



# **Influencing Barrier Acceptability and Use among Women Living with HIV: A Conceptual Framework**

**MICROBICIDES 2002**

Stephen M. Weiss, Ph.D., MPH

University of Miami School of Medicine

Deborah L. Jones, Ph.D.

Barry University

Miami, Florida

# Health Behavior Models

---

- ❖ Health Belief Model
- ❖ Theory of Reasoned Action
- ❖ Social Cognitive Theory
- ❖ Stages of Change Model



# Theory of Reasoned Action

- ❖ Knowledge
- ❖ Attitudes
- ❖ Beliefs
- ❖ Intentions → behaviors
- ❖ Social/ cultural norms



# Social Cognitive Theory

- ❖ Cognitive-behavioral skills training
- ❖ Social Modelling
- ❖ Coping
- ❖ Self efficacy
- ❖ Social norms



# Conceptual Model

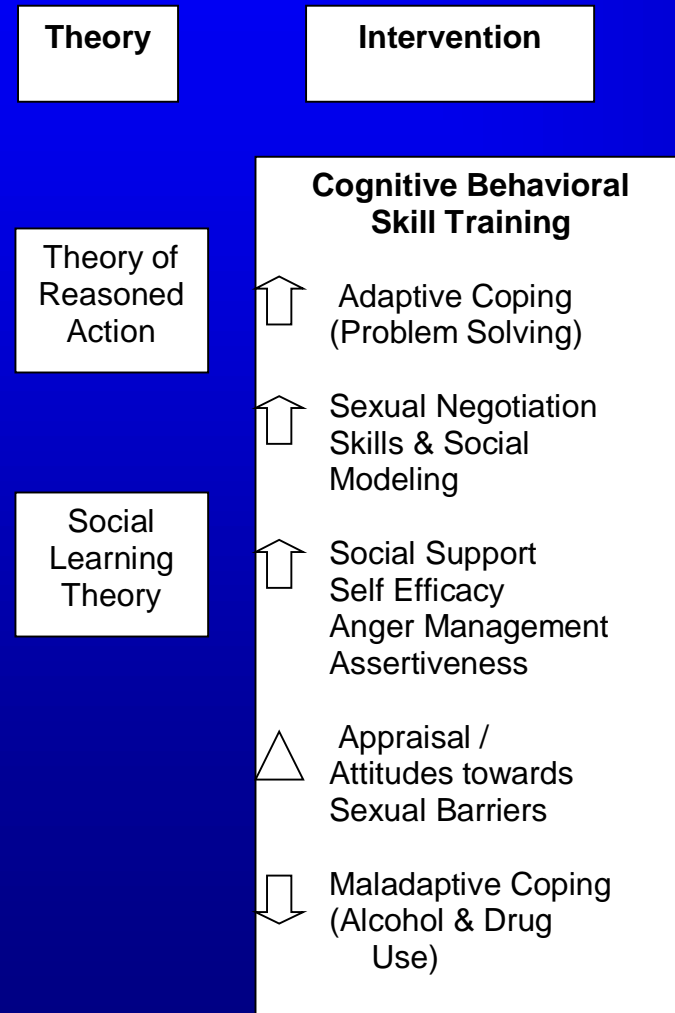
Theory

Theory of  
Reasoned  
Action

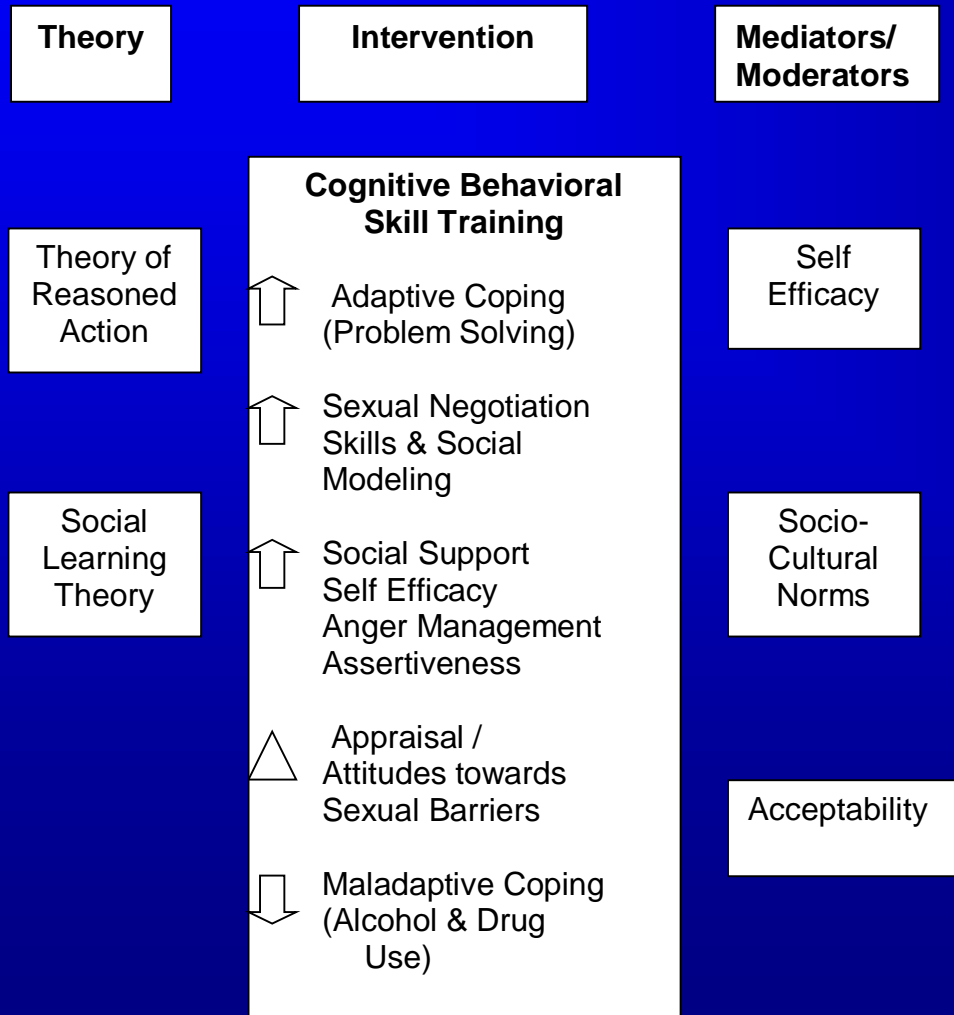
Social  
Cognitive  
Theory



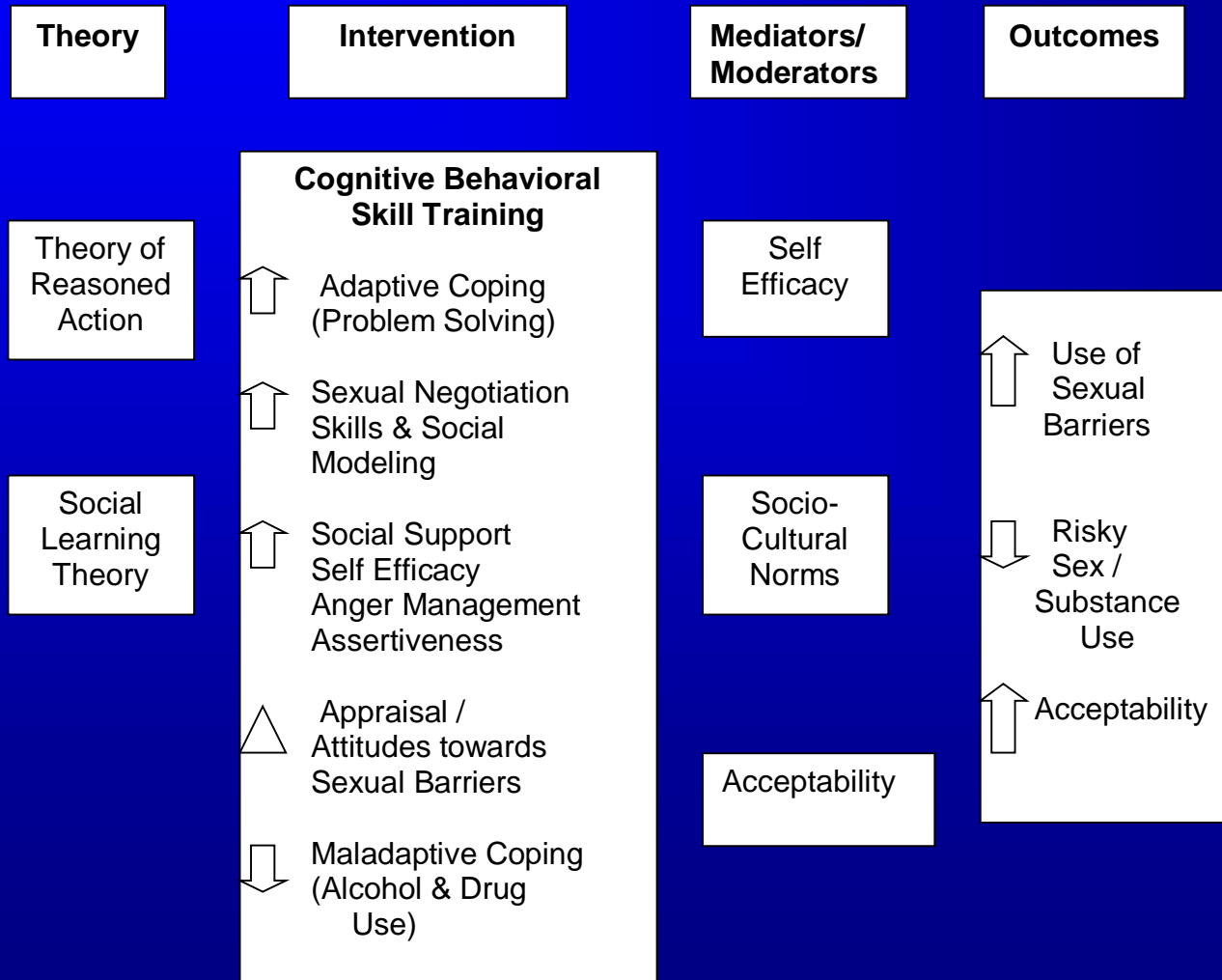
# Conceptual Model



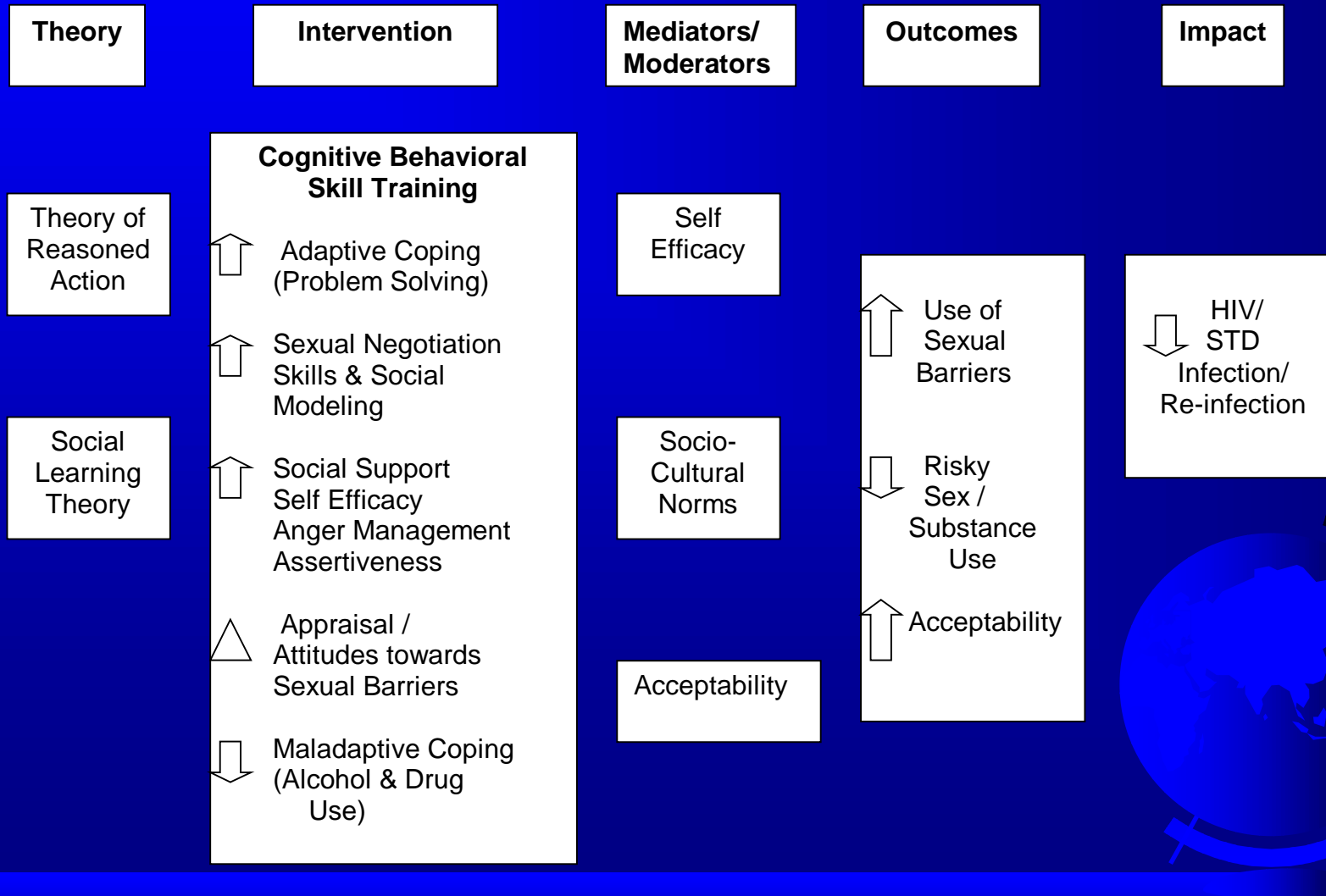
# Conceptual Model



# Conceptual Model



# Conceptual Model



# Pilot Studies --- Development of the Safer Sex Intervention

## ❖ Studies

- Miami Pilot Study 1:
  - ◆ The Couples Study (RO1 DA09520)
- Miami Pilot Study 2:
  - ◆ The SMART/EST Women's Project (RO1 MH55463)
- Acceptability of Female Controlled Barrier Methods: Zambia Pilot
  - ◆ SMART/EST Women's Project Supplement



# Use of Female Controlled Microbicides in HIV Risk Reduction

Robert Malow, David Ziskind, Deborah Jones  
University of Miami School of Medicine

**Sample:** 41 minority women

**Intervention:** 3- Session Groups

**Barriers:** Male & female condoms,  
3 types of N-9 vaginal barriers

**Results:** Increased total protected sexual episode rate (N-9 +/- condoms) from 19% to 60% at 3 month follow-up

AIDS Care 2000

# Zambia

## ❖ Census 2000

– Population: 10.3 million (Lusaka: 1.7 million)

◆ >50% are < 20 years of age

◆ HIV+: 923,000 adults and 87,000 children.

– HIV Prevalence (Age 15 – 49)

◆ 28% urban

◆ 13.6% rural



# Sexual Risk Reduction Among Zambian HIV Positive and Negative Women

(Presented: Society of Behavioral Medicine Conference 2002)

Deborah Jones\*, PhD, Barry University, Stephen M. Weiss, PhD, MPH, Douglas A. Feldman, Ph.D., Mary J. O'Sullivan, MD, University of Miami, Ganapati J. Bhat, MD, Violet Bwalya, University of Zambia.

**Sample:** 147 Zambian HIV+/- Women

**Intervention:** 3-Session Groups; 1 mini-session

**Barriers:** Male & female condoms,  
3 types of N-9 vaginal barriers

**Results:** Increased: trial use of N-9 products (22% to 55%), willingness to use gels (44% - 62%), overall protected sex (“sometime” to “most of the time”;  $F = 4.6, p < .05$ ) at 9 month follow-up in intervention condition.

# Zambia Pilot

## Sample Characteristics

- ❖ Participant Characteristics: No difference between HIV+ and HIV- at baseline
- ❖ HIV+: 56%
- ❖ Age: avg. 27 yrs.
- ❖ Education: avg. 8 yrs.
- ❖ Employed: 24%
- ❖ Couple: 90%
- ❖ Children: 99% (avg. 3)
- ❖ Alcohol problems: 9%

### Partner Characteristics:

- ❖ HIV Status:
  - HIV+ 16%
  - HIV- 16%
  - Don't know 68%
- ❖ May be sexually active outside relationship: 60%
- ❖ May not be using condoms outside home: 14%



# Zambia Pilot

## Sexual Behavior

### Characteristics

#### Baseline

##### Protected Sex

- Microbicides: No experience
- Male Condoms: half the time
- Female Condoms: never - sometimes

#### Post Intervention

##### Protected Sex

- Microbicides: Half the time
- Male Condoms: Most of the time
- Female Condoms: sometimes



# Zambia Pilot Product Preference

- Gel : 40%
- Film: 40%
- Suppository: 20%



# Zambia Pilot- % of Protected Sexual Episodes

- ❖ Among women identified as using barriers “never to sometimes,” the percentage of total protected sex acts in the Group Condition increased in comparison to the Individual Condition ( $F = 4.7_{1,20}$ ,  $p = .04$ )
  - Group: “never” increased to “most of the time”
  - Individual: “never” increased to “sometimes”





# **Barrier Acceptability Among Culturally Diverse HIV+ Women: The NOW Project**

**Miami USA & Lusaka, Zambia**

(Supported by NIH R01MH63630)

PI: Stephen Weiss, Ph.D., MPH

Co-PI: Mary Jo O'Sullivan, MD

Co-Investigators: Ganapati Bhat, MD

Douglas Feldman, Ph.D.

Project Director: Deborah Jones, Ph.D.



# New Opportunities for Women The *NOW* Project

## Study Objectives:

- Assess the acceptability of various sexual barriers, including lubricant products that are potential vehicles for vaginal microbicides.
- Test the efficacy of a cognitive-behavioral sexual risk reduction intervention to increase acceptability as well as decrease risk behaviors.

# The *NOW* Project

- ❖ Sample: 900 sexually active HIV+ women over 18 years of age in Miami and Lusaka
- ❖ Participants are enrolled for one year
- ❖ Participants are randomized to
  - Group (4) or Individual Sessions (4)
- ❖ Over 12 months, participants are given:
  - 3 pelvic exams
  - 3 STD tests
  - 3 assessments (30 – 60 minutes each)



# Summary and Conclusions

- ❖ Product characteristics & preferences change with exposure
- ❖ Exposure to microbicides increases percentage of protected sex acts with no decrease in condom use
- ❖ Female condoms appear more acceptable following multiple (>1) trials

