

Effect of Normative Feedback on College Students' Perceptions of Sexual Behaviors

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Overview

- Problem Overview
- Background
- Study Design and Methods
- Results
- Discussion and Application

Problem Overview

- College students frequently engage in risky sexual behaviors, including:
 - First coitus at a young age
 - Multiple sexual partners
 - Use of drugs and alcohol
 - Not using condoms to protect from sexually transmitted infections (STIs)

Centers for Disease Control, 1997

STI Prevalence

- 19 million new STI cases yearly
- 50% with an STI are college-aged (15-24)
- 50% of all new HIV cases are diagnosed in individuals ages 25 and younger

Centers for Disease Control, 1997, 2004a

Cost and Consequences

- Health
 - Cancer
 - Pelvic inflammatory disease (PID)
 - Infertility (both male and female)
- Economic
 - Prescriptions
 - Hospitalization
 - Doctor visits

Centers for Disease Control, 2004b; Eng & Butler, 1997

Background

- **Social Influence**

- Individuals consider the behaviors and beliefs of their peers in determining their own behaviors and beliefs

- **Social Norm Approach**

- Behaviors are thought to be influenced by perceptions of social norms

- Perception that college students drink a great deal leads to an increase in the behavior

Perkins & Berkowitz, 1986; Baer, Stacy, & Larimer, 1990

Background

- Perceptions of the social norm are often incorrect
- Such misperceptions are thought to contribute to the development and maintenance of risky behaviors
 - Binge Drinking
 - Illicit Drug Use
 - Risky Sexual Behaviors

Perkins & Berkowitz, 1986; Baer, Stacy, & Larimer, 1990

False Consensus Effect (FCE)

- Individuals perceive their own attitudes and behaviors as relatively common
- College students who drink tend to overestimate the number of other college students who drink

Rimal and Real, 2003; Ross, Green, & House, 1977

FCE: IMPLICATION

- Men who engage in risky sexual behaviors tend to perceive these behaviors as common
- Provides a sense of validation and “correctness”

Suls & Wan, 1987; Van de Eijnden et al., 2000

Normative Feedback

- Counteract the FCE by correcting misperceptions
- Alcohol Consumption
 - Normative feedback can reduce drinking behavior among college students
- Sexual Behaviors
 - Normative feedback may be effective in reducing risky sexual behaviors

Chernoff & Davison, 2005; Haines & Spear, 1996; Neighbors et al., 2004

Application to Risky Sexual Behaviors

- ❑ Change perceptions
- ❑ Change behaviors
- ❑ Reduction in STIs
- ❑ New, innovative prevention programs

Study Overview

- Purpose
- Brief Overview
 - Design
 - Method
 - Manipulation

Hypotheses

- Hypothesis 1: At baseline (Time 1) an FCE will be observed for the prevalence estimates of sexual behaviors and will no longer be observed at T2 or T3
- Hypothesis 2: At baseline (Time 1) an FCE will be observed for level of agreement and will no longer be observed at T2 or T3

OVERVIEW

	BASELINE (TIME 1)	TIME 2 <small>(Directly following Normative Feedback- Session 1)</small>	TIME 3 <small>(Approx. 14 days later)</small>
DATA COLLECTED	Questionnaire & Feedback	Questionnaire	Questionnaire
EXPECT FCE	YES	NO	NO

Methods

Session 1

- Health Behavior Survey (T1)
- Math problems set 1
- Introduction to normative feedback
- Math problems set 2
- Health Behavior Survey (T2)

Session 2 (two weeks later)

- Health Behavior Survey (T3)

Health Behavior Questionnaire

- Health Behavior Questionnaire
 - Completed 3 times (baseline, T2, & T3)
 - 41 questions, 5 identification questions
 - Demographics
 - Age
 - Gender
 - Race

Health Behavior Questionnaire

- Sexual behaviors, drinking behaviors, exercise patterns, and smoking behaviors
- Sexual behaviors include:
 - Vaginal sex
 - Anal sex
 - Oral sex
 - Condom use

Manipulation

Normative Feedback Component

- Health Behavior Pamphlet
 - Conservative norms for several health behaviors, including sexual behaviors (vaginal sex, oral sex, and anal sex)
 - Other behaviors include: drinking behaviors, eating habits, and exercise
 - *“Most college students only have 1 or 2 alcoholic beverages when they go out”*

Who's Doing It?

You may think all
your friends are
sexually
active...
But really only 1 in
every 4 are!



A recent nationwide
survey of over 79
Universities and
Colleges found that...

Only 23% of all college
students have engaged in
vaginal intercourse.

AND

4 out of 5 college
students use condoms
when having vaginal sex.

Facts

- Only 14% of all college students have performed oral sex.
- Only 16% of all college students have received oral sex.
- Only 11% of college students have engaged in anal sex.



Results

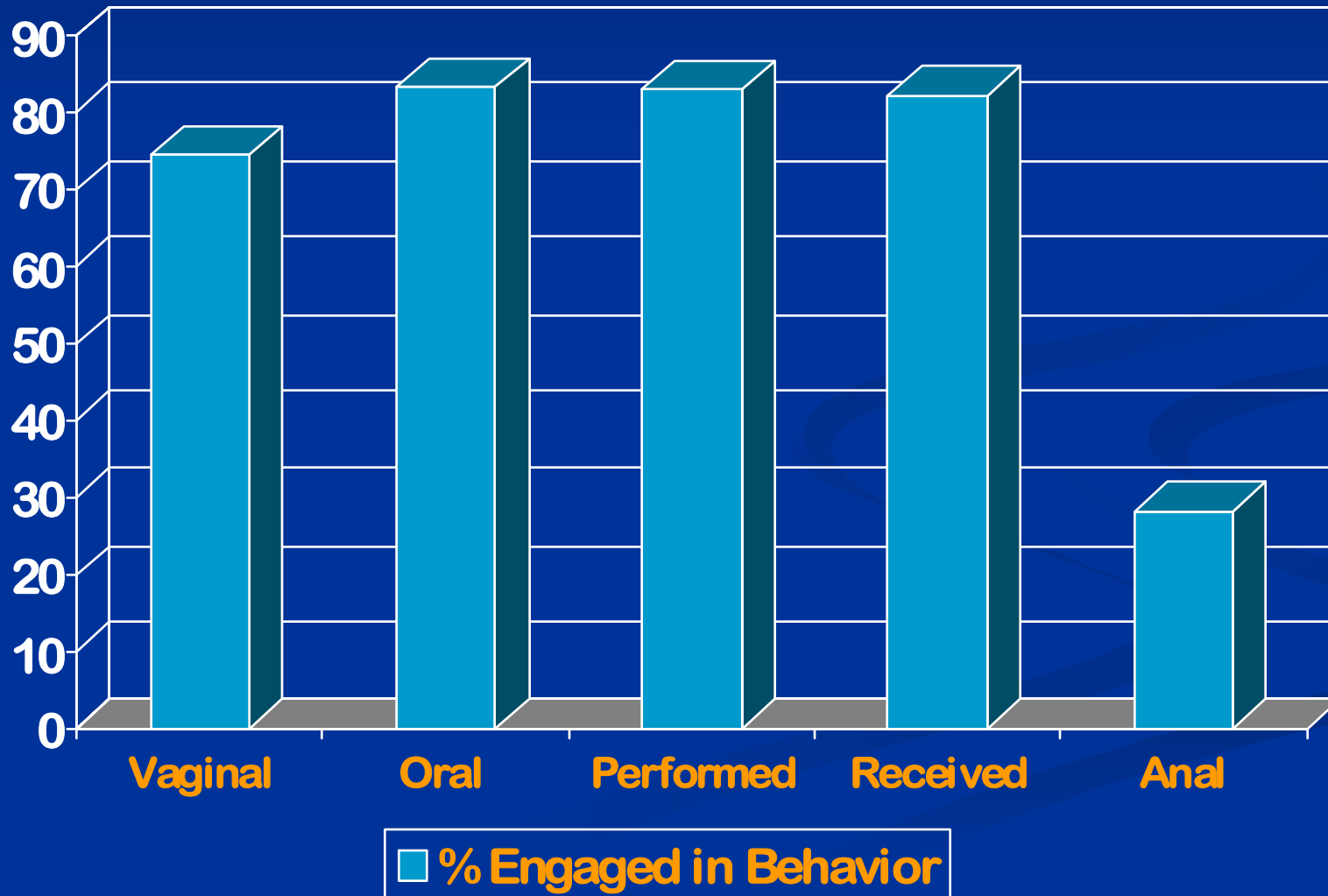
Demographics

■ Participants

- 78 undergraduate students attending PSU Harrisburg
- 61 completed all sessions (17 participants did not return)
- Average age: 22 years (range 18-57)
- 64.1% female, 35.9% male
- Majority identified as Caucasian

Descriptives

Sexual Behaviors



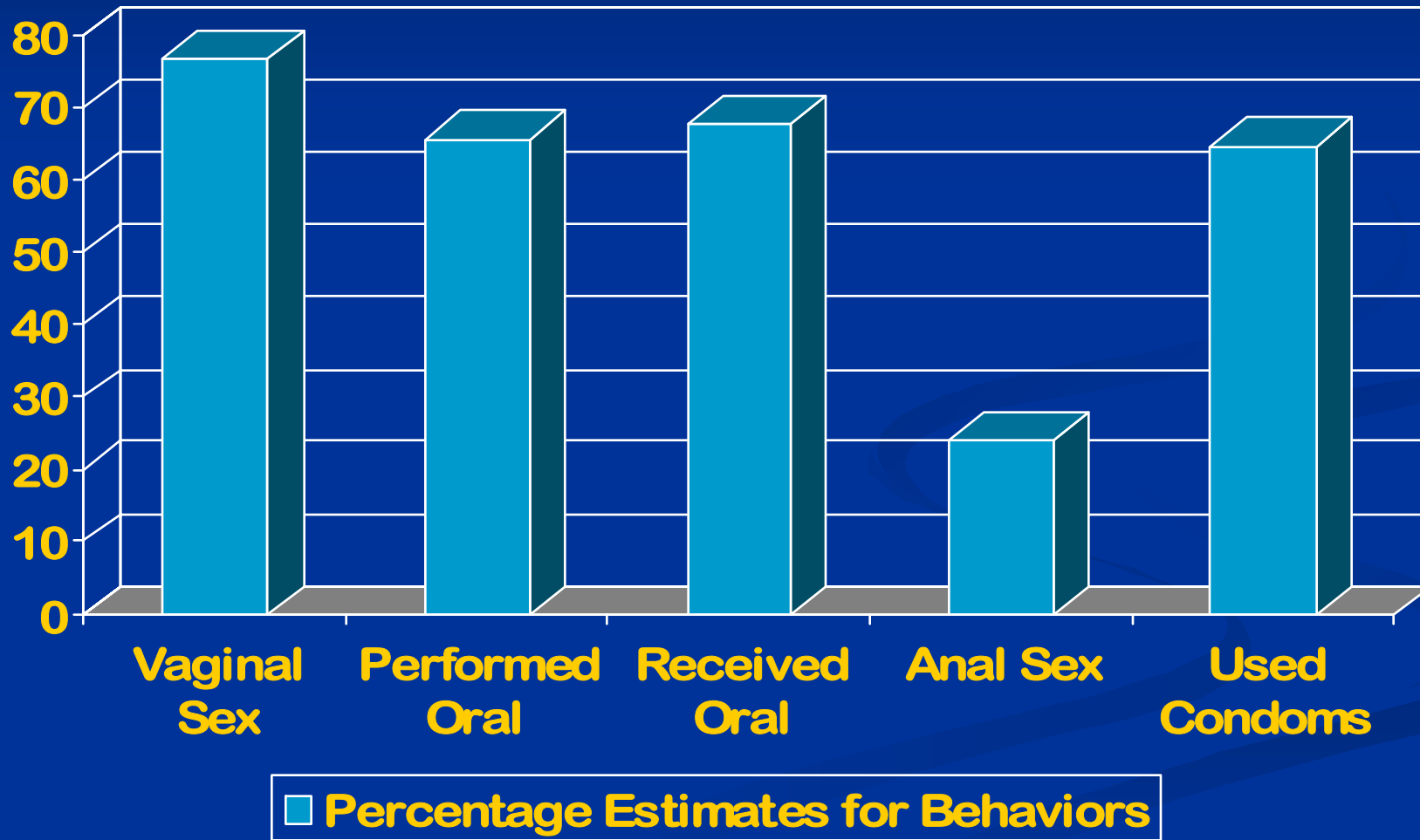
Perceptions

Percentages for Level of Agreement: Vaginal Sex, Oral Sex, Performed Oral Sex, Received Oral Sex, Anal Sex

	“most college students have had vaginal sex”	“most college students have engaged in oral sex”	“most college students have performed oral sex”	“most college students have received oral sex”	“most college students have engaged in anal sex”
Strongly Disagree	9%	7.7%	1.3%	1.3%	5.1%
Disagree	0%	0%	9.0%	6.4%	73.1%
Agree	44.9%	38.5%	59.0%	60.3%	21.8%
Strongly Agree	46.2%	53.8%	30.8%	32.1%	0%

Perceptions

Perceived Percentage Estimates for Behaviors



False Consensus Effect

Level of Agreement

Baseline (T1)

- Significant group differences were obtained at T1 for (FCE):
 - Anal Sex $t(76) = 2.26, p = .03$
 - Oral Sex $t(76) = 2.45, p = .02$
 - Performing Oral Sex $t(76) = 3.24, p = .00$
 - Receiving Oral Sex $t(76) = 2.56, p = .01$

Level of Agreement Immediately Following Exposure (T2)

- Significant group differences were Not obtained for (no FCE):
 - Oral Sex $t(76) = .80, p = .44$
 - Performed Oral $t(76) = 1.42, p = .16$
 - Received Oral $t(76) = 1.33, p = .19$

Level of Agreement T3 (2 weeks later)

- Significant group differences were obtained for (FCE):
 - Vaginal Sex $t(76) = 2.48, p = .02$
 - Performing Oral $t(76) = 2.44, p = .02$
 - Receiving Oral $t(76) = 3.56, p = .00$

Level of Agreement T3 (2 weeks later)

- Significant group differences were Not obtained for (no FCE)
 - Oral Sex $t(76) = 1.51, p = .13$
 - Anal Sex $t(76) = 1.82, p = .07$

False Consensus Effect

Percentage Estimates Baseline (T1)

- Significant group differences were obtained for (FCE):
 - Vaginal Sex $t(76) = 2.25, p = .03$
 - Received Oral $t(76) = 2.46, p = .016$
 - Performed Oral $t(76) = 2.71, p = .008$

Percentage Estimates Immediately Following Exposure (T2)

- Significant group differences were Not obtained for (no FCE):
 - Vaginal Sex $t(76) = .94, p = .346$
 - Received Oral $t(76) = 1.11, p = .269$
 - Performed Oral $t(76) = .848, p = .399$

Percentage Estimates for Peer Behaviors 2-weeks later (T3)

- Significant group differences were Not obtained for:
 - Performed Oral $t(76) = .88, p = .38$
 - Received Oral $t(76) = 1.12, p = .26$
 - Vaginal Sex $t(76) = 2.02, p = .06$

Discussion

FCE

Level of Agreement

	Vaginal	Anal	Oral	Perform Oral	Receive Oral
Baseline	NO	YES	YES	YES	YES
T2 (Immediate)	_____	YES	NO	NO	NO
T3 (14 days later)	_____	NO	NO	YES	YES

FCE

Percentage Estimates

	Vaginal	Anal	Perform Oral	Receive Oral
Baseline	YES	NO	YES	YES
T2 (Immediate)	NO	_____	NO	NO
T3 (14 days later)	NO	_____	NO	NO

Summary of Results

- Normative Feedback is an effective strategy for changing perceptions with regard to risky sexual behaviors
- Specifically, Normative Feedback was able to eradicate the FCE
 - Normative Feedback was most effective when considering percentage estimates

Limitations

- **Small Sample Size**
- **Sample Population**
- **Length of Study**

Application & Future Direction

- **Application**
 - Normative Feedback is an effective strategy for changing perceptions
 - Role of Normative Feedback in changing behaviors.
- **Future Directions**
 - Integrating Normative Feedback in prevention programming aimed at reducing risky sexual behaviors
 - Applying to younger populations

Thank You