. & Campbell, O., 2012. Social science methods for research on sexual and reproductive health. Geneva: World Health Organization.
See: http://apps.who.int/iris/bitstream/10665/44805/1/9789241503112_eng.pdf
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THANK YOU

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