

# From Deep Hanging Out to Big Data

## Ethnographic methods for qualitative research

**Northeastern University CCIS - IS 4300 – Human-Computer Interaction**

**Lecture #11, Guest Lecturer Dr. Barbara Barry**

**Teaching Assistant, Lazlo Ring**

**11/5/2012**

# Quals & Quants: Who knows how?

	<b>Qualitative</b>	<b>Quantitative</b>
<b><i>Philosophy</i></b>	Phenomenology	Positivism
<b><i>Goal</i></b>	Understand, meaning	Predication/Tests
<b><i>Focus</i></b>	Quality (features)	Quantity (how much, numbers)
<b><i>Method</i></b>	Ethnography/Action Research	Experiments/Correlations
<b><i>Data Collection</i></b>	Interviews, observation, documents, artifacts	Questionnaire, scales, tests, inventories
<b><i>Research Design</i></b>	Flexible, emerging	Structured, predetermined
<b><i>Sample</i></b>	Small, purposeful	Large, random, representation
<b><i>Generalization</i></b>	Unique case selection	Generalization
<b><i>Analysis</i></b>	Inductive (by the researchers)	Deductive (by statistical methods)
<b><i>Role of the Researcher</i></b>	Immersed	Detached

\*\*\*\* however\*\*\*\*

# Four Anthropologists



...the ethnographic method...

# In Class Experiments: Today

## ***Design Problem:***

**Creating an application to support people when hurricanes strike**

## ***Design Context:***

**Natural Disasters - preparedness, response and recovery**

## ***Resources:***

**Your own experience, archives of interviews & stories from hurricane survivors, data sets from social media**

## **Goal:**

**Uncover main themes, issues, and establish practice in reflecting on subjectivity**



# Experiment I: Subjectivity and Personal POV

***Design Problem:*** Creating an application that can support people when hurricanes strike

***Design Context:*** Natural Disasters - preparedness, response and recovery

- 1. Write up your own experience of preparing for Hurricane Sandy. Use “think description” (10 minutes)**
- 2. Read each of the descriptions in your group. List points of commonality and difference (Please write list on whiteboard)**
- 3. Discussion**

Inductive coding:  
Finding themes and hypotheses in  
the data

# Task: Deciding between two clinical trials

## Description 1-1

### Cancer rehabilitation study: Yoga-Based Cancer Rehabilitation Program

Phase	Type	Status	Age	Sponsor	Protocol IDs
No phase specified	Behavioral study, Supportive care	Active	18 and over	NCI, Other	#2000-007NCI R03 CA88598-01A1, NCT00179348

#### Summary

The purpose of this study is to find out if a Yoga-Based Cancer Rehabilitation Program can help reduce the physical and emotional side effects of living with cancer or its treatment.

#### Further Study Information

Research on yoga is extensive in both healthy and chronically ill individuals including cardiovascular disease, chronic pain, diabetes, asthma, headache, anxiety and depression. Benefits of yoga include: improved mood, energy, memory, concentration, flexibility, physical fitness, breathing capacity, and decreased pain, blood pressure, and cholesterol. There is paucity of controlled research studies on the effects of yoga for cancer patients. Yoga is an ideal intervention to improve quality of life for patients with cancer because it incorporates elements of relaxation, social support, and exercise, all found to improve quality of life. This randomized-controlled study compares a 12-week yoga intervention to standard care on quality of life among patients with early-stage breast, lung, and colorectal cancer. Quality of life assessments are conducted at baseline, and at one, three, and six month intervals.

## Description 1-2

### Cancer rehabilitation study: Evaluating the Effectiveness of Escitalopram to Prevent Depression in Head and Neck Cancer Patients Receiving Treatment

Phase	Type	Status	Age	Sponsor	Protocol IDs
Phase IV	Supportive care	Active	19 and over	NIMH	R01 MH079420DAHBR 96-BHC, NCT00536172

#### Summary

This study will evaluate the effectiveness of escitalopram to prevent depression in head and neck cancer patients receiving treatment.

#### Further Study Information

Most types of head and neck cancer develop in the lining of cells found within many parts of the head and neck. Each year, more than 40,000 adults are diagnosed with head and neck cancer in the United States. The leading cause of this type of cancer is tobacco use. Common signs and symptoms of head and neck cancer include blood in saliva; frequent nose bleeds; and difficulty chewing, swallowing, or breathing. Effective treatments for head and neck cancer are available if the cancer is found in its early stages. However, treatment is difficult, causing many people to become depressed within 3 months of being diagnosed. Unfortunately, depression can lead to delays in treatment, impair quality of life, and decrease long-term survival. The purpose of this study is to determine whether the use of antidepressant medication initiated prior to starting treatment will prevent the onset of depression during treatment in non-depressed head and neck cancer patients. This study will also determine if escitalopram will maintain quality of life during treatment, improve participation in treatment, decrease delays and premature discontinuation of treatment, and reduce alcohol and tobacco use in patients with head and neck cancer.

All participants will attend an initial screening, followed by eight clinic visits. The first clinic visit will include completion of an interview and brief questionnaires regarding depression, mental and emotional health, alcohol and tobacco use, and quality of life. Participants will then be randomly assigned to receive 16 weeks of the antidepressant escitalopram or a placebo pill. Participants will take 10 mg of their assigned medication every day for the first week and then 20 mg of their assigned medication every day for the remaining 15 weeks. Participants will visit the clinic every 2 weeks during treatment, at which time they will answer questions similar to those asked at the initial visit. Any medication side effects will also be recorded at each visit. Once treatment has been completed, participants will visit the clinic three more times over a period of 12 weeks. Similar questions as those at treatment visits will be asked. Results from this study will be used to assess whether depression is preventable in head and neck cancer patients if antidepressant medication is initiated before treatment begins.

# Text: Interview transcript

A: “Um, it was, I guess, less of a time commitment and I think, you know, it sounded like it could be beneficial. It didn’t have the risks like the other one said that, uh, people, uh, typically could become depressed after three months of being diagnosed.”

Q: Uh, so, what do you think, what what what the what’s the purpose of these two trials, summarize it.”

A: “Uh, the yoga based one is simply just, um, promoting you to be more healthy, uh, be like relaxing and improve your flexibility and just your overall health. Um, the other one is, um, it’s to help you if you have head and neck cancer, um.”

Q: “ So, yeah, that’s true I think both these they try to help you cope with depression, you know, that results from your disease or results from your treatment. You said time commitment, if time commitment was not an issue in this one that they are trying to use an antidepressant would you still prefer yoga or”

A: “Yeah I think I would still prefer the yoga.”

Q:” Yeah, um, do you think there is more risk involved in the one that they are testing the antidepressant or.”

A: “Yeah I think so.”

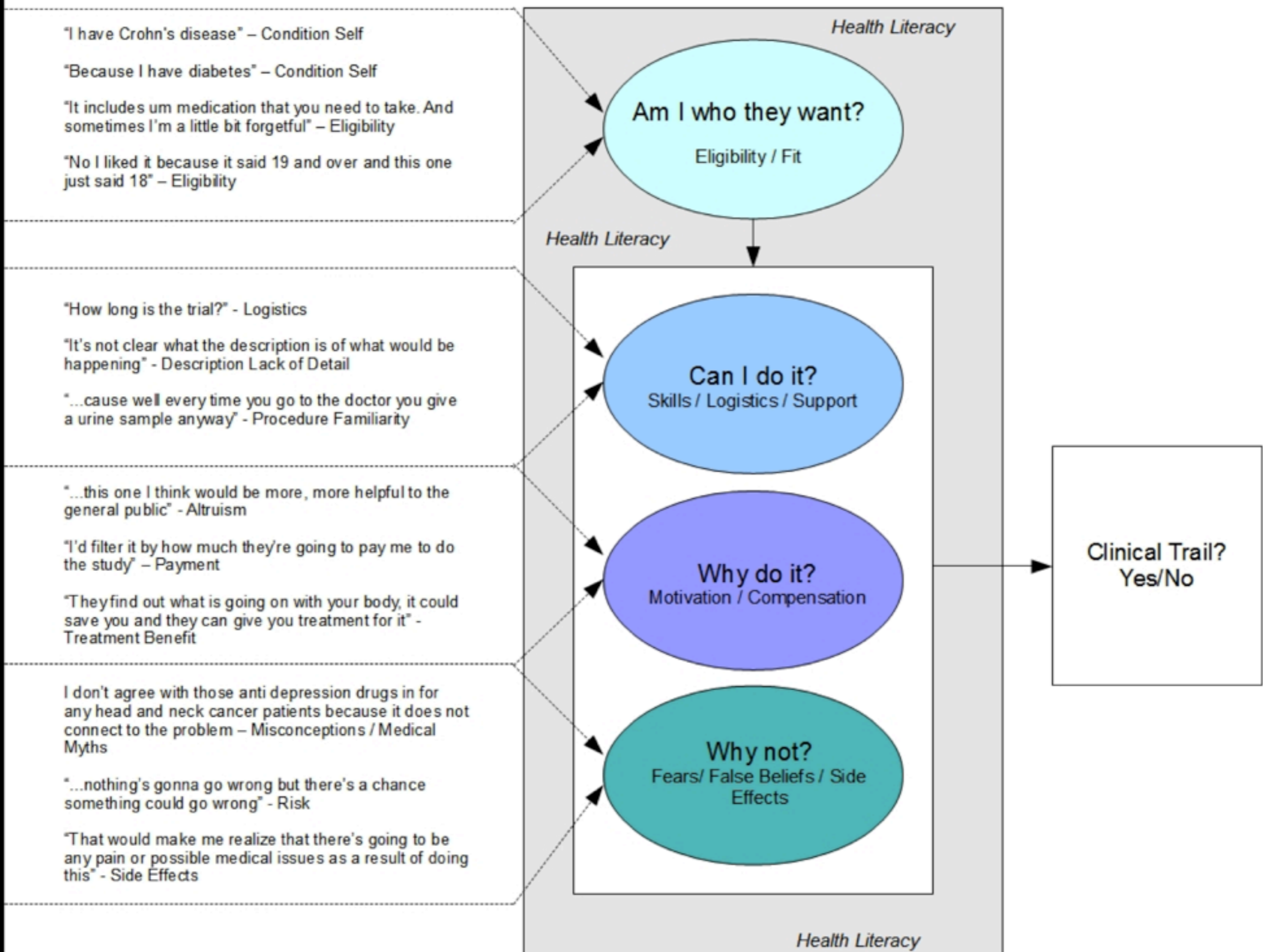
# Exploratory Coding: Tagging phrases with descriptors

I mean I have I personally I have asthma so they gonna teach me how to do different breathing techniques things like this.	Treatment Benefit	Existing Condition Self
this one I think would be more, more helpful to the general public.”	Altruism	
The reason I picked this one is because there’s a new wide scattering technology	Curiosity / Novelty	
I’m just saying that I would prefer to use that treatment than the medicine and if that didn’t work of course I would go to the medicine but I will stick to the electrical stimulation, sounds more interesting	Curiosity / Novelty	Medical / CAM
Can go to your brain I don’t know I think I would ughh and then the needle	Procedure Perceived Discomfort	Procedure Fear
I don’t I don’t agree with those anti depression drugs in for any head and neck cancer patients because it does not connect to the problem	Medication (or not)	

# Themes

Existing Condition Self	43%
Invasiveness	38%
Medication	38%
Procedure Familiarity	19%
Description Detail	14%
Existing Condition Others	10%
Study Duration	10%
Medical vs CAM	10%
Description Clarity	10%
Study Location	10%
Misconceptions / Medical Myths	10%
Procedure Discomfort	10%
Treatment Benefit	5%
Risk	5%
Location in the Body	5%
Side Effects	5%
Curiosity / Novelty	5%
Eligibility	5%
Altruism	0%
Word Scan	0%

Table 2: Favored themes (top 3) by all participants



# Experiment 2: Coding texts

1. Take the following three texts linked below, parse them and code phrases in an Table or Excel spread sheet.

2. For each story do some memoing in the margins (this will be used during discussion)

3. List your top 5 thematic categories from your coded phrases - be prepared to read one example phrase from each

4. Discussion

<http://www.hurricanearchive.org/items/show/45296>

<http://www.hurricanearchive.org/items/show/45277>

<http://www.hurricanearchive.org/items/show/45248>

Nicely done!