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JOHNS HOPKINS  
BLOOMBERG  
SCHOOL *of* PUBLIC HEALTH

# Health Belief Model, Social Learning Theory

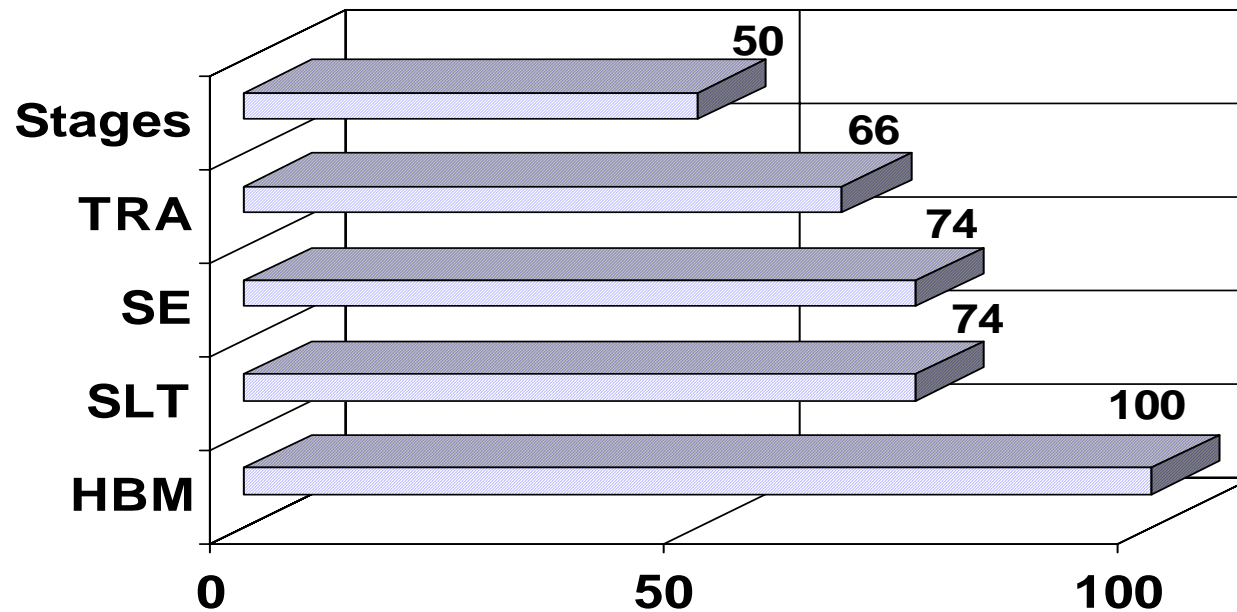
**William R. Brieger, MPH, CHES, DrPH**  
**Johns Hopkins University**

# Section A

## *Theories in Practice*

# Theories in Practice

## Common Models and Theories *In Health Education Research*



# The Health Belief Model

## ✦ Basic components

- A recommended (health) action
- Perception of (disease) threat
  - Susceptibility
  - Seriousness

# The Health Belief Model

## ✦ Basic components

- Perceived benefits/constraints to that action
  - Perceived efficacy
  - Perceived costs
- Social and structural modifiers
- Cues to action

# The Health Belief Model

## ✦ Background issues

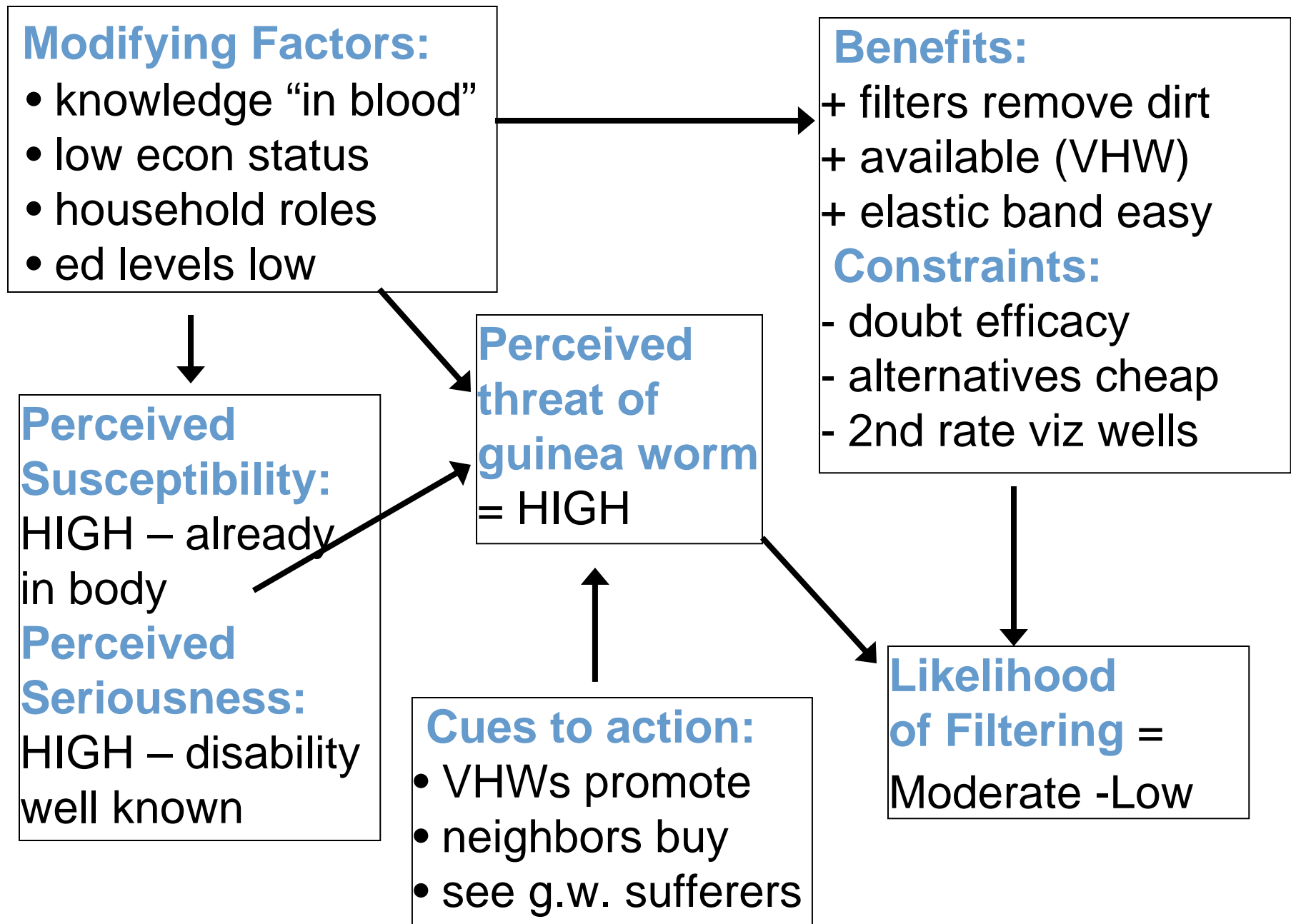
- Draws heavily on Lewin's force field
- Value expectancies inherent in benefit-constraint analysis
- Decision making paradigm—Some element of rationality, but

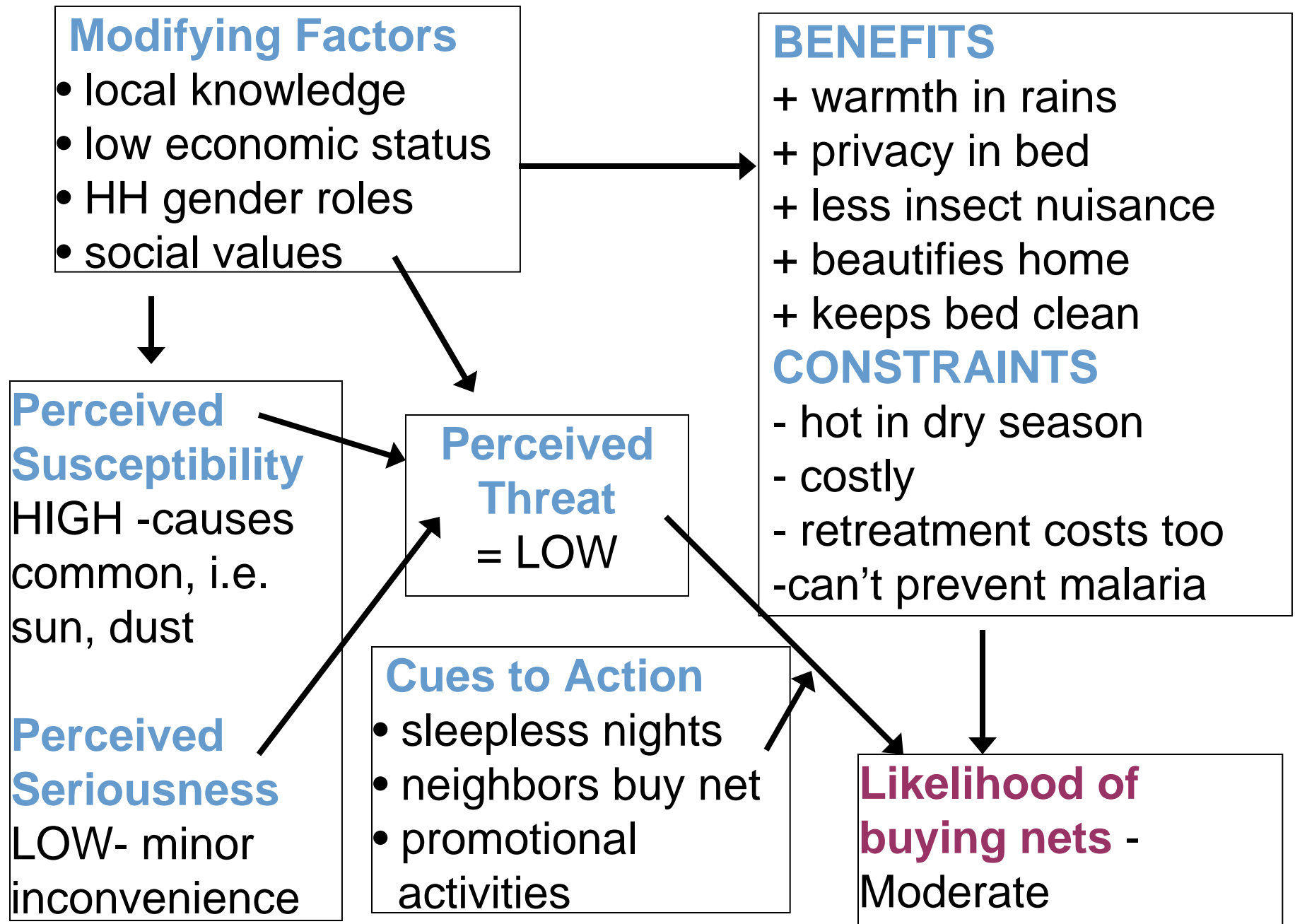
# The Health Belief Model

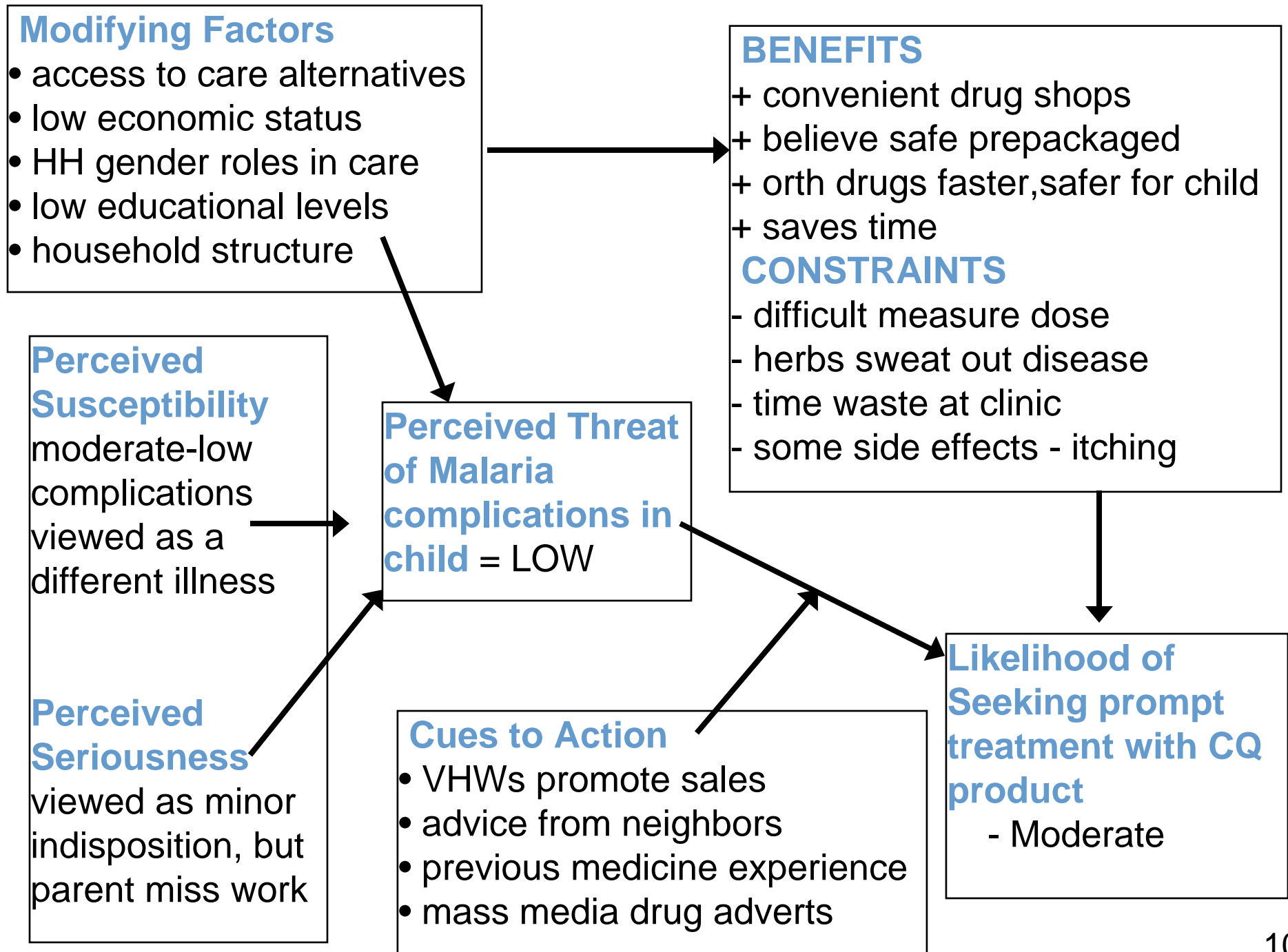
## ✦ Background issues

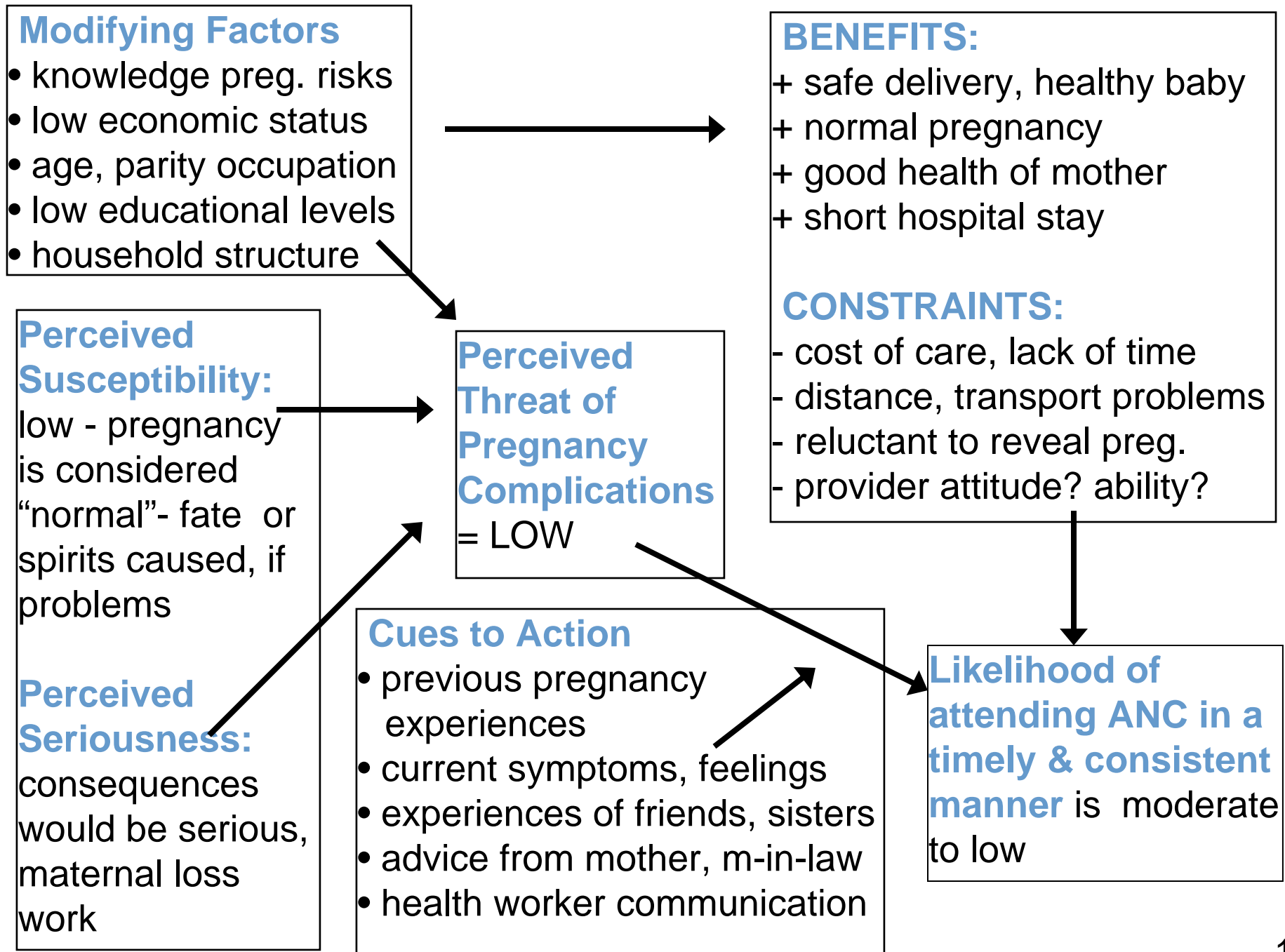
- Key word is “perception”
- Disease threat central concept
  - Need to add cultural aspect of disease perception: What is disease? What is illness?











# Note

## *Role of Explanatory in Constructing Theoretical*

### ✦ Beliefs about pregnancy

- Normal, keeps it hidden = Don't register ANC early

### ✦ Beliefs about malaria

- Caused by sun, heat = Nets won't prevent

# Note

## *Role of Explanatory in Constructing Theoretical*

### ✦ Beliefs about medicines

- Good medicines make one sweat out the disease
- Modern medicines cause no sweat and have side effects

### ✦ Beliefs about guinea worm

- In the blood = Filters can't prevent, remove

# HBM Lessons

- ✦ Threat of guinea worm high with both high susceptibility and seriousness
  - But people do not perceive efficacy of filtering
  - Therefore, likelihood of action low

# HBM Lessons

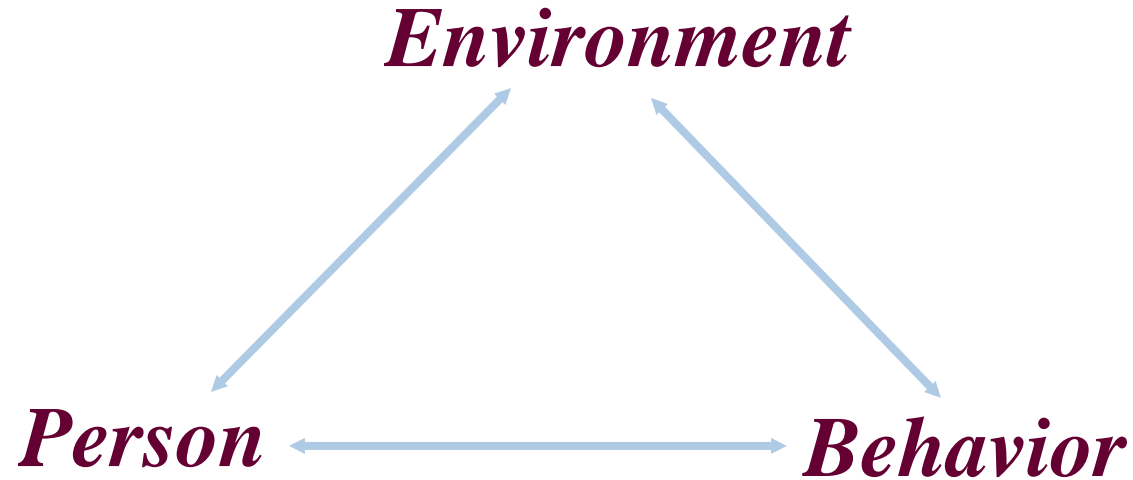
- ✦ Threat of complications during pregnancy seen as low, as few believe they are susceptible
  - But benefits seen in attending ANC like immunizations, drugs, social
  - Therefore, likelihood of action moderate to high



# Section B

*Social Learning / Cognitive Theory*

# Social Learning/Cognitive Theory



# Social Learning/Cognitive Theory: Basic Components

- ✦ Reciprocal determinism
- ✦ Environmental context
  - Social, economic, geographical, political
- ✦ The individual
  - Personal and cognitive characteristics

# Social Learning/Cognitive Theory: Basic Components

- ✦ The behavior
  - Nature and dimensions
- ✦ Self-efficacy
- ✦ Value expectancies

# Details on Self-Efficacy

- ✦ The state of belief in one's ability is a good predictor of motivation and behavior
- ✦ The person's confidence in performing a particular behavior
- ✦ Implications
  - Approach behavior change in small steps
  - Seek specificity about the change sought

# Self-Efficacy Beliefs

- ✦ Self-efficacy beliefs can be enhanced through:
  - Performance mastery
  - Modeling
  - Reinterpretation of physiological symptoms, and
  - Social persuasion (information, encouragement)

# Self-Efficacy

- ✦ Enhanced self-efficacy leads to improved behaviors, motivation, thinking patterns, and emotional well being
- ✦ Not concerned with the skills one has but judgments of what one can do with skills one possesses
- ✦ Also enhances perceptions of well being as in cases of chronic illness

# The Component Processes

## *Underlying Observational Learning*

### ✦ Attention

- Including modeled events (distinctiveness, effective valence, complexity, prevalence, and functional value) and observer characteristics (sensory capacities, arousal level, perceptual set, and past reinforcement)



# The Component Processes

## *Underlying Observational Learning*

### ✦ Retention

- Including symbolic coding, cognitive organization, symbolic rehearsal, and motor rehearsal

### ✦ Motor reproduction

- Including physical capabilities, self-observation of reproduction, and accuracy of feedback

# The Component Processes

## *Underlying Observational Learning*

### ✦ Motivation

- Including external, vicarious, and self-reinforcement

# Motorcycle Drivers

- ✦ Motorcycle taxis are a main form of transportation
- ✦ Drivers don't wear helmets; speed to make more trips; carry extra loads, etc.



Motorcycle  
taxi drivers

## *ENVIRONMENT*

- drivers code of conduct
- passengers demand
- regulations/enforcement
- road conditions
- community beliefs acid.
- econ conditions

## *Observational Learning*

other drivers,  
older brothers

## *PERSON*

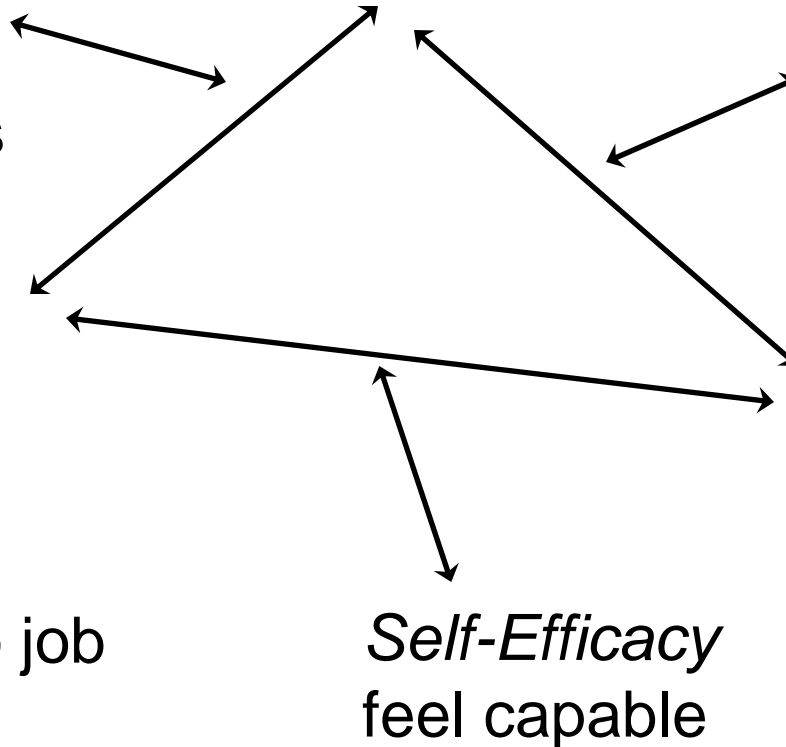
- younger age
- risk taker
- gender-male
- educated, no job

## *Value*

*Expectancies*  
save life, waste  
time/money

## *BEHAVIOR*

safe driving:  
proper speed,  
stopping, etc.





*Alcohol and women*

Women  
drinking  
alcohol

## *ENVIRONMENT*

- social norms frown on women who drink
- available cheaply in neighborhood, discretely
- free flow of drinks at ceremonies on weekend

## *Value*

### *Expectancies*

less stress,  
more friends,  
but bad  
reputation, hurt  
children

## *Observational Learning*

friends, spouse,  
boyfriends

## *PERSON*

age, marital status,  
being a mother,  
econ status/occu.  
= purchase power,  
religion

*Self-Efficacy*  
feel capable  
refusing or  
moderate

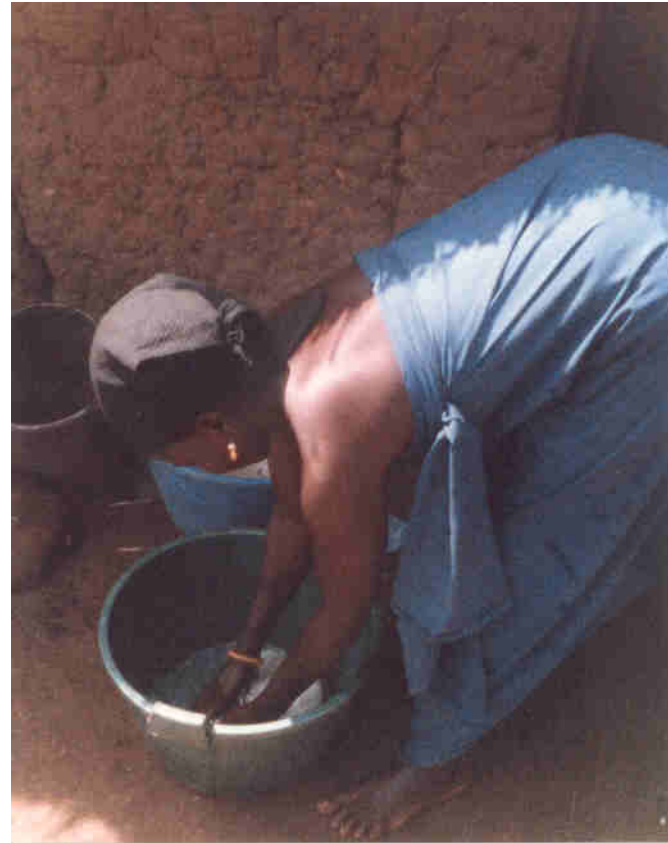
## *BEHAVIOR*

refuse drinks or  
take moderate  
amounts

# Women Are Usually Responsible for Collecting and Filtering Water



*Fitting the filter on the water pot*



*Washing filter when it's dirty*

Filter Use  
for Guinea  
Worm

## *ENVIRONMENT*

- social roles, women's domestic roles
- perceptions about water quality and disease causes
- concepts of filtering/sieving
- water container designs

*Observational Learning*

VHW, watch neighbors

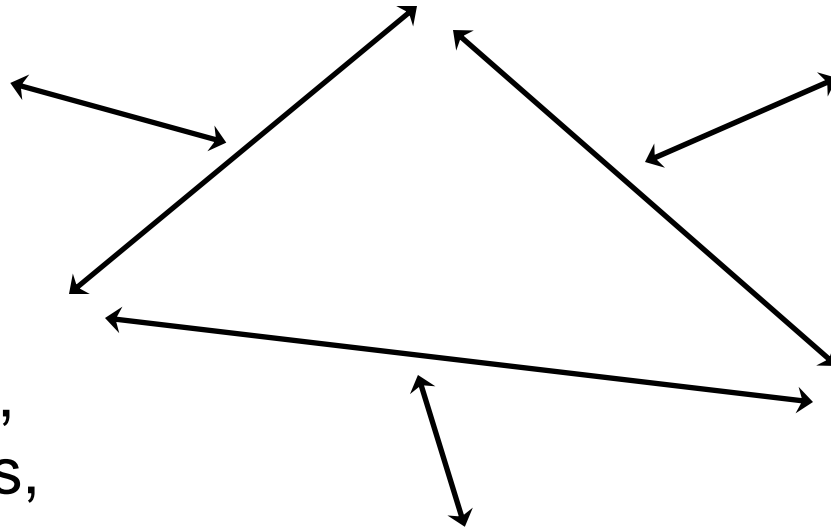
## *PERSON*

wife, mother,  
low ed status,  
occupation,  
passive within  
extended family

*Value Expectancies*  
removes dirt,  
but can't  
prevent gw

*BEHAVIOR*  
filtering water  
each time  
collect from  
pond

*Self-Efficacy*  
feel capable of  
sieving





# Breastfeeding Is Normal in the Villages, But ...

- ✦ Colostrum is suspected
- ✦ People believe babies, like other people, need water
- ✦ Herbal teas are given to prevent problems



Source: The Basics

Exclusive  
Breast  
Feeding

*ENVIRONMENT*

- breastfeeding normal
- economic austerity
- extended family house
- formula advertised
- community beliefs about herbs, baby's needs

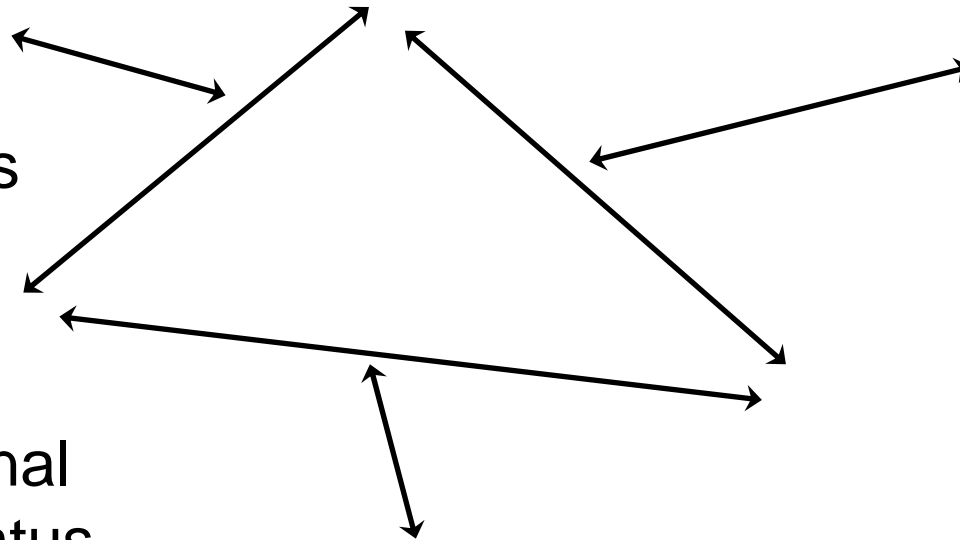
*Value Expectancies*  
safe, clean,  
but mother  
weak, baby  
thirsty

*Observational Learning*  
sisters,  
mothers,  
friends, nurses

*PERSON*  
age, educational  
level, econ status  
(afford alternative),  
assertive or passive

*BEHAVIOUR*  
only give breast  
milk first 4  
months of life

*Self-Efficacy*  
feel capable to BF but  
not sustained EBF



# Lessons

- ✦ **Different configuration of components for each situation**
  - EBF—unlikely because
    - Doubt ability to sustain, not enough food for oneself
    - Doubt will satisfy baby
    - No role models

# Lessons

- ✦ **Different configuration of components for each situation**
  - Motorcycle driver's safety—Might try
    - Feel capable, but
    - Costs outweigh benefits
    - Observe: Safer drivers are older, already established

# Lessons

- ✦ **Different configuration of components for each situation**
  - Filtering to prevent guinea worm—  
doubts outweigh confidence
    - Feel confident can filter
    - Doubt filtering will prevent, takes extra time