

# Understanding the intersection of adolescent girls' motives for sex and risk profiles

\*Dianne Morrison-Beedy, PhD, FAANP, FNAP, FAAN;  
UK Fulbright Scholar 2016-2017

\*Linsey Grove, MPH, \*Ming Ji, PhD & Elizabeth Baker, PhD\*\*

\*University of South Florida ; \*\*Des Moines University



FULBRIGHT  
COMMISSION



# Acknowledgements & COI

---

Funding thanks to the National Institute of Nursing Research  
(NIH RO1NR008194; RO3NR010193; R15NR04059; KO100152)

Co-Investigators NR008914; NR010193:  
Michael P. Carey, Ph.D. & Xin Tu, Ph.D.

It is hoped that the information provided in this overview will be helpful to attendees in familiarizing themselves with the research topic. This overview is not intended to be comprehensive nor does it involve sales of a product. Subjects covered in this presentation represent my views and not those of the University of South Florida.

# Background

---

## Impact of sexual risk behaviors in adolescent girls across the globe

- 16 million girls aged 15-19 years and 1 million girls < 15 years of age give birth every year
- Yearly >300 million new cases of curable STIs occur worldwide with the highest rates in 15-24 year olds
- Globally, > 90% of HIV is transmitted heterosexually - the majority in females
- Impacts: healthcare costs, high school dropout, welfare, lower wages

# Purpose

---

To describe differences in motivations for having sex based on risk profiles among girls age 15-19 years enrolled in the Health Improvement Project for Teens (*HIPTeens*) randomized controlled trial (RCT)

# The Health Improvement Project for Teens (*HIPTeens*)

Extensive formative work & community based participatory research

Tested large-scale RCT

Theoretically-driven

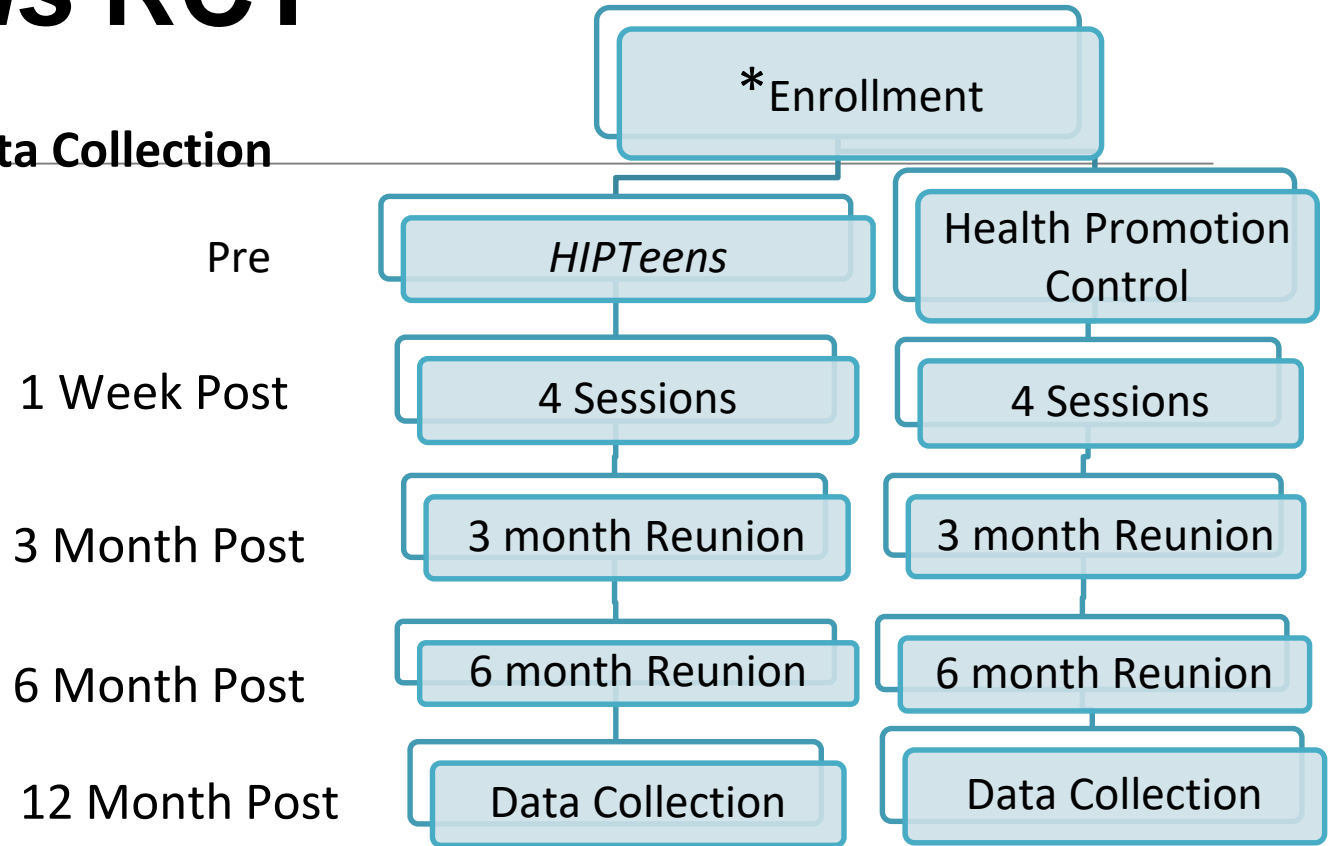
Gender-specific

Developmentally-tailored



# HIPTeens RCT

## Data Collection



# Participants

---

Sexually-active, urban adolescent girls N=738

Ages 15-19 (M=16.5); African American 69%

Age first vaginal sex (M=14.4 yrs); hx STI = 12%

Past 3 mo.: marijuana use 41%; binge drink 28%

Economically Disadvantaged 69%

# Recruitment Sites

---

Clinical adolescent  
health centers

Youth development  
programs

Posters or  
friend referral

After-School  
Programs



# Data Collection and Analysis

---

Data collection: audio computer-assisted self-interviewing (ACASI) through laptop computers at enrollment sites

Research Analysis: compared responses of girls randomized to the intervention and control groups at 3, 6, and 12 months post-intervention using intent-to-treat poisson regression for count data and inferential stats for risk profile comparisons

## Results: Statistically Significant Behavioral Changes

---

Fewer episodes of vaginal sex at all follow-ups

Fewer episodes of unprotected vaginal sex at 3 and 12 month follow-ups

Decrease in total number of partners at 6 month follow-up

# Unanticipated (but oh so wonderful) Results

Significantly higher rates of abstinence  
at 3 and 12 month follow-ups

Medical record audits documented 50%  
reduction in positive pregnancy tests  
across the year



# National Recognition of *HIP Teens*

## CDC

- Has been identified by the CDC as meeting *PRS criteria for good evidence of efficacy for HIV & STI prevention*
  - disseminated through the CDC
  - <http://www.cdc.gov/hiv/prevention/research/compendium/rr/complete.html>

## HHS

- Recognized by U.S. Health and Human Services as meeting intervention effectiveness criteria based on the **Teen Pregnancy Prevention (TPP) Evidence Review**
- [www.hhs.gov/ash/oah/oah-initiatives/teen\\_pregnancy/db/programs/hip\\_teens.pdf](http://www.hhs.gov/ash/oah/oah-initiatives/teen_pregnancy/db/programs/hip_teens.pdf)

# The “Why” of Sexual Behaviors: Sex Motives

---

**Intimacy Motives:** sex for love, closeness, and/or emotional connection to partner

**Enhanced Motives:** sex for thrill-seeking, excitement, pleasure, and/or physical attraction

**Self-Affirmation Motives:** sex for self-confidence boost and/or to feel sexually-attractive

**Coping Motives:** sex for decreasing feelings of loneliness, sadness, and/or disappointment

**Partner Approval Motives:** sex to gain partner’s love, attention, and/or favor

**Peer Pressure Motives:** sex to “fit in,” for social approval, and/or positive perception

# Reproductive History and Motives

	Intimacy Motives M(SD)
No STI (n=449)	8.00(3.23)
STI (n=286)	7.19(3.57)
<i>t-test</i>	<b>3.13**</b>

\*\* $p < .05$ , \*\*\* $p < .001$

	Peer Pressure Motives M(SD)
Never Pregnant (n=543)	0.19(0.68)
Ever Pregnant (n=192)	0.06(0.37)
<i>t-test</i>	<b>2.55**</b>
No Child (n=663)	0.17(0.65)
At Least One Child (n=72)	0.03(0.17)
<i>t-test</i>	<b>4.43***</b>

# Mental Health Status and Motives

	Intimacy Motives M(SD)
Not Depressed (n=607)	7.87(3.30)
Depressed (n=128)	6.83(3.67)
<i>t-test</i>	<b>3.17**</b>

	Coping Motives M(SD)
Not Depressed (n=607)	0.95(1.84)
Depressed (n=128)	2.15(2.72)
<i>t-test</i>	<b>-4.76***</b>

\*\* $p < .05$ , \*\*\* $p < .001$

	Peer Pressure Motives M(SD)
Not Depressed (n=607)	0.13(0.52)
Depressed (n=128)	0.30(0.95)
<i>t-test</i>	<b>-1.98**</b>

	Self-Affirmation Motives M(SD)
Not Depressed (n=607)	0.76(1.69)
Depressed (n=128)	2.00(3.07)
<i>t-test</i>	<b>-4.43***</b>

	Partner Approval Motives M(SD)
Not Depressed (n=607)	0.61(1.55)
Depressed (n=128)	2.06(3.40)
<i>t-test</i>	<b>4.71***</b>

# Substance Use and Motives

	Coping Motives M(SD)
No Drug Use (n=401)	0.97(1.95)
Drug Use (n=334)	1.38(2.18)
<i>t-test</i>	<b>-2.63**</b>
No Alcohol Use (n=508)	0.95(1.8)
Alcohol Use (n=286)	1.62(2.52)
<i>t-test</i>	<b>-3.59**</b>

	Partner Approval Motives M(SD)
No Alcohol Use (n=508)	0.71(1.89)
Alcohol Use (n=286)	1.21(2.39)
<i>t-test</i>	<b>-2.82**</b>

	Self-Affirmation Motives M(SD)
No Drug Use (n=401)	0.82(1.82)
Drug Use (n=334)	1.17(2.28)
<i>t-test</i>	<b>-2.22**</b>
No Alcohol Use (n=508)	0.76(1.73)
Alcohol Use (n=286)	1.46(2.57)
<i>t-test</i>	<b>-3.72**</b>

	Enhanced Motives M(SD)
No Drug Use (n=401)	4.56(3.03)
Drug Use (n=334)	5.43(3.10)
<i>t-test</i>	<b>-4.09***</b>
No Alcohol Use (n=508)	4.72(3.05)
Alcohol Use (n=286)	5.48(3.12)
<i>t-test</i>	<b>-3.11**</b>

\*\* $p < .05$ , \*\*\* $p < .001$



# Implications:

## When does tailoring make sense?

- Modify role plays (e.g., peer approval/teen moms)
- Negotiation skills: partner and peer approval
- Address triggers to risk behaviors (e.g., sadness, loneliness)
- Combine substance use treatment with *HIPTeens*
- Build resilience and self-esteem strategies
- Address mental health issues

# Tailoring *HIPTeens* for Other Populations

Adolescent  
Males

Young Teen  
Moms

Depressed  
Teens

Mother-  
daughter dyads

Girls with  
Intellectual  
Disabilities

Substance-Using  
Teens in RX

Non-sexually  
Active  
Adolescents

College-Aged  
Students

Co-parenting  
Teen Couples

- Thank you. Questions, thoughts?