

Changing Bodies: Adolescent Sexual Development in Context

Maria Trent, MD, MPH, FAAP, FSAHM

Bloomberg Professor of American Health, Pediatrics,
and Nursing



JOHNS HOPKINS
M E D I C I N E

Objectives

At the conclusion of this activity, the participant should be able to understand:

- Pubertal development & the hormonal changes occur
- Discuss some of the many challenges in addressing adolescent sexual and reproductive health.
- Explore the role of age, social determinants, and developmental factors in exploring youthful sexual and other risk
- Explore the intersection of biological and social determinants of adolescent sexual risk seeking and avoidance

Disclosure

- I receive funding from the National Institutes of Health to support and supplies through a material transfer agreement with Johns Hopkins University and Speedx, LLC
- I also receive royalties from AAP Publishing and Lippincott, Williams, and Wilkins for publishing work.
- I do not plan to discuss off-label use of medications or devices in this talk.

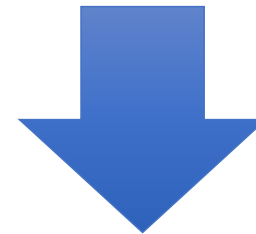
Puberty In Context of Adolescence

Puberty

- Biologic processes that occur during the transition from childhood to adulthood
- Characterized by
 - Secondary sexual characteristics
 - Growth to an adult size
 - Reproductive capability
- Result from hormonal changes
- Changes are :
 - Characteristic
 - Permanent
 - Predictable
 - Variably timed

Developmental Tasks

- Physical growth
- Identity and Moral systems develop
- Sexual identity formation
- Vocational attainment
- Relationships evolve
 - Parents, Peers, Intimate relationships



Independence

Key Factors that Influence Puberty

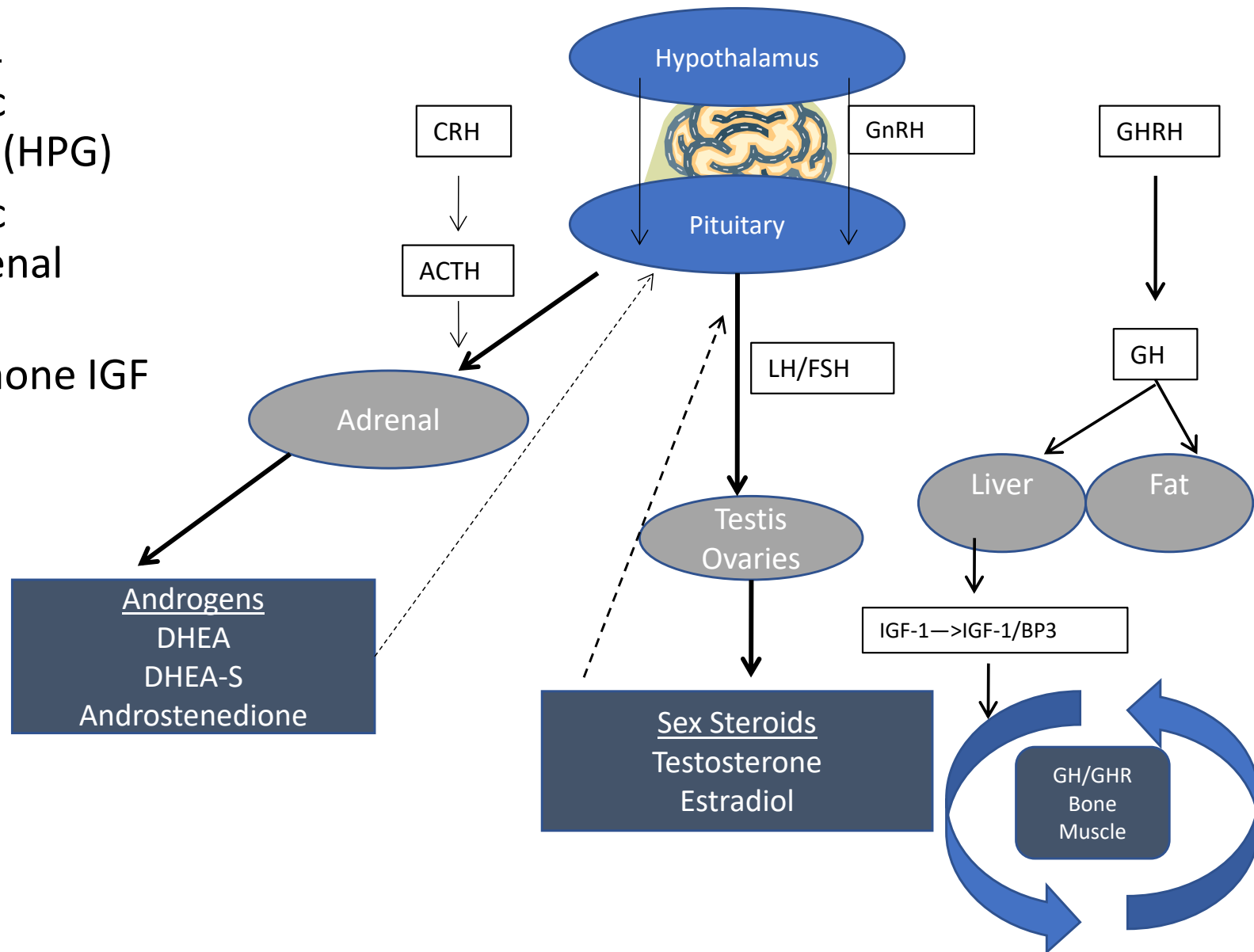
- General Health
 - Past Major Medical Problem
 - Chronic Medical Problems
- Nutritional Status
 - Overweight
 - Underweight
- Genetics
 - Familial pubertal patterns
 - Individual genetic disorders



“At your age, Tommy, a boy’s body goes through changes that are not always easy to understand.”

Hormonal Production in Puberty

- Axes Involved
- Hypothalamic Pituitary Axis (HPG)
- Hypothalamic Pituitary Adrenal (HPA)
- Growth Hormone IGF AXIS



Endocrine Changes Along the Life Course

Time 



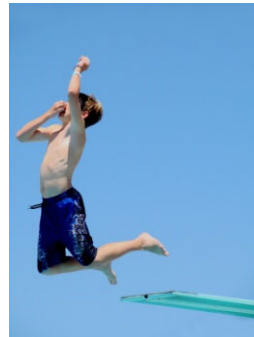
Fetal

- GnRH (pulsatile), LH, FSH, E, T by 10 wks
- GnRH levels fall at term due to withdrawal of placenta



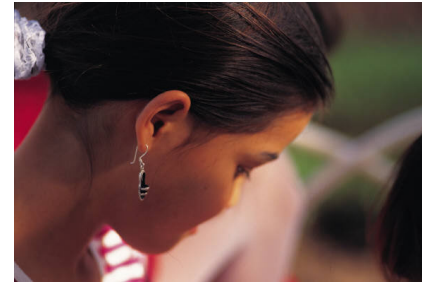
Early Infancy

- Mini-puberty
- Active GnRH pulse generator
- Mid-pubertal sex steroid levels
- Ends 9-12 mos in male & by 2 years in female
- Back to prepubertal levels
- Growth is highest in this period (25cm/yr)



Childhood

- GnRH pulsatility & HPG system restrained
- Neuro-transmitter inhibition
- Growth falls rapidly after first year of life (lowest age 5-10 yrs)—5-6cm/yr



Adolescence

- Re-activation HPG axis
- Pulsatile GnRH secretion (sleep)
- Puberty begins
- Increased pulsatile GH secretion →height velocity



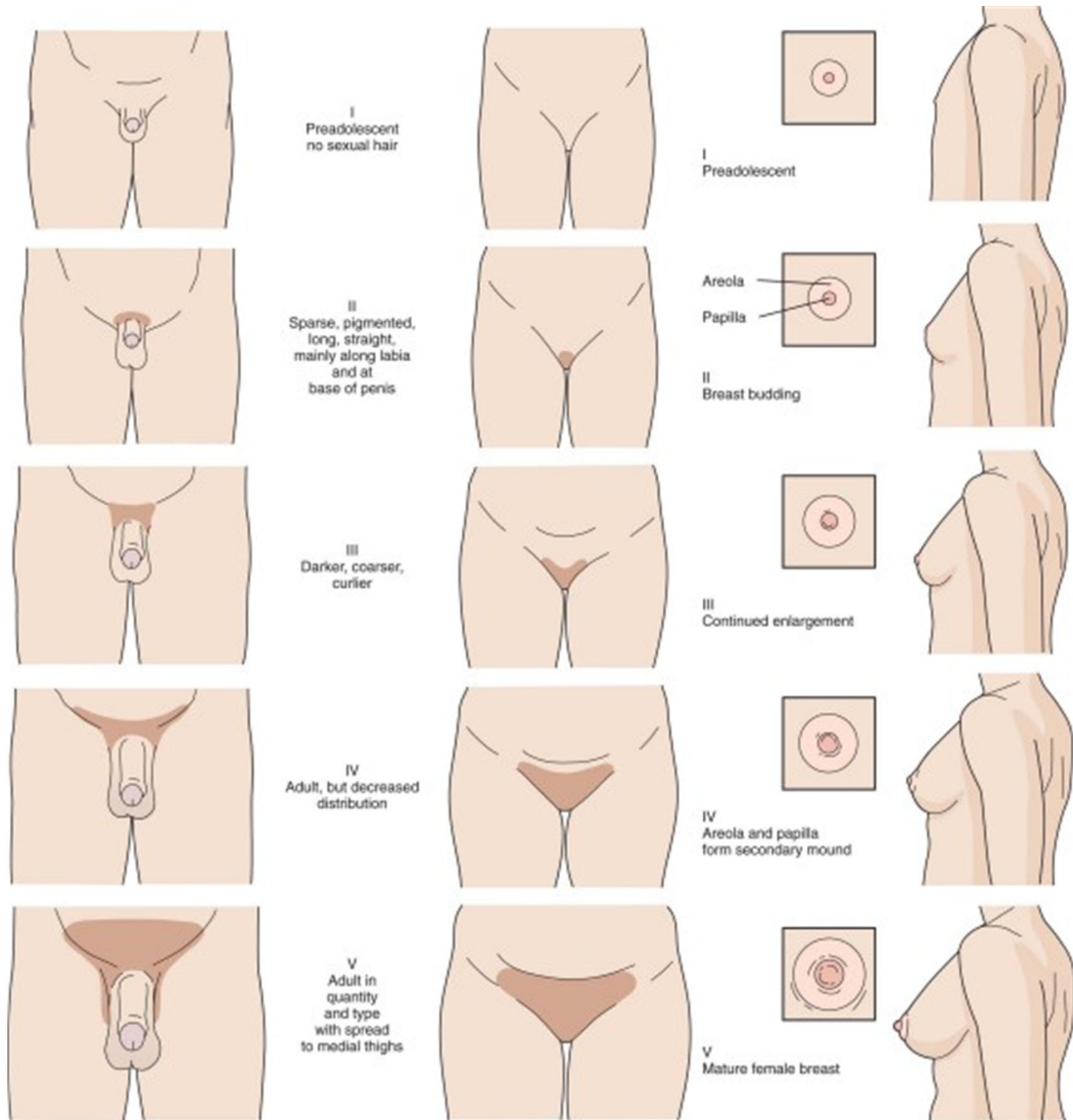
Adulthood

- Pulsatile GnRH secretion continues
- Males emerge ~13 cm taller
- Childbearing→Menopause

Sexual Development

Sexual Maturity Rating	Pubic Hair Male	Testicular Development	Pubic Hair Female	Breast Development
I	None	Preadolescent T Volume <4mL (<2.5 cm)	None	Preadolescent
II	<ul style="list-style-type: none"> •Sparse, long, pigmented hair, straight/slightly curly •Base of penis 	Enlargement scrotum/testis Reddening of scrotum T Volume 4-8mL (2.6-3.3 cm)	<ul style="list-style-type: none"> •Sparse, long, pigmented hair, straight/slightly curly •Labia 	Breast bud Elevation of breast and papilla Enlargement of areola
III	<ul style="list-style-type: none"> •Darker, coarse, curled •Over Pubis 	Growth of penis, mostly length but some breadth. Further growth of testes and scrotum T volume 10-15mL (3.4-4.0cm)	<ul style="list-style-type: none"> •Darker, coarse, curled •Over Pubis 	Enlargement of breast and areola, with no separation of contours
IV	<ul style="list-style-type: none"> •Adult type •No hair on thighs 	Penile, Testicular, & scrotal enlargement Darkening of scrotal skin T volume 15-20 mL (4.1-4.5 cm)	<ul style="list-style-type: none"> •Adult type •No hair on thighs 	'Mound on a mound'
V	<ul style="list-style-type: none"> •Adult-like •Inverse triangle •Inner thighs, but not above linea alba 	Adult size and shape >25mL (>4.5cm)	<ul style="list-style-type: none"> •Adult-like •Inverse triangle •Inner thighs, but not above linea 	Mature stage; projection of papilla only, recession of areola to the general

Adapted from Marshall WA, Tanner, JM.. Archives of Disease in Childhood. 1970; 45:13–14. Marshall WA. Archives of Disease in Childhood. 1969; 44:291–292, Carswell JM, Normal Physical Growth & Development in Neinstein, 5th ED.3-31 st



B

C

Pubertal Sequence

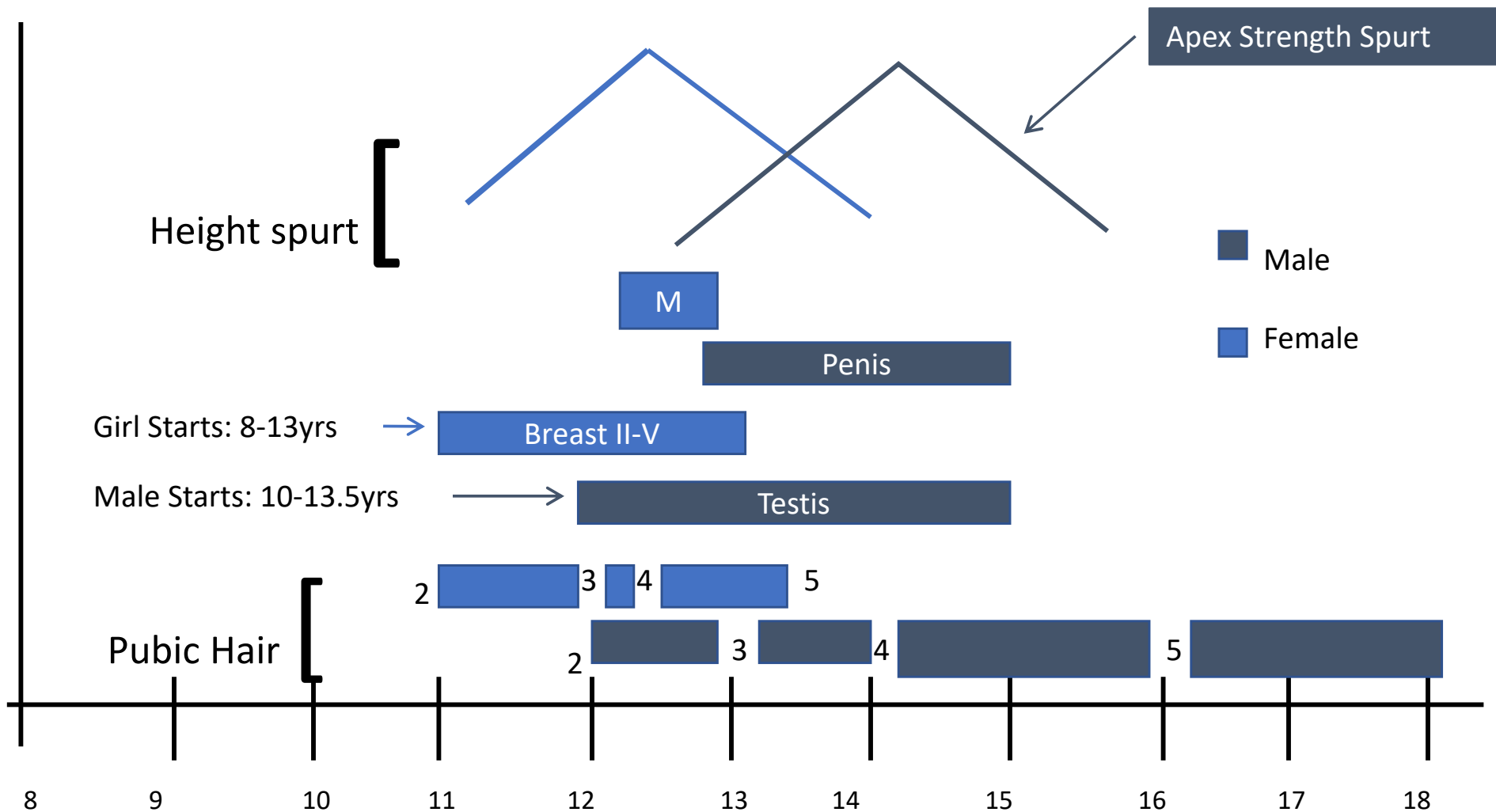
Biological female

- Breast budding
- Pubarche
- Peak Height Velocity
- Menarche
- Ovulation

Biological male

- Testicular Development
- Pubarche
- Phallic enlargement
- Spermarche
- Voice Change
- Peak Height Velocity

Pubertal Development: Males vs. Females*



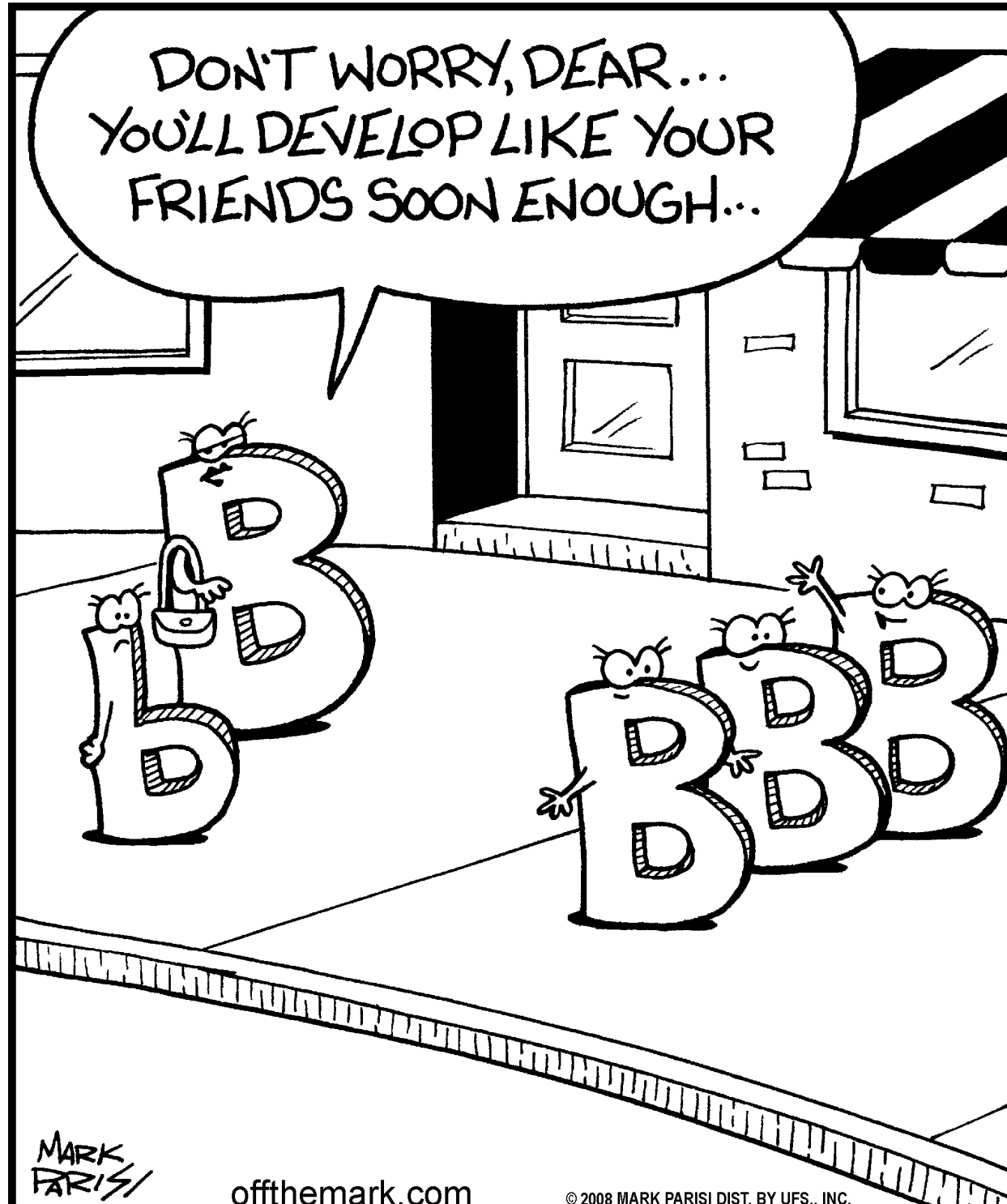
*Biologically assigned gender at birth

Biopsychosocial Development

Stage	Male (yrs)	Female (yrs)	School	Cognitive	Identity	Relationships
Early	11-15	10-13	Middle	Concrete Short-term Test Authority Impulsive	Ego-Centric Fantasy/Present Emotional lability	Peer focused Same Sex Need for Privacy Less interest in parent activities
Middle	15-18/19	14-16	High	Abstract Introspective Sees long-term, but ? use in decision-making	Invincible	Peer focused Mixed Groups Conflicts w/ parents over autonomy
Late	19+	17-21	College Work	Independent Thinking Future oriented Can compromise & delay gratification	Firm identity Stable emotionally Transition to adult roles	Parental separation Adult communication with parents Intimacy

Body ≠ Brain

- Brain growth continues through adolescence into young adulthood
- It's normal for the process of neurobehavioral maturation to manifest as emotional intensity
- While cognitive function really develops during adolescence, consistent higher order function is a relatively late event
- Every adolescent is different---many assume a great deal of autonomy at a young age



Effect of Pubertal Timing on Psychosocial Development

Timing	Outcomes
Early Maturing Boys	Athletic Popular with peers Academically successful Increased risk for delinquency
Early Maturing Girls	Low self esteem Body dissatisfaction Early sexual debut Higher rates of mental health issues (conduct disorder, depression, eating disorders, suicide, delinquency)
Late Maturing Boys	Poor self-image School performance suffers

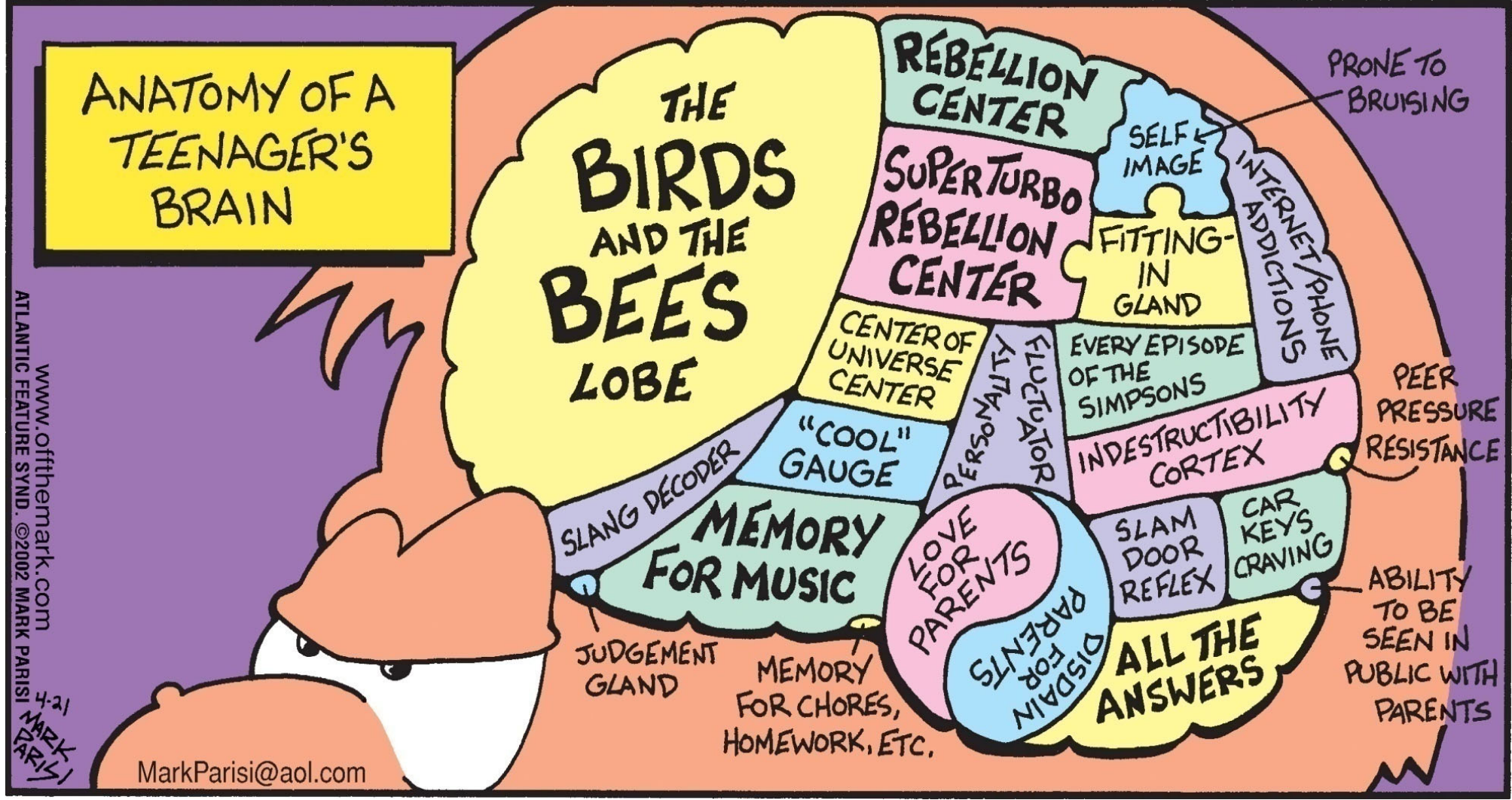


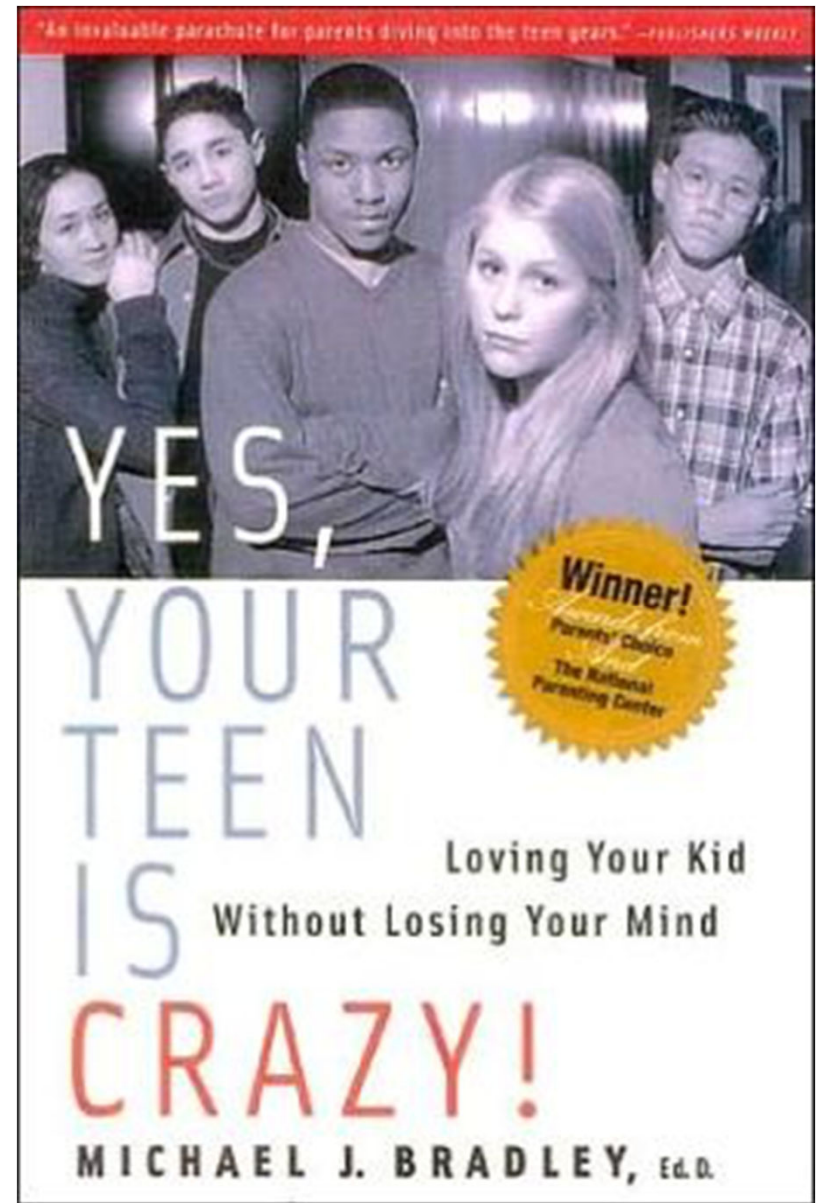
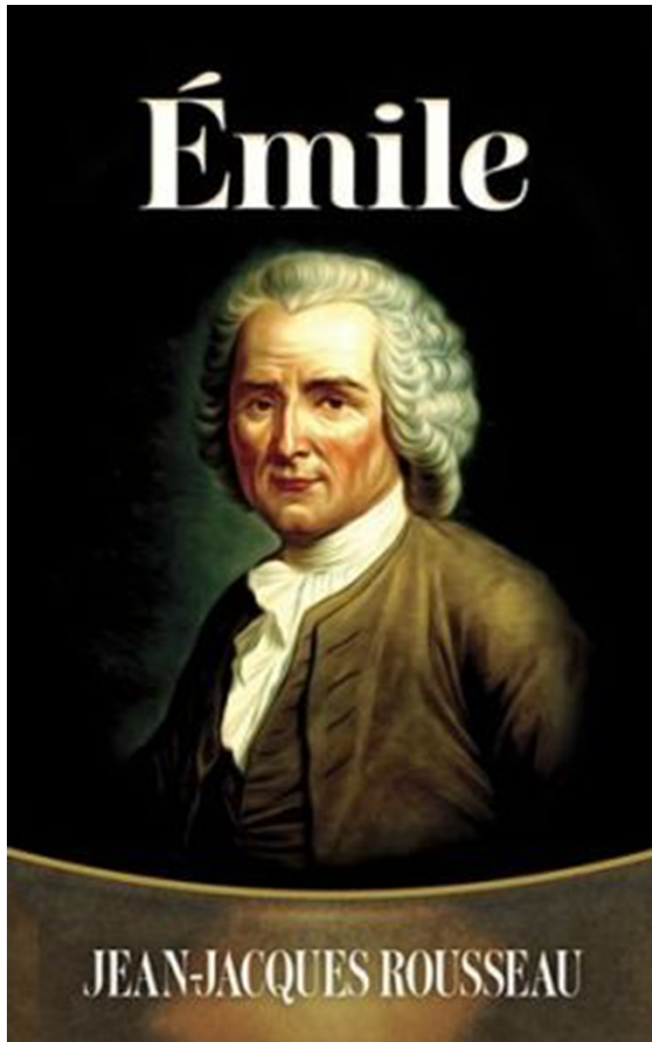
<https://www.healthychildren.org/English/ages-stages/gradeschool/puberty/Pages/Delayed-Puberty.aspx>

Biosocial Development: Getting into Adolescents Heads

off the mark.com

by Mark Parisi





As the roaring waves precedes the tempest, so the murmur of rising passions announces the tumultuous change...Keep your hand upon the helm, or all is lost. Rousseau, 1762



Injuries and neuropsychiatric disorders are major causes of morbidity and mortality among adolescents in all regions.

-Unicef

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THE GROUNDBREAKING 10-YEAR STUDY
THAT WAS THE BASIS FOR
PASSAGES!

"THE MOST AMBITIOUS ACCOUNT
OF THE ADULT LIFE CYCLE."
—*THE NEW YORK TIMES*

THE SEASONS OF A MAN'S LIFE

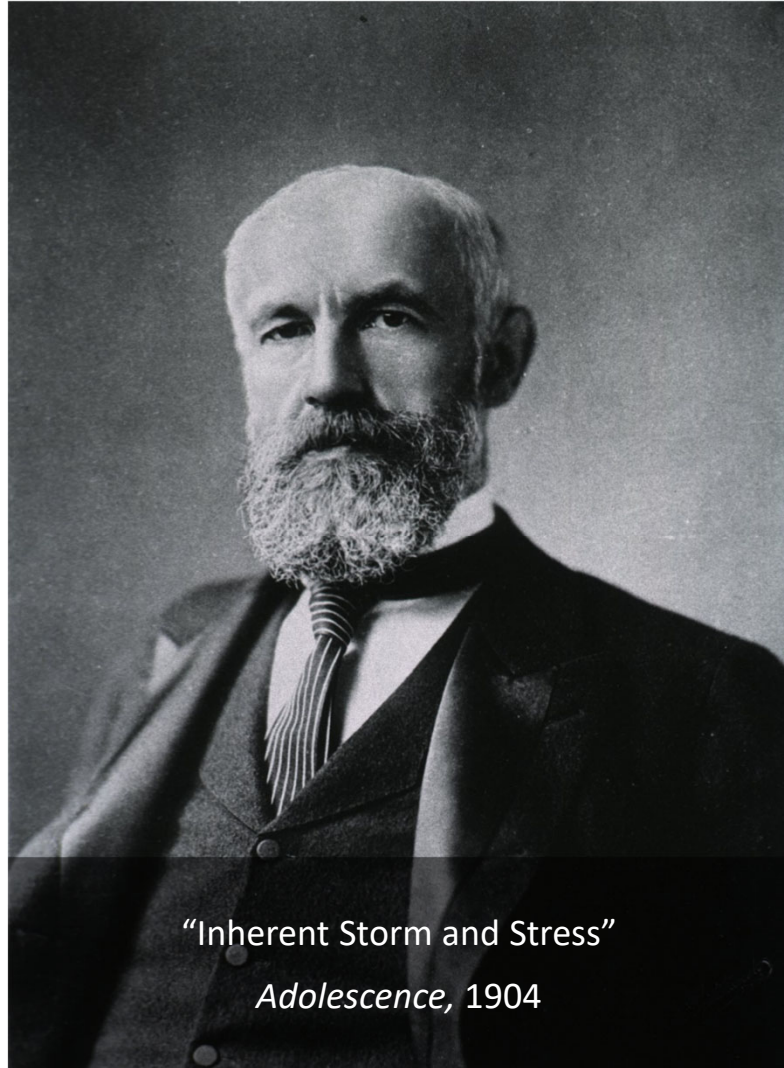
THE
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DANIEL J.
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MARIA H. LEVINSON • BRAXTON MCKEE

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"Inherent Storm and Stress"

Adolescence, 1904



Society & Experiences Influence Individual Behavior

1928

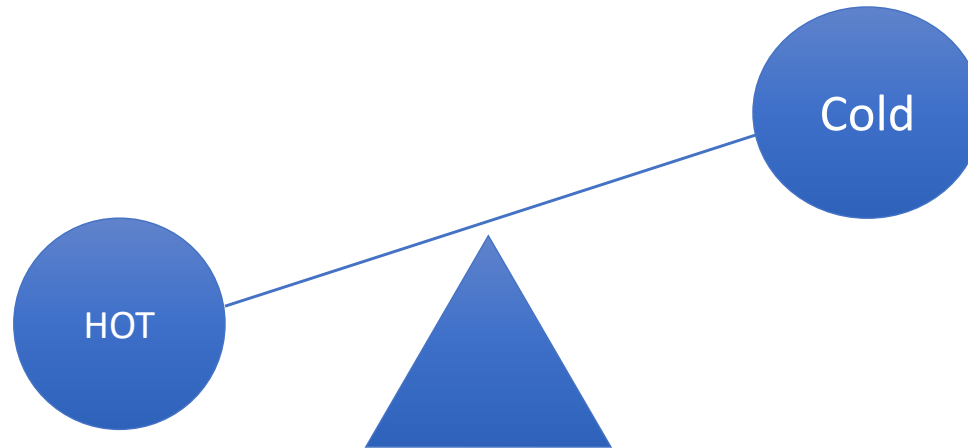
Nature Versus Nurture

Neurobiological Models of Adolescence

Dual System Model of Will Power



Pre-frontal control system



Motivational Limbic System

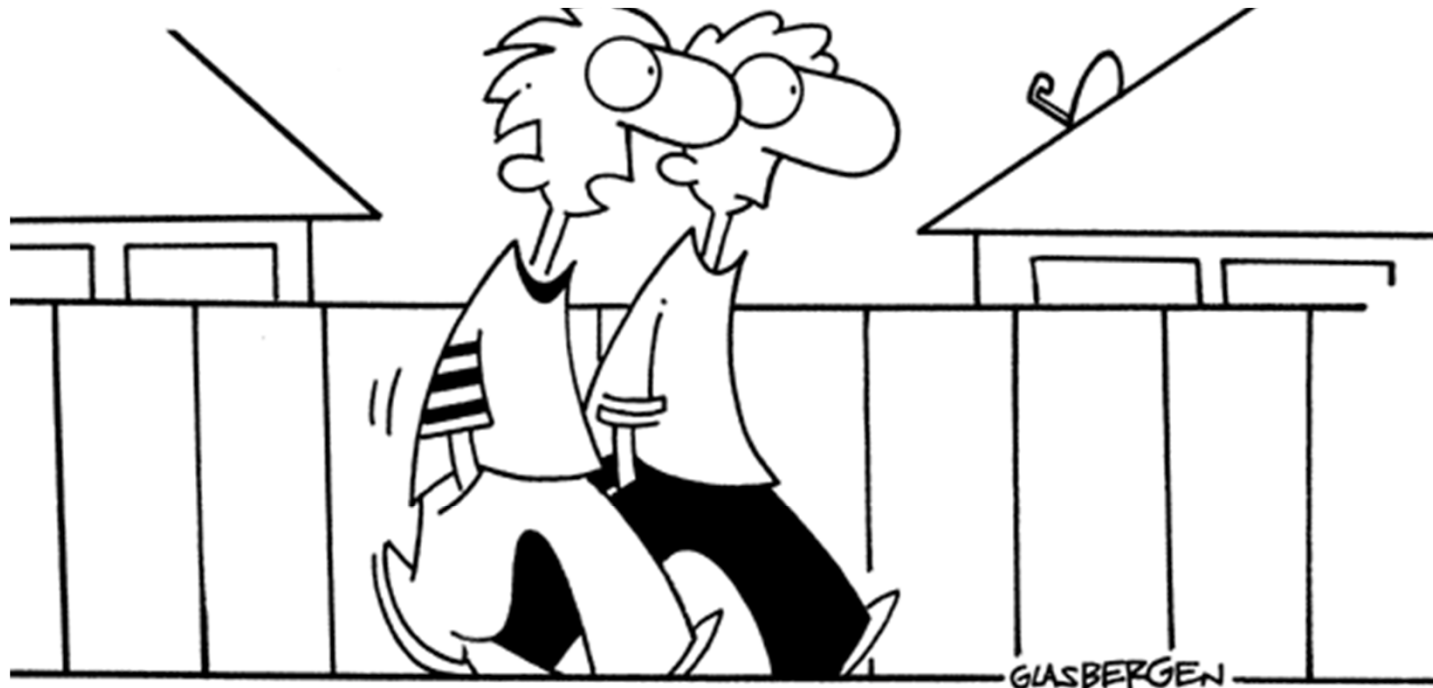
Balance Varies as a function of the individual, development, & stress (Metcalf & Mischel (1999))

Used to explain immediate vs. delayed rewards (McClure, 2004)

*Other Models:

- Triadic (Ernst, 2006)
- Imbalance (Casey, 2008)

It's also about Expectations



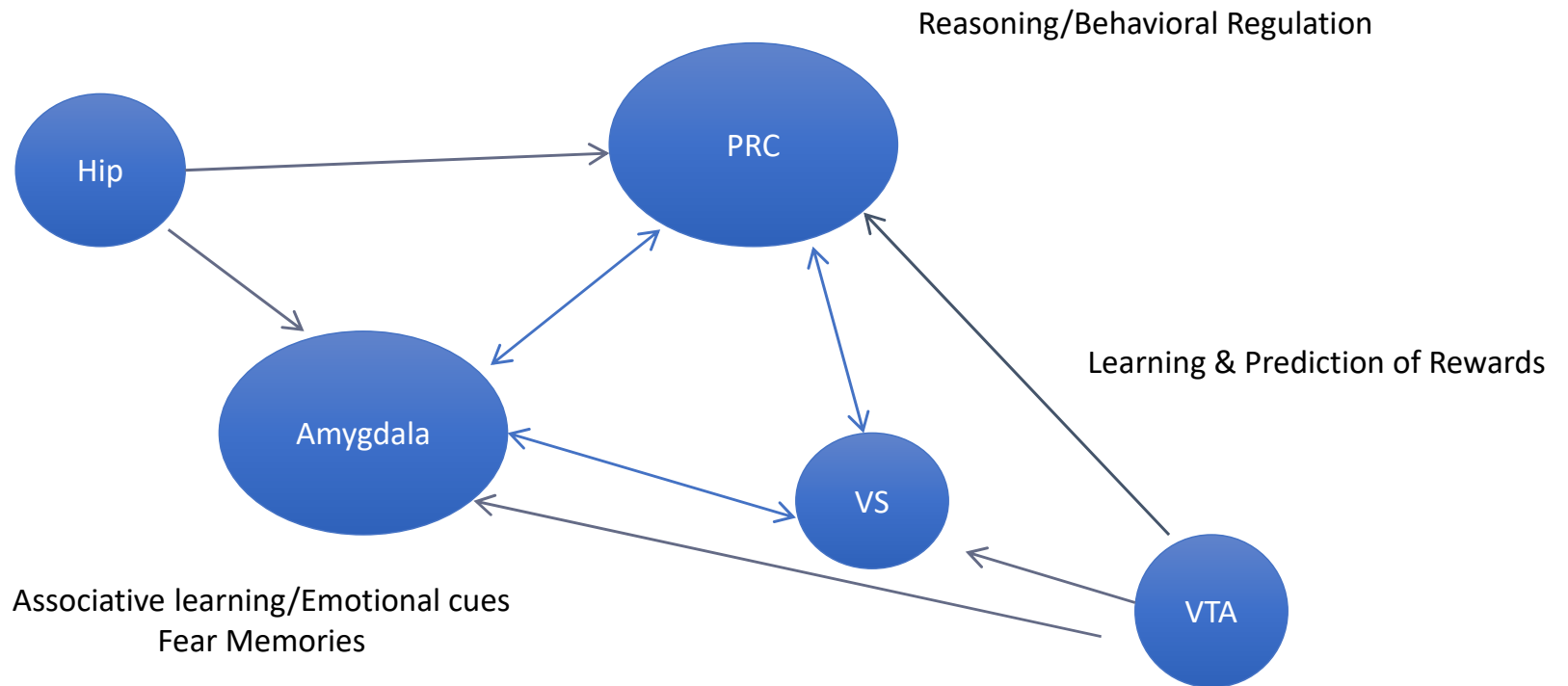
**"WHEN I WAS 5 EVERYONE TOLD ME TO BE A BIG BOY.
WHEN I WAS 10 THEY TOLD ME I SHOULD BE MORE MATURE.
NOW THEY SAY IT'S TIME TO START ACTING LIKE AN ADULT.
AT THIS RATE, I'LL BE ELIGIBLE FOR SOCIAL SECURITY
BEFORE I GRADUATE FROM HIGH SCHOOL!"**



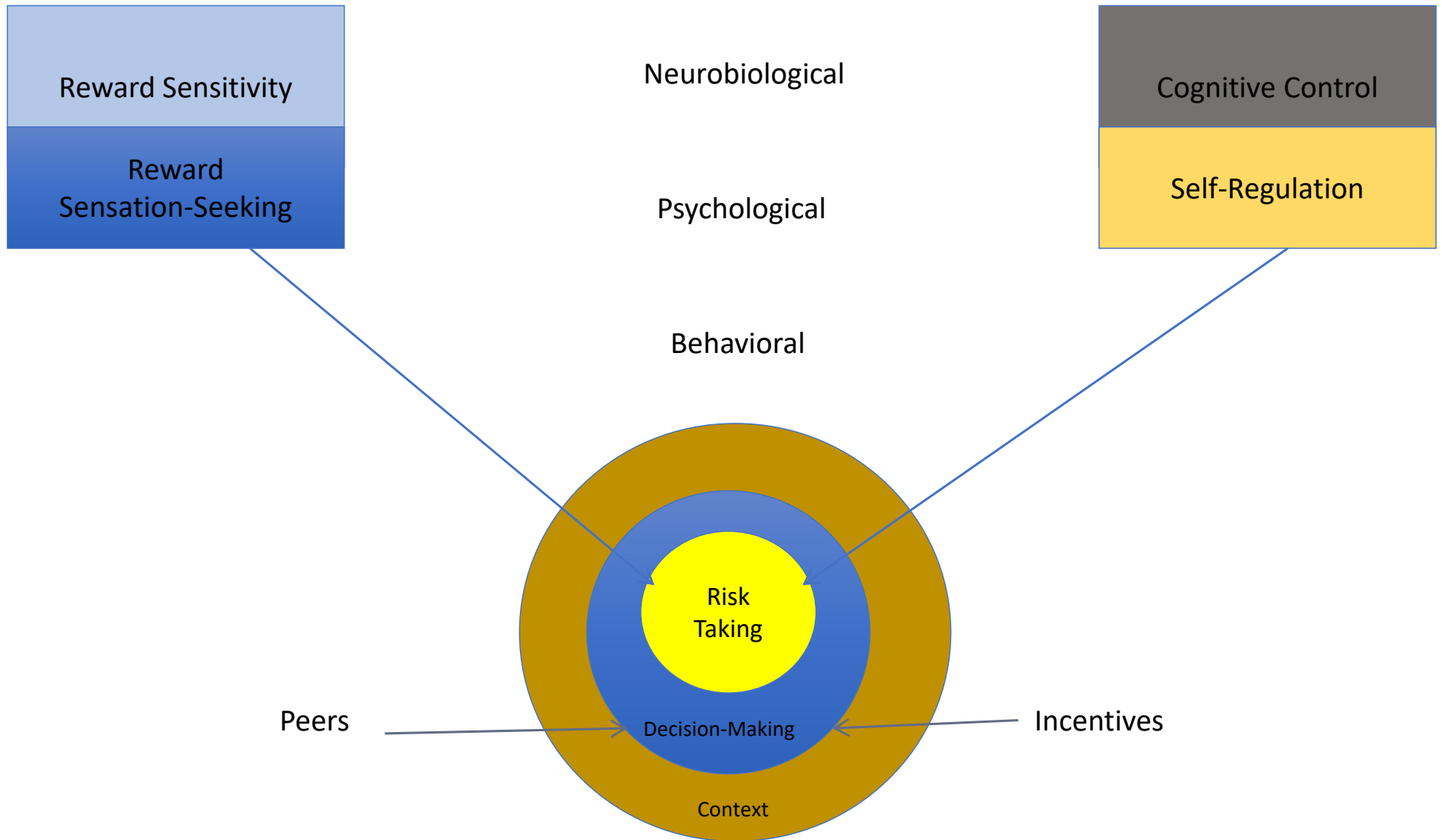


**“Yes, mother, I am practicing abstinence
at college. And if I keep practicing,
eventually I’ll get it right.”**

Newer Data suggest Wiring Matters



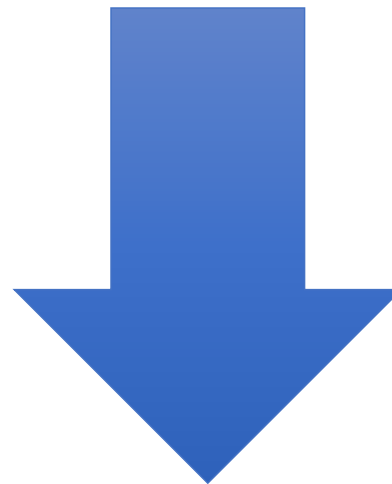
Risk-Taking



Why Would the Brain Function this Way?



- Heightened sensitivity to socially relevant cues [e.g. Sense threats & avoid harm]
- Decreased fear of new or potentially threatening contexts [e.g. Identity Development, Leave Home]



Harms Way as
circuitry
becomes refined
by experience

- Allow Adolescents to Meet the Developmental Milestones
- Face Challenges of Autonomy

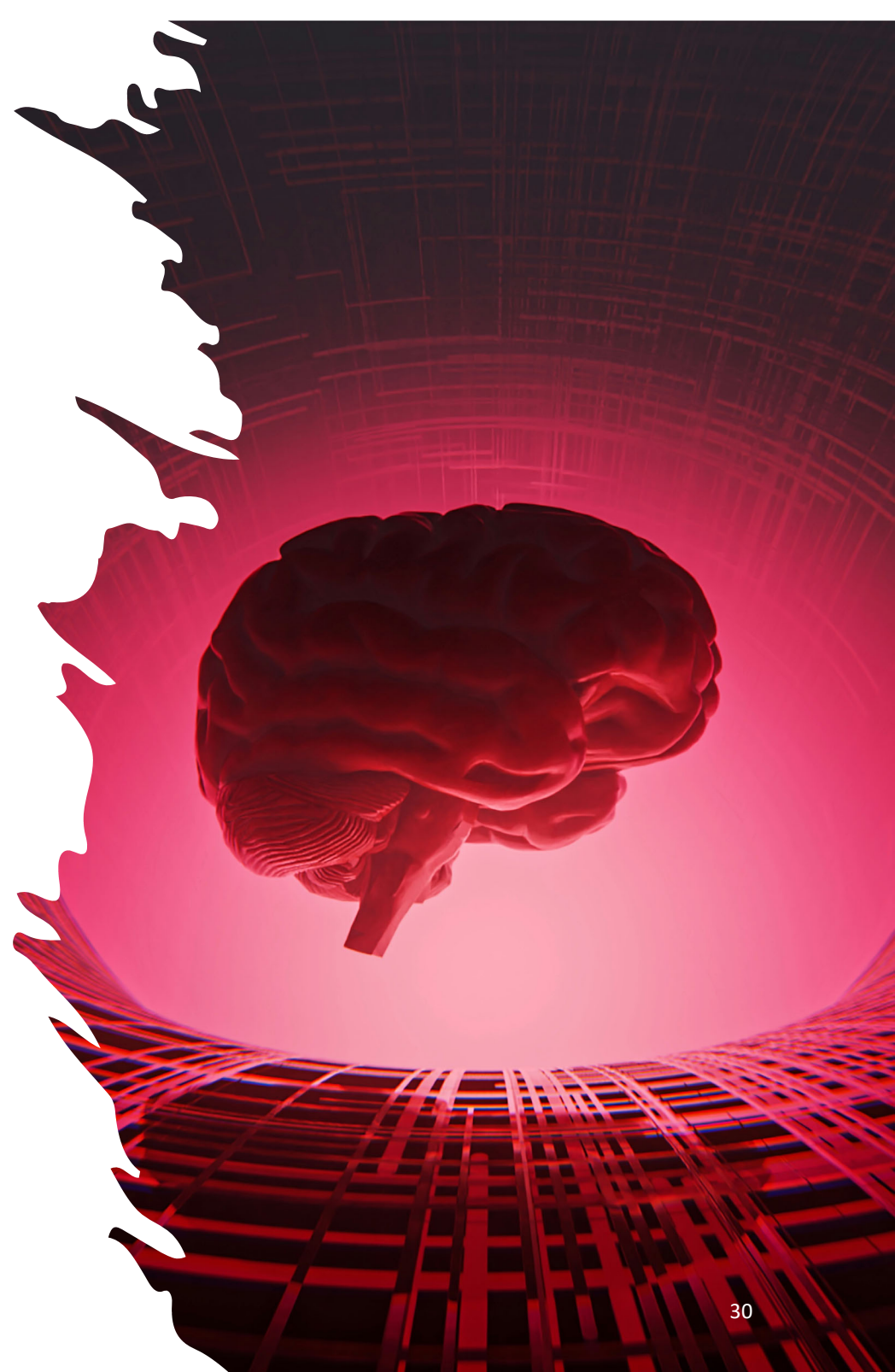
Adolescents Must Take Risks and Do Hard Things



“Only in a state of discomfort can you grow.” -Bill Eckstrom, Tedx Speaker

Grit =Growth

- The brain rewires itself in response to experience-->risk taking is important
- Process critical for developing grit.
- Pushing through a challenge creates new neural pathways in the brain.
- Prepares us to confront and conquer future obstacles.

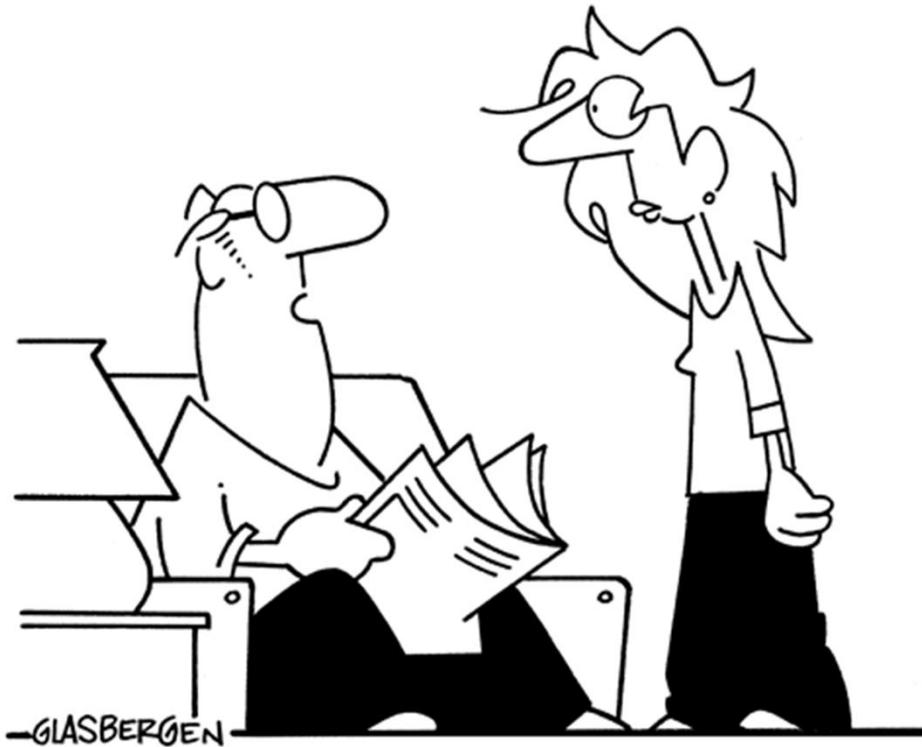




Worst Day Ever!

Story shared with permission
(Safi Hampton)

Parental (Adult) Distress



“A body goes through changes during the teen years.
 When you started dating, my hair turned gray.
 When you started driving, I got heart palpitations...”

Am I ready? Was I good? Should I leave the light on? Have they been tested? What if I get pregnant? I'm nervous. Consent?

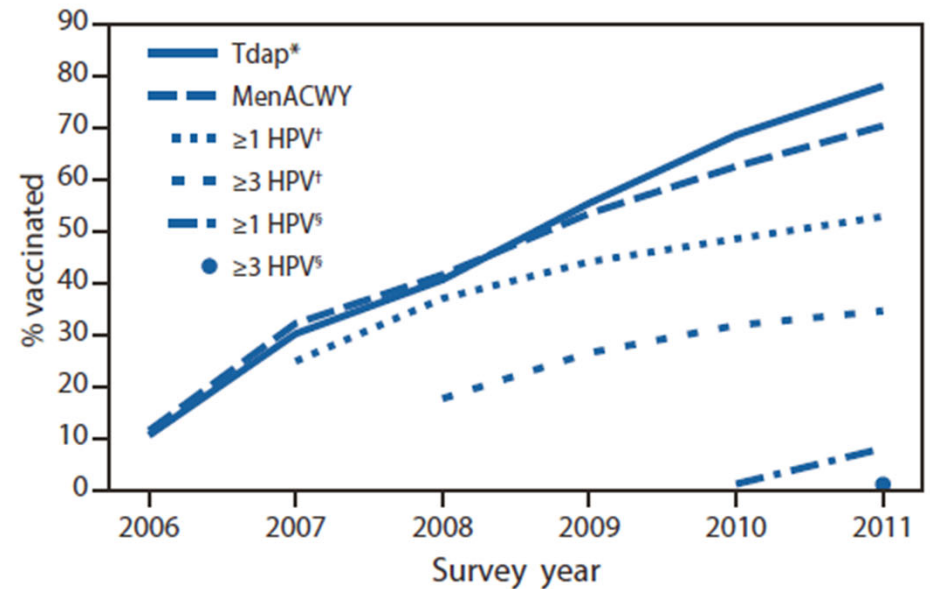
Does she like me? Birth Control? Do they like me?

Sex is complicated enough.

Is this safe? What if my roommate's home? Should I wait? Should I get tested? Is this the right time?

HPV doesn't have to be.

Find out if the HPV vaccine is right for you:



SEXUAL INTERCOURSE AMONG YOUNG PEOPLE IN THE U.S.

The proportion of young people who have had sexual intercourse increases rapidly with age.

% of adolescents who have had sex

100

80

60

40

20

0

10

11

12

13

14

15

16

17

18

19

20

Age

Female
Male

59% of females compared with 14% of males did not enjoy the first time they had sex. [Evanweiss, et.al]

the **SCIENCE** *of* **SEXUALITY**



The Truth About
**LOVE, ROMANCE,
PLEASURE & DESIRE**

plus

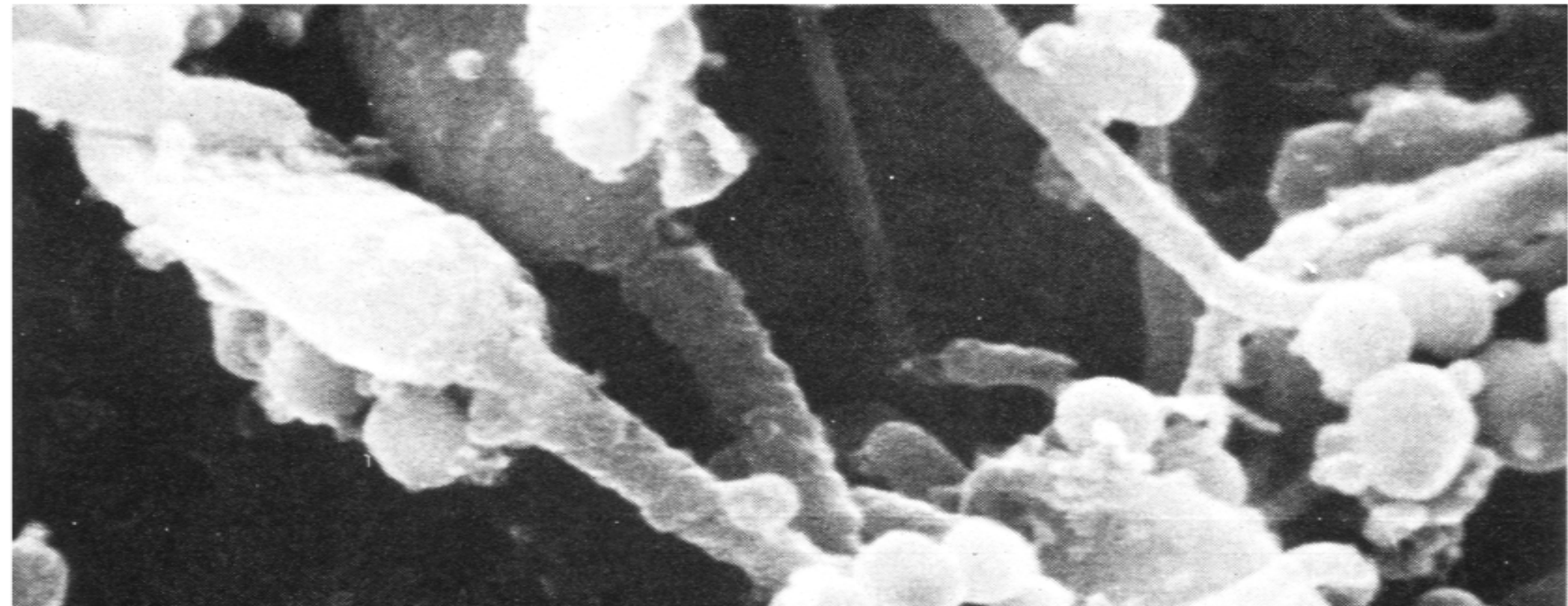
- **Secrets of Intimacy**
- **Is There a Gay Gene?**
- **What Boosts Libido**
- **Your Brain on Sex**
- **Why We Kiss**



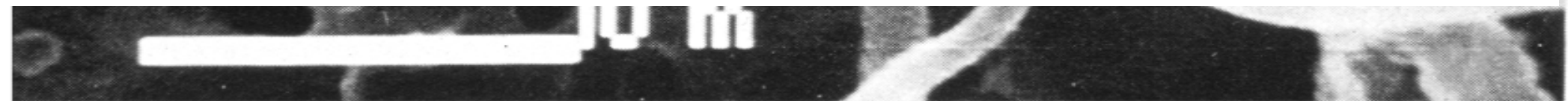
Sexual Tension Good Example



Twilight, Summit Entertainment, 2008



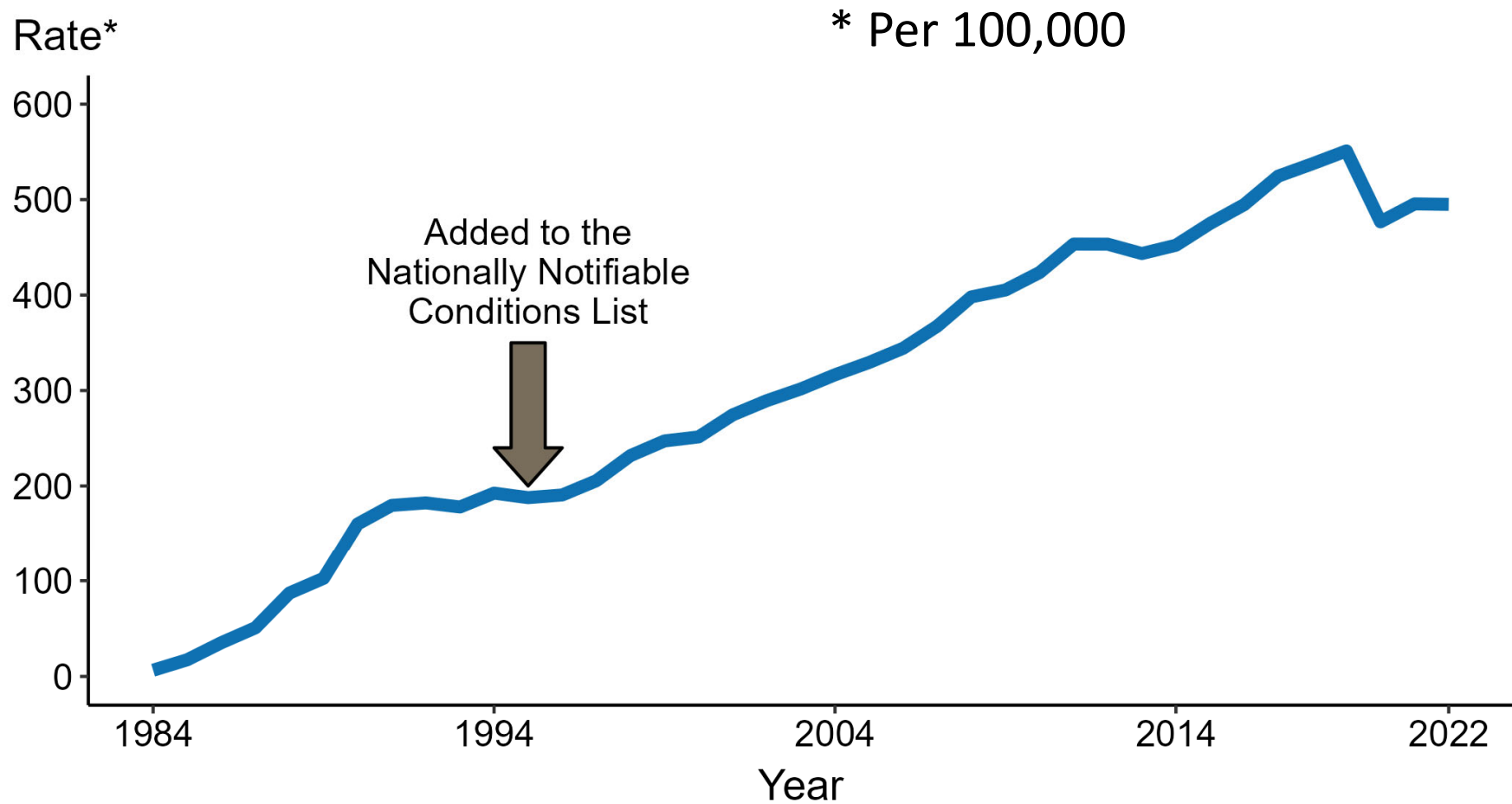
Average sperm count per ejaculate ~280 million
Travel time to female fallopian tube~5-68 minutes
PID RISK: 1:8 for 15 y compared with 1:80 in 25y



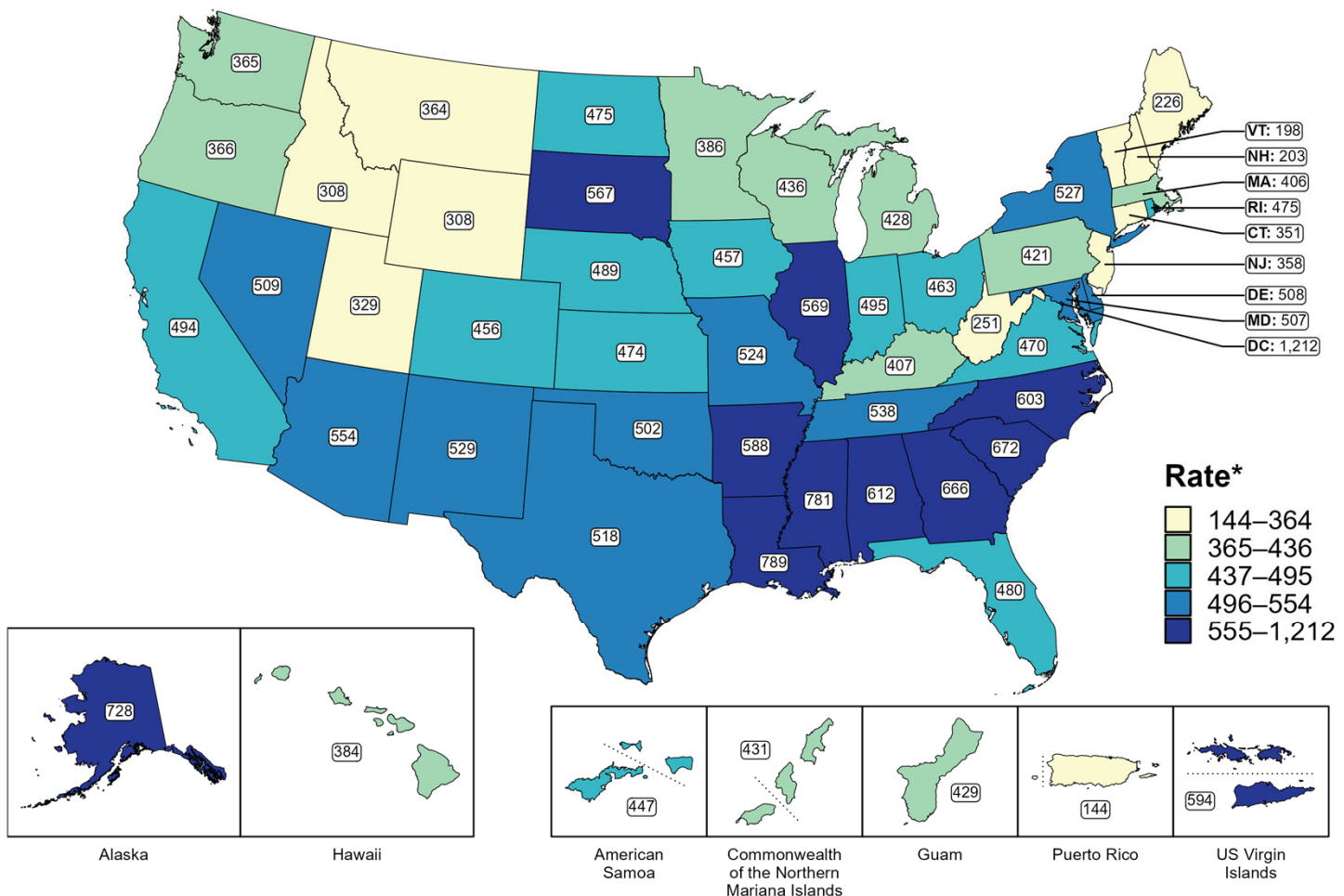
Original magnification x 30,000

Oakland University, <http://www2.oakland.edu/biology/lindemann/spermfacts.htm>

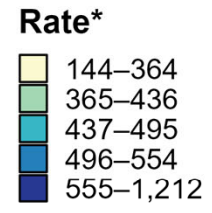
Chlamydia — Rates of Reported Cases by Year, United States, 1984–2022



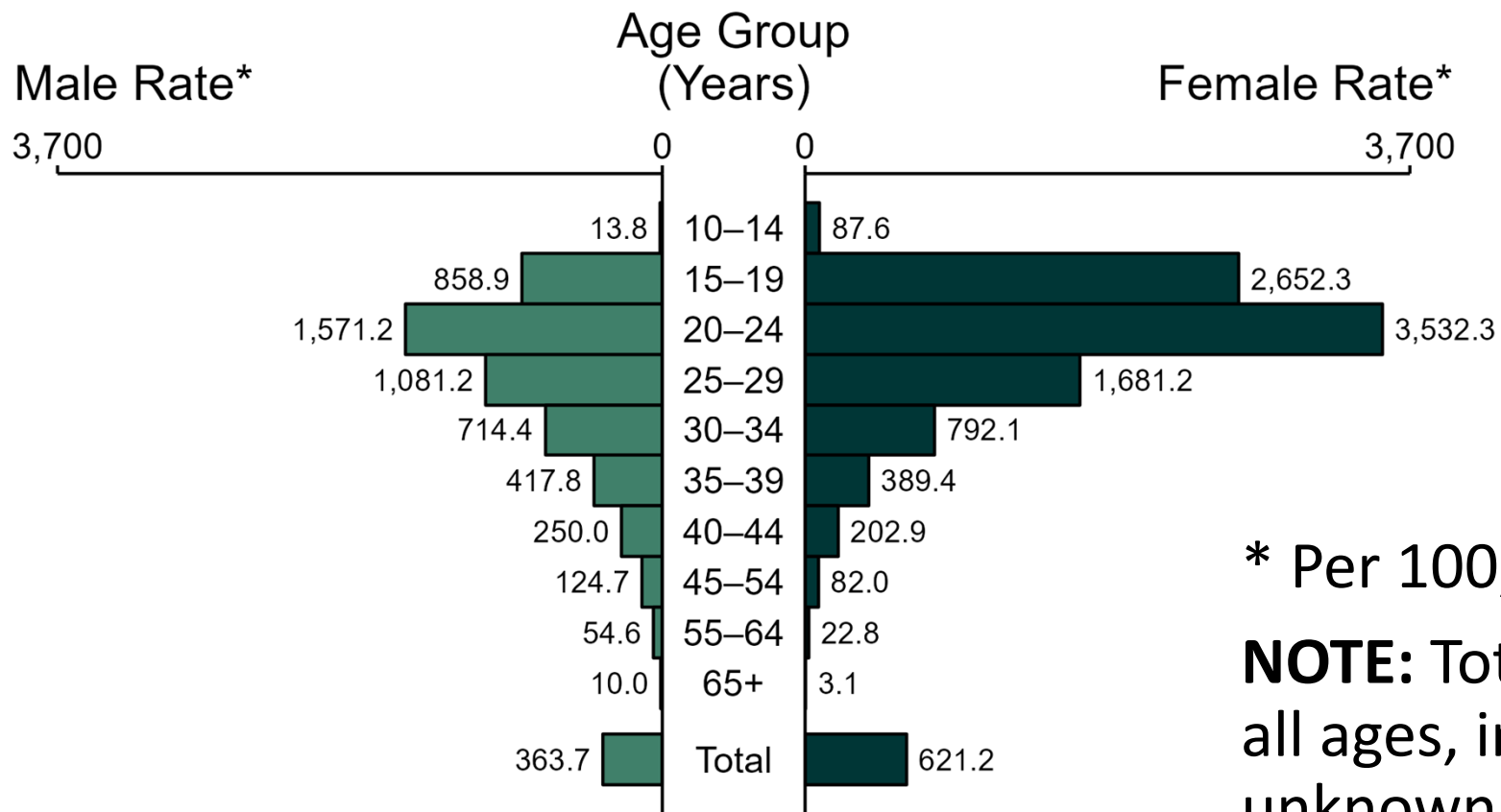
Chlamydia — Rates of Reported Cases by Jurisdiction, United States and Territories, 2022



* Per 100,000



Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2022



* Per 100,000

NOTE: Total includes cases of all ages, including those of unknown age.

CHLAMYDIA

SHREVEPORT AREA



**344.8 CASES
PER 100,000 RESIDENTS**

- Louisiana ranks #1 *Chlamydia trachomatis*
- Top 10- for every reportable STI
- Louisiana Health Hub indicates that young people aged 15–24 account for 50% of all new STDs in the state, even though they only make up 25% of the sexually active population.
- Louisiana has some of the most restrictive Sex Ed policies focused in the US

Image Source:

<https://www.ksla.com/2024/04/17/louisiana-ranks-1-us-chlamydia-cases-research-shows/>

Louisiana is #3 in the United States for Unplanned Pregnancy



Childbearing Motivation

- Health disparities exist in both STIs and the reproductive health potential for young women
- Disease status along with other factors contributes to diminished reproductive potential, particularly for African American women¹
- Most adolescents do not desire a pregnancy during adolescence.
- Parenting in the future is somewhat or very important to adolescents and emerging adults!²

Sources: 1. Michael C. Lu, MD, MPH and Neal Halfon, MD, MPH, "Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective," *Maternal and Child Health Journal* 7, no. 1 (March 2003): 13–30, <http://mchb.hrsa.gov/infantmortalitysummit/disparitieslifecourse.pdf>

2. Trent, Millstein, Ellen, *JAH*, 2006: 38 (3) 282-7





When They Break Up and Get Back Together: Length of Adolescent Romantic Relationships and Partner Concurrency

Pamela Ann Matson, PhD, MPH, Shang-en Chung, MS, and Jonathan Mark Ellen, MD

STD, 2012; 39 (4) 289-5

Relationship Status and Sexual Behaviors in Post-Pelvic Inflammatory Disease (PID) Affected Urban Young Women: A Sub-Study of a Randomized Controlled Trial

Lisa Tabacco¹, Shang-en Chung², Jamie Perin³, Steven Huettner¹, Arlene Butz¹ and Maria Trent^{1}*

Intl Arch Nurs Health Care, 2018 (4).



Understanding Variability in Adolescent Women's Sexually Transmitted Infection-Related Perceptions and Behaviors Associated With Main Sex Partners


Pamela A. Matson, PhD, MPH, Shang-en Chung, ScM,* Steven Huettner, BS,* and Jonathan M. Ellen, MD*†*

STD 2014; 41 (8): 475-9

Impairment: Substance Use Affects Sexual Decision Making



- 43 million persons in the US used marijuana in the last year
- 3.1 million adolescents 12-17 years have use marijuana in the United States
- 11 millions youth 18-24 years have used marijuana in the last year
- Marijuana can impair attention, memory, and learning
- Effects can last up to several days beyond the time of actual “high”.
- For individuals <25y, marijuana impacts how connectivity occurs in the brain

A male doctor with dark curly hair and a white t-shirt, wearing a stethoscope, is sitting on a dark blue couch and talking to a young woman. The woman has long black braids with pink and white highlights and is wearing a white sleeveless top and white shorts. She is holding a piece of paper and looking at the doctor. The background is a light-colored wall with circular patterns.

Who is Responsible
for Talking to
Adolescents and
Young Adults about
Sexual Health?

Image: AAP

Preventive Services



Overall, 78.8 % of adolescents 12-17 years had a preventive services visit in the last year!¹

Missed opportunities to engage in preventive services and anticipatory guidance

- 65% of providers talk about sex, but spend an average of 36 seconds on sexuality issues²
- 86% of providers screen for substance abuse, but only 1/3 use a validated tool³
- Parents and teens value preventive services and opportunities for confidential care⁴
- Confidential screening and treatment for STIs in the typical provider's office is difficult due to billing issues
- Title X Services Threatened

1 HHS, <https://health.gov/healthypeople/objectives-and-data/browse-objectives/adolescents/increase-proportion-adolescents-who-had-preventive-health-care-visit-past-year-ah-01>

2 Alexander, SC. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4428666/>,

3 Harris SK. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4428666/>,

4 Klein J, JAH, [https://www.jahonline.org/article/S1054-139X\(18\)30398-7/fulltext](https://www.jahonline.org/article/S1054-139X(18)30398-7/fulltext)



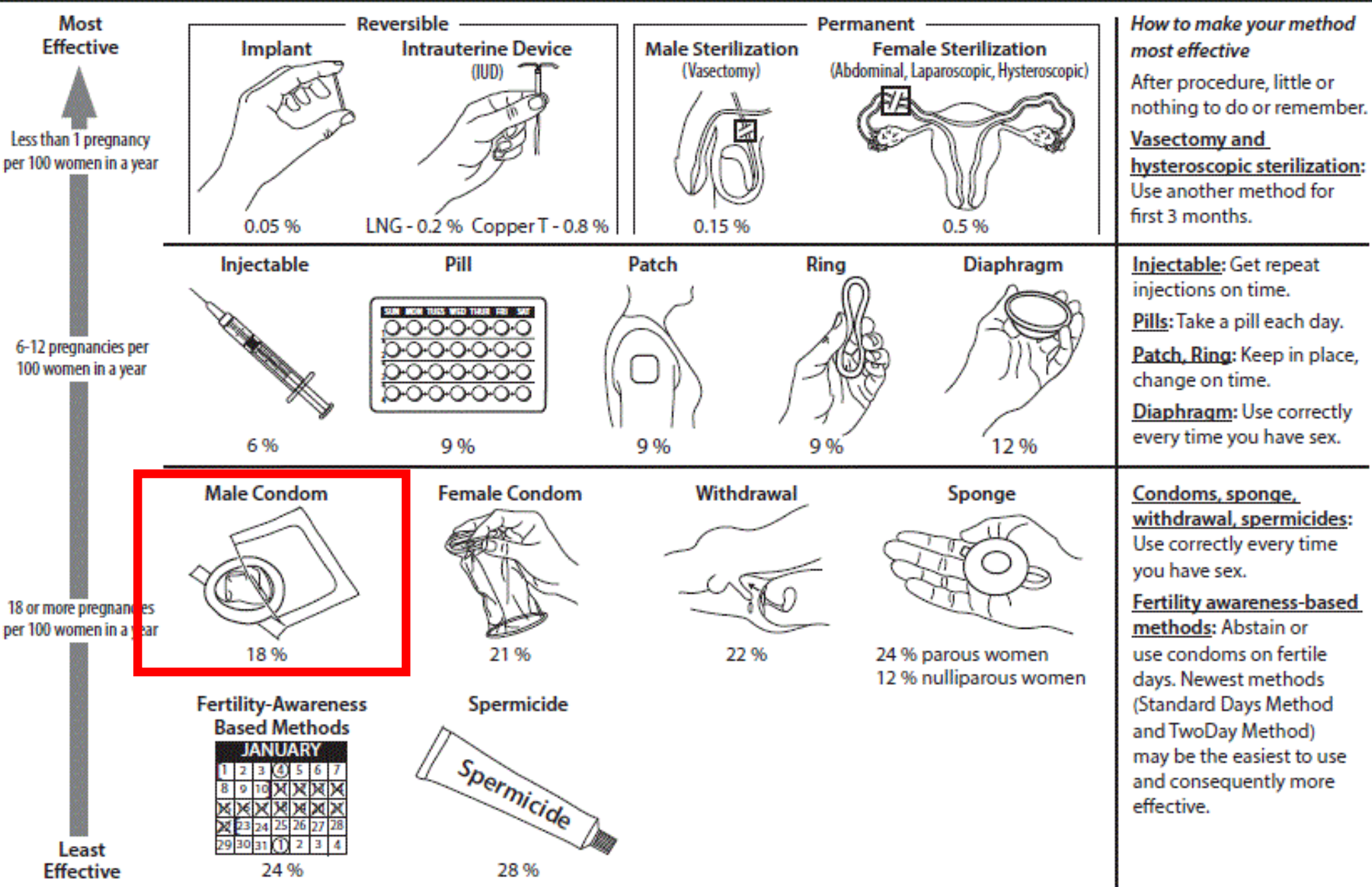
The National Academies of
SCIENCES • ENGINEERING • MEDICINE

CONSENSUS STUDY REPORT



**THE PROMISE OF
ADOLESCENCE**
Realizing Opportunity
for All Youth

National Academies of Sciences,
Engineering, and Medicine.
2019. *The Promise of Adolescence:
Realizing Opportunity for All Youth*.
Washington, DC: The National
Academies Press.
<https://doi.org/10.17226/25388>



How to make your method most effective
 After procedure, little or nothing to do or remember.
Vasectomy and hysteroscopic sterilization: Use another method for first 3 months.

Injectable: Get repeat injections on time.
Pills: Take a pill each day.
Patch, Ring: Keep in place, change on time.
Diaphragm: Use correctly every time you have sex.

Condoms, sponge, withdrawal, spermicides: Use correctly every time you have sex.
Fertility awareness-based methods: Abstain or use condoms on fertile days. Newest methods (Standard Days Method and TwoDay Method) may be the easiest to use and consequently more effective.

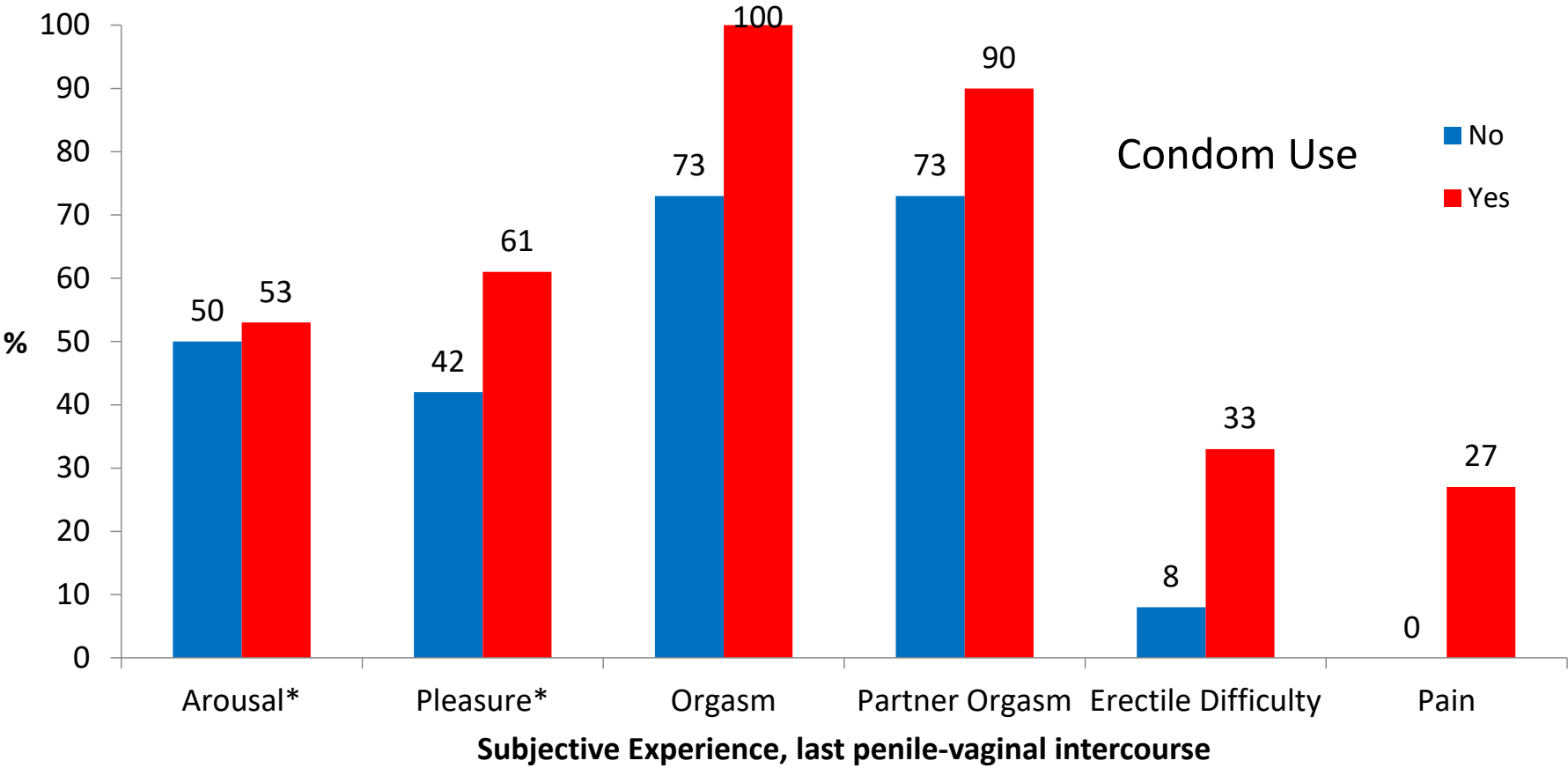
CONDOMS SHOULD ALWAYS BE USED TO REDUCE THE RISK OF SEXUALLY TRANSMITTED INFECTIONS.

Other Methods of Contraception

Lactational Amenorrhea Method: LAM is a highly effective, temporary method of contraception.

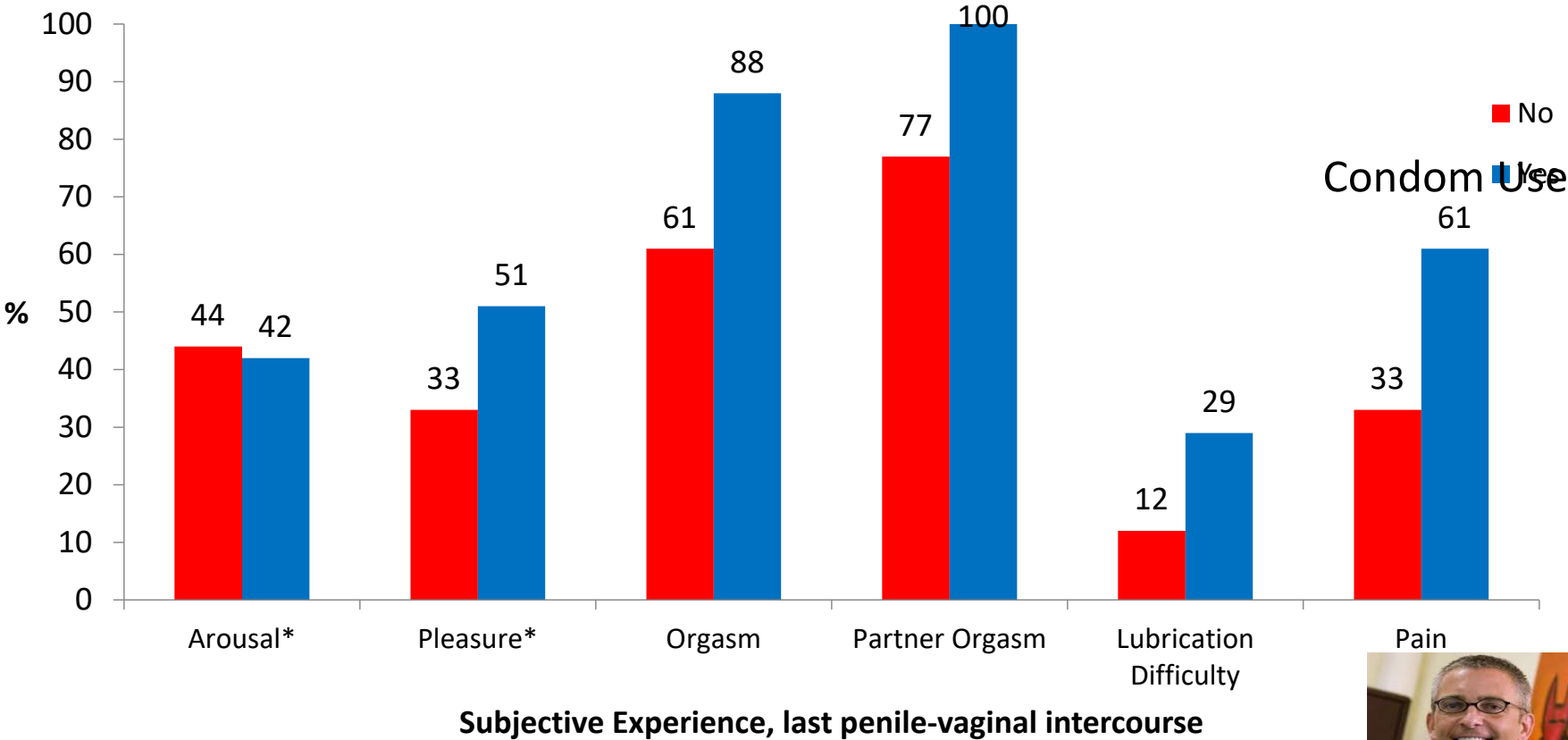
Emergency Contraception: Emergency contraceptive pills or a copper IUD after unprotected intercourse substantially reduces risk of pregnancy.

Subjective Sexual Experience at last Penile-Vaginal Intercourse, by Condom Use – Males



*Most recent event “extremely”

Subjective Sexual Experience at last Penile-Vaginal Intercourse, by Condom Use – Females



*Most recent event “extremely”

Reece, M, et.al. NSSHB, 2018



CENTER FOR
SEXUAL HEALTH
PROMOTION

SCHOOL OF HEALTH, PHYSICAL EDUCATION, and RECREATION
INDIANA UNIVERSITY - BLOOMINGTON

Promoting Sexual Health through Research, Education, & Training



Original Investigation | Pediatrics

Efficacy of a Technology-Enhanced Community Health Nursing Intervention vs Standard of Care for Female Adolescents and Young Adults With Pelvic Inflammatory Disease

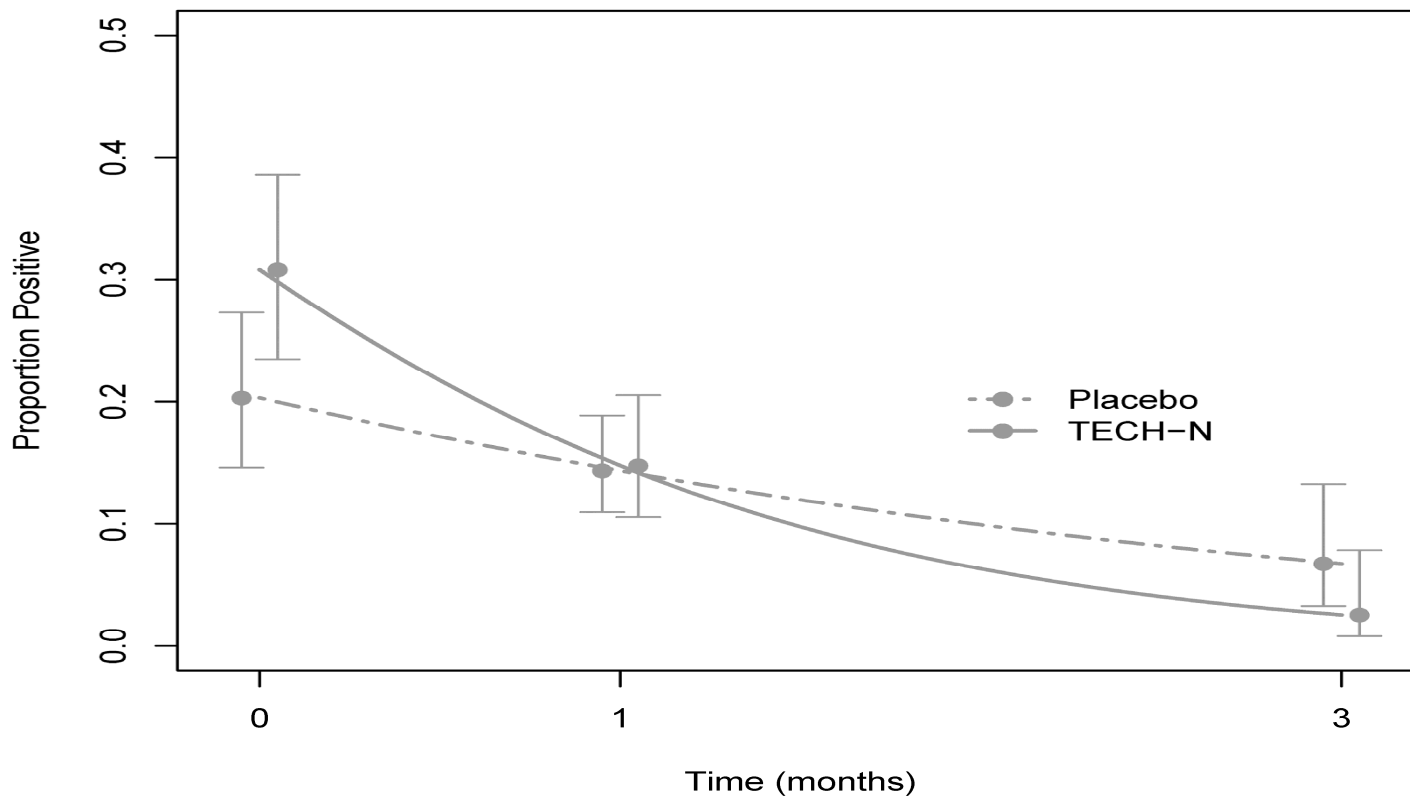
A Randomized Clinical Trial

Maria Trent, MD, MPH; Jamie Perin, PhD; Charlotte A. Gaydos, MS, DrPH; Jennifer Anders, MD; Shang-en Chung, MSc; Lisa Tabacco Saeed, MPH; Julia Rowell, BA; Steven Huettner, BS; Richard Rothman, MD, PhD; Arlene Butz, ScD, RN, CPNP

Table 3. Logistic Regression Results for Measures of Adherence^a

Outcome	Unadjusted		Adjusted ^b	
	Odds Ratio (95% CI)	P Value	Odds Ratio (95% CI)	P Value
Follow-up visit within 72 h	84.3 (35.7-199.2)	<.001	86.3 (34.9-213.5)	<.001
All medication taken, yes or no	0.6 (0.4-1.1)	.08	0.6 (0.4-1.1)	.08
Abstinence	1.0 (0.9-1.1)	.33	1.0 (0.9-1.1)	.35
Partner notification	0.8 (0.4-2.0)	.70	1.0 (0.4-2.4)	.97
Partner treated	0.6 (0.3-1.1)	.14	0.6 (0.3-1.2)	.15

GC/CT Positivity Over Time (GEE)



TECH-N participants experienced a **28%** decline from baseline STI positivity compared with **14%** in control group at 90-days ($p=0.04$)

Trent, et.al. [JAMA Netw Open](#). 2019 Aug 2;2(8):e198652

TECH-N is not only Cost-Effective but also Cost-Saving!

For 100 female adolescents aged 18 years, who start with moderate pelvic inflammatory disease, **TECH-N saves 2 quality-adjusted life years** and **reduces healthcare cost by \$63,000**

Cost savings are driven by:

- Low intervention costs
- ↓ Recurrent chlamydia
- ↓ Recurrent gonorrhea
- ↓ Recurrent PID

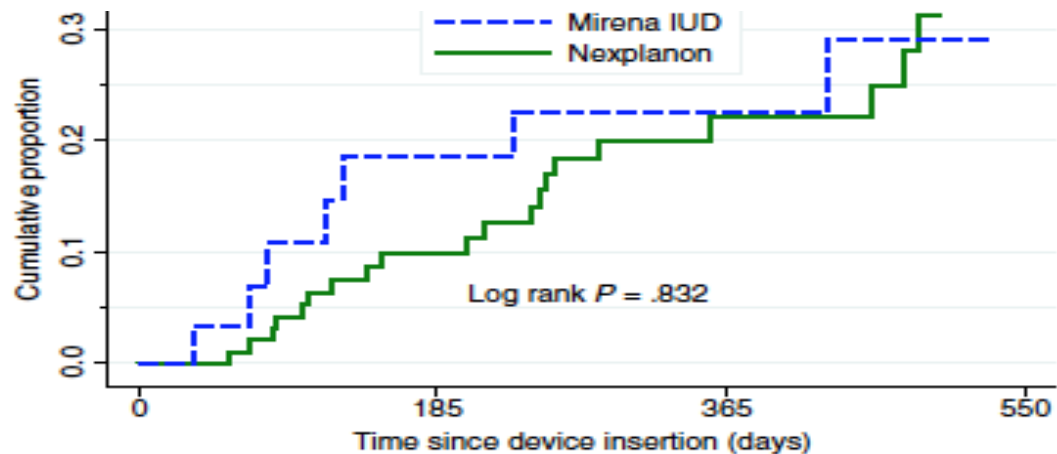
Ballreich, Trent, Gaydos, Anders, Rothman, Frick, SAHM 2023
NIH/NINR, 1R01NR013507



Incidence of Discontinuation of Long-Acting Reversible Contraception among Adolescent and Young Adult Women Served by an Urban Primary Care Clinic



Katharine K. Sznajder MD, MPH ^{1,*}, Kathy S. Tomaszewski RN, BSN ², Anne E. Burke MD, MPH ^{1,3}, Maria Trent MD, MPH ^{2,3}



At risk, n:	0	185	365	550
Mirena IUD	33	(5) 20	(1) 15	(1) 8
Nexplanon	111	(9) 70	(8) 36	(3) 20

JPAG, 2017 : 30 (53-57)

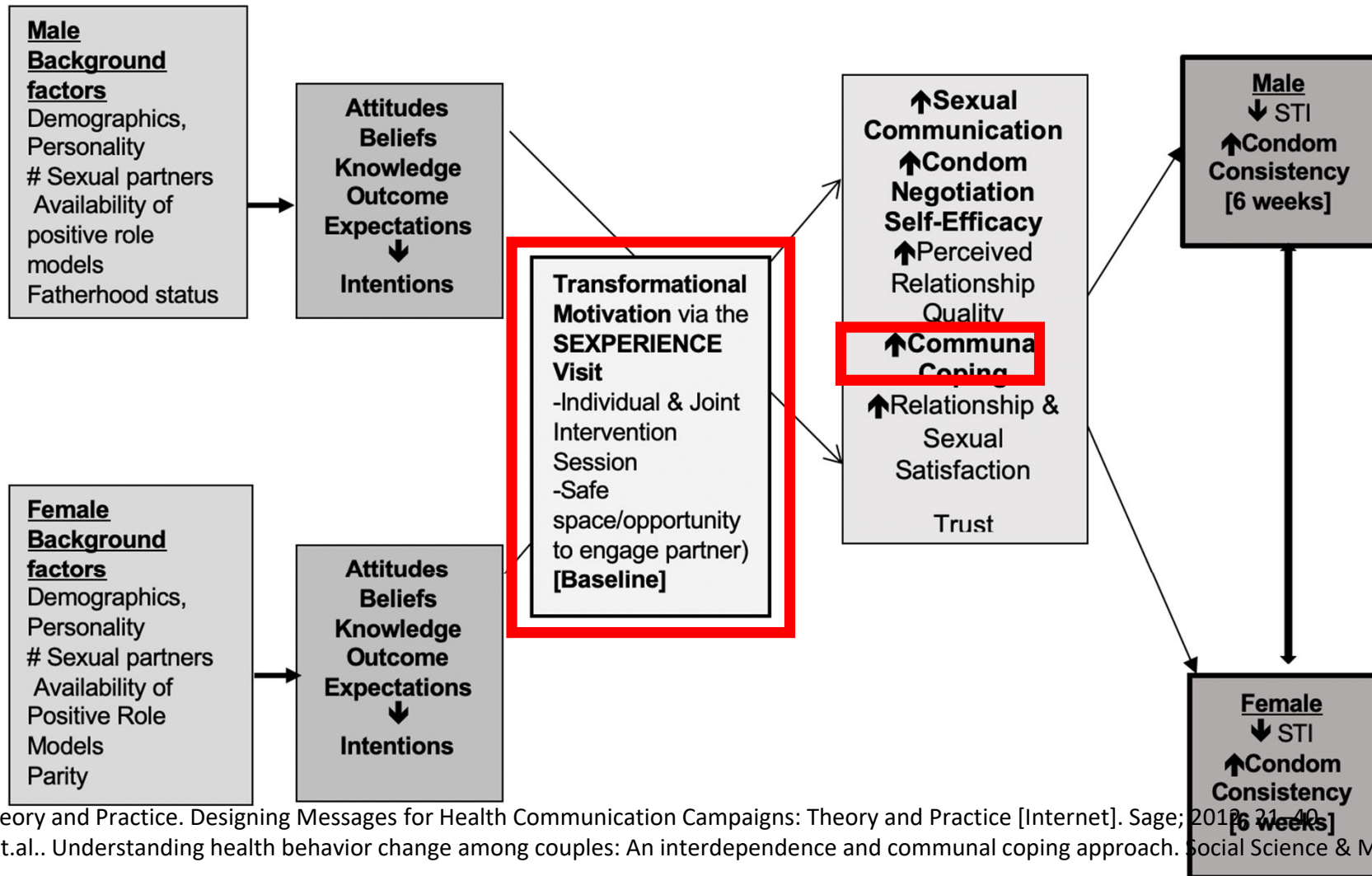
Fig. 1. Cumulative proportion with LARC discontinuation. Numbers in parentheses represent the number of discontinuations in each group during that time interval. Mirena (LNG-IUS) is manufactured by Bayer HealthCare Pharmaceuticals Inc (Whippany, NJ). IUD, intrauterine device. Nexplanon (etonogestrel implant) is manufactured by Merck Pharmaceuticals (Rockville, MD).





Dr. Maria Trent (PI), Dr. Pamela Matson (Co-I)

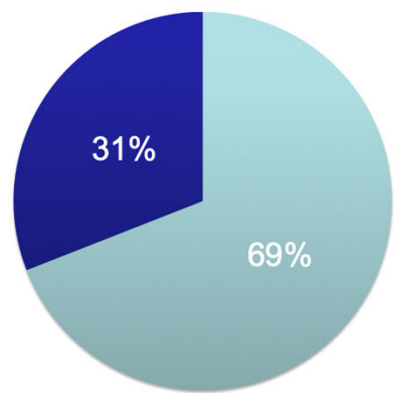
Figure 1. Conceptual Framework of the *Sexperience* Intervention



Yzer MC. Theory and Practice. Designing Messages for Health Communication Campaigns: Theory and Practice [Internet]. Sage; 2012. 21-40.
 Lewis MA, et.al.. Understanding health behavior change among couples: An interdependence and communal coping approach. Social Science & Medicine. 2006]; 62:1369-80.

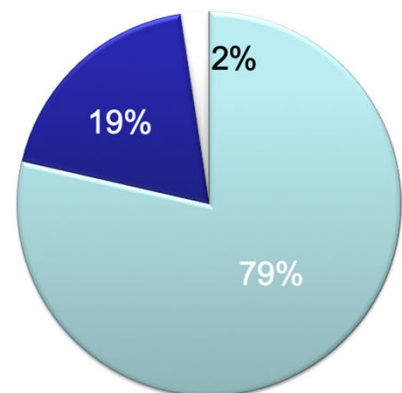
Relationship Impacts (N=22)

Great opportunity to reflect on my relationship

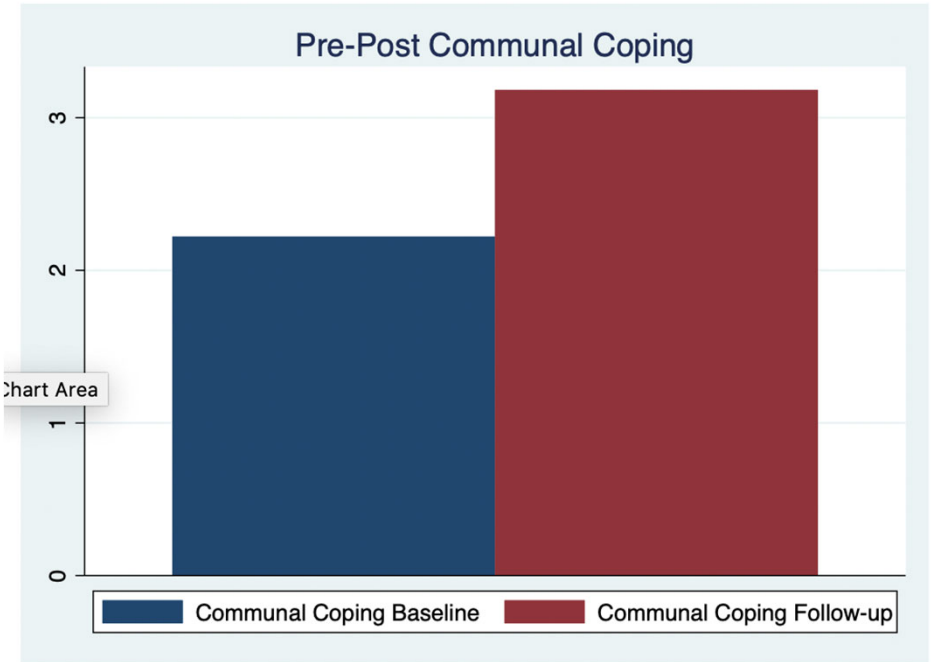


strongly agree agree

I better understand how to protect myself against an STI



strongly agree agree neither agree nor disagree



TITLE X'S ROLE

United States

National
Family Planning
& Reproductive Health Association

The Title X ("ten") family planning program is critical to providing and maintaining access to family planning services for people with low and no incomes and people who are un- or under-insured. This mission has been threatened by years of insufficient funding and politically motivated attacks, leaving millions without access to federally supported services.

2023 GRANTEES

\$263,506,626 81 grantees nationwide

Understand the Impact of Politics and Policies on People

TITLE X PATIENTS 2022

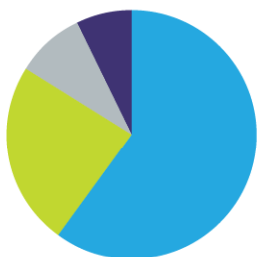
INCOME LEVEL

60%
CARE AT NO COST
(BELOW 101% FPL)

24%
DISCOUNTED FEE
(101-250% FPL)

9%
FULL FEE
(MORE THAN 250% OF FPL)

7%
UNKNOWN



Income is listed relative to the federal poverty level (FPL). In 2022, the FPL for an individual was \$13,590.

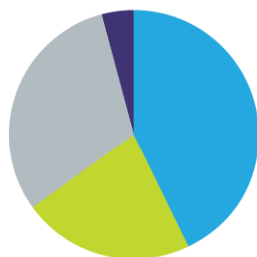
INSURANCE STATUS

43%
PUBLIC

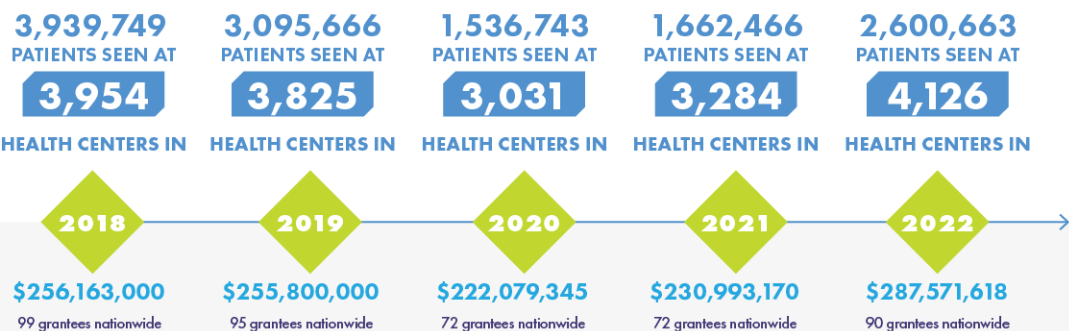
22%
PRIVATE

31%
UNINSURED

4%
UNKNOWN



FIVE-YEAR LOOK BACK^{1,2}



WHILE THERE HAVE BEEN SHIFTS IN THE PROPORTION OF FUNDS ALLOCATED TO TITLE X SERVICE GRANTS OVER THIS TIME PERIOD, FUNDING FOR THE PROGRAM AS A WHOLE HAS REMAINED STAGNANT FOR A DECADE.

BREAKING NEWS

Fifth Circuit upholds decision that federal Title X statute does not preempt Texas law requiring parental consent to prescribe birth control to teens

Supreme Court overturns Roe v. Wade, ending right to abortion upheld for decades

Updated June 24, 2022 · 10:43 AM ET ⓘ

Heard on [All Things Considered](#)

By [Nina Totenberg](#), [Sarah McCammon](#)



6-Minute Listen

+ PLAYLIST



<https://www.npr.org/2022/06/24/1102305878/supreme-court-abortion-roe-v-wade-decision-overturn>

	B"; 9 "&+BD">A# ' D1' +'8 +) 1' #5" #A+"
 - ; A'DA#9B. +9) +A'K; F'D/



DEMOCRACY MAPS

EQUALITY MAPS

POLICY

COMMUNICATIONS

OPEN TO ALL

ABOUT

CHOOSE A STATE ▾

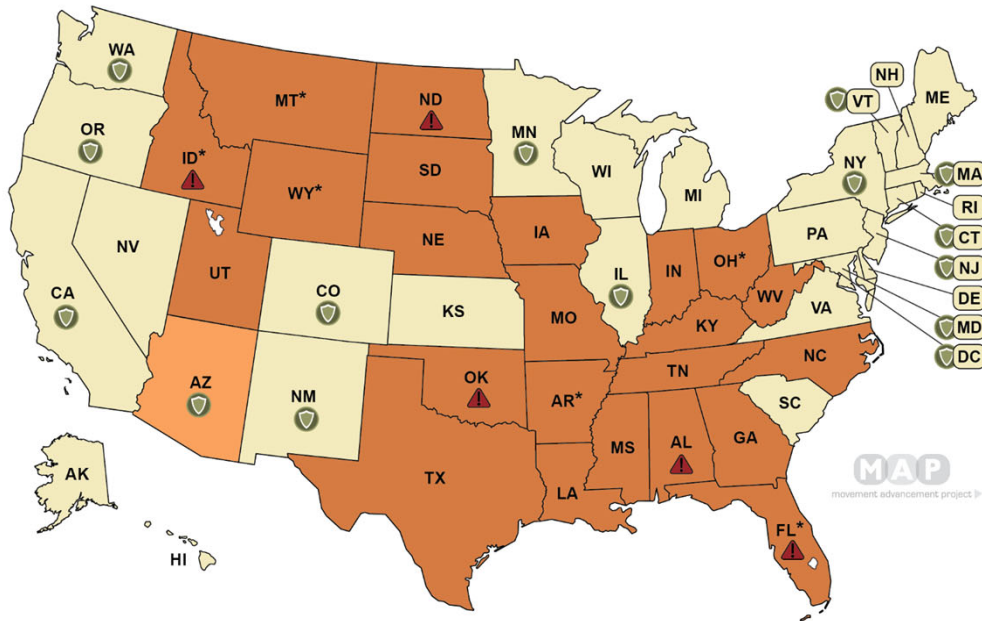
CHOOSE AN ISSUE ▾

SHARE ↗

EMBED <>

PRINT 🖨

For more on these efforts, including how these attacks have become more extreme over time, [read MAP's 2023 spotlight report.](#)



- State has "shield" law protecting access to transgender health care (see this map for more information) (14 states + D.C.)
- State bans best practice medication and surgical care for transgender youth, though ban may not be in effect (see note) (23 states)
- State bans best practice surgical care for transgender youth (1 state)
- State does not ban best practice medical care for transgender youth (26 states, 5 territories + D.C.)
- State ban makes it a felony crime to provide best practice medical care for transgender youth (5 states)
- State has taken steps to ban or restrict best practice medical care for transgender youth, but state law does not ban this care (see note) (0 states)

U.S. Territories



Citations & More Information

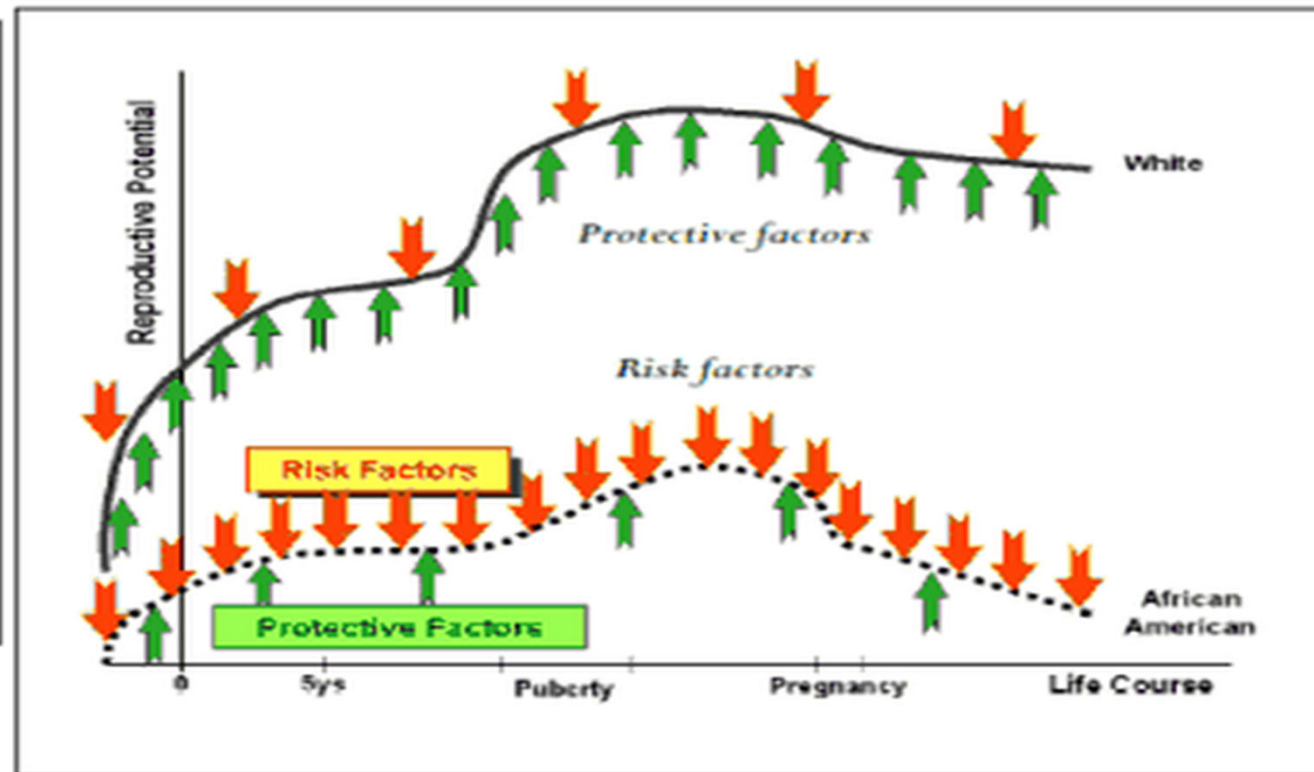
https://www.lgbtmap.org/equality_maps/profile_state/KS

Source: https://www.lgbtmap.org/equality-maps/healthcare_youth_medical_care_bans

Consider Social Determinants and Root Causes of Health Disparities

Examples of Protective & Risk Factors

- Socioeconomic status
- Race and racism
- Health care
- Disease status
- Stress
- Nutrition
- Weight status
- Birth weight
- Various health behaviors

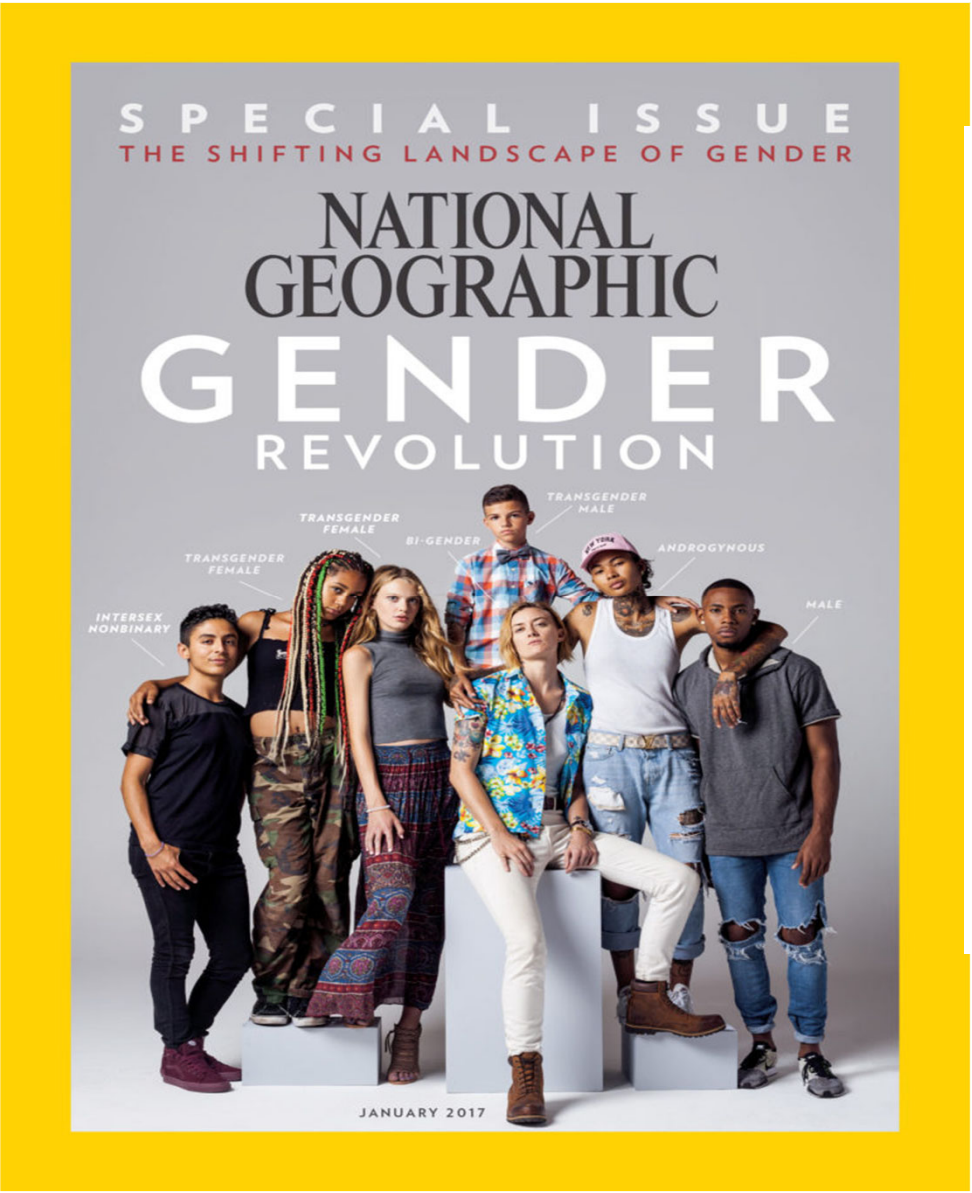


Source: Michael C. Lu, MD, MPH and Neal Halfon, MD, MPH, "Racial and Ethnic Disparities in Birth Outcomes: A Life-Course Perspective," *Maternal and Child Health Journal* 7, no. 1 (March 2003): 13–30, <http://mchb.hrsa.gov/infantmortalitysummit/disparitieslifecourse.pdf>

Don't Forget the Boys and Young Men!

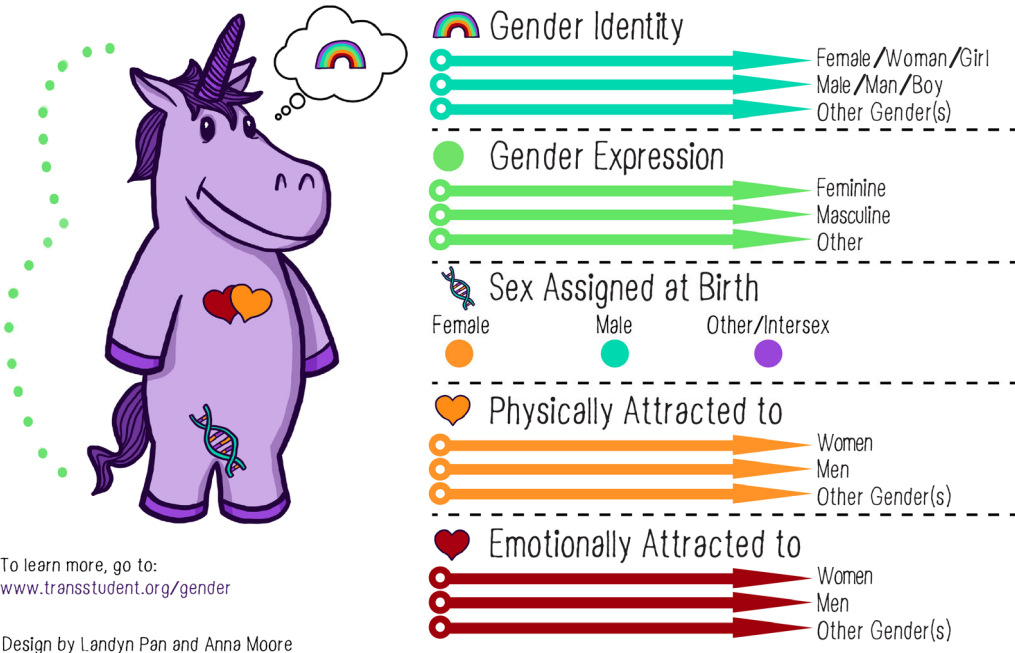


Advocate for All Adolescents/Young Adults



The Gender Unicorn

Graphic by:
TSER
Trans Student Educational Resources



To learn more, go to:
www.transstudent.org/gender

Design by Landyn Pan and Anna Moore



Photo by [Alexander Grey](#) on [Unsplash](#)

National Sexuality Education Standards

Core Content and Skills, K–12



FoSE
Future of Sex Education

Partner with Non-Profits & Start Young

amaze

SEX ED CAN BE
#MOREINFOLESSWEIRD



[YOUTUBE.COM/C/AMAZEVIDS](https://www.youtube.com/c/AmazeVids)



I never as people to
do things I am not
willing to do a public
health professional.....



Howard school board needs to stand up for county youth

OCTOBER 27, 2014, 12:00 PM

As a pediatrician and parent of children attending Howard County Schools, I am concerned about the actions taken by the county school board regarding member Cynthia Vaillancourt's effort to initiate a discussion about teens' access to condoms ("[Condom flap reveals childish school board](#)," Oct. 19).

Reducing unplanned pregnancy and sexually transmitted infections among teens is a national public health goal. In 2013, Maryland ranked 13th in the nation for teen births, with 24 adolescent girls between the ages of 15 and 19 per thousand giving birth to a child.

Maryland ranks seventh in the nation for new H.I.V. infections and 21st for chlamydia infections. Some 40 percent of students in the state have had sexual intercourse and nearly two in five of those did not use condoms the last time they had sex.

While students in Howard County have performed well academically, that has not exempted them from danger posed by STIs. The Maryland Department of Mental Health and Hygiene reports that for the 15- to 19-year-old age group, "every county is a chlamydia hot spot."

Trent M, Baltimore Sun, October 27, 2014



Source: Board of Education of Howard County,
<https://go.boarddocs.com/mabe/hcpsmd/Board.nsf/Public>, 2/22/2018



Advocacy Works!
Opens August 1, 2023



This STD is more common than gonorrhea, but few people know about it. Johns Hopkins is hoping to change that.

By ANDREA K. MCDANIELS
THE BALTIMORE SUN | NOV 14, 2018 AT 7:00 AM



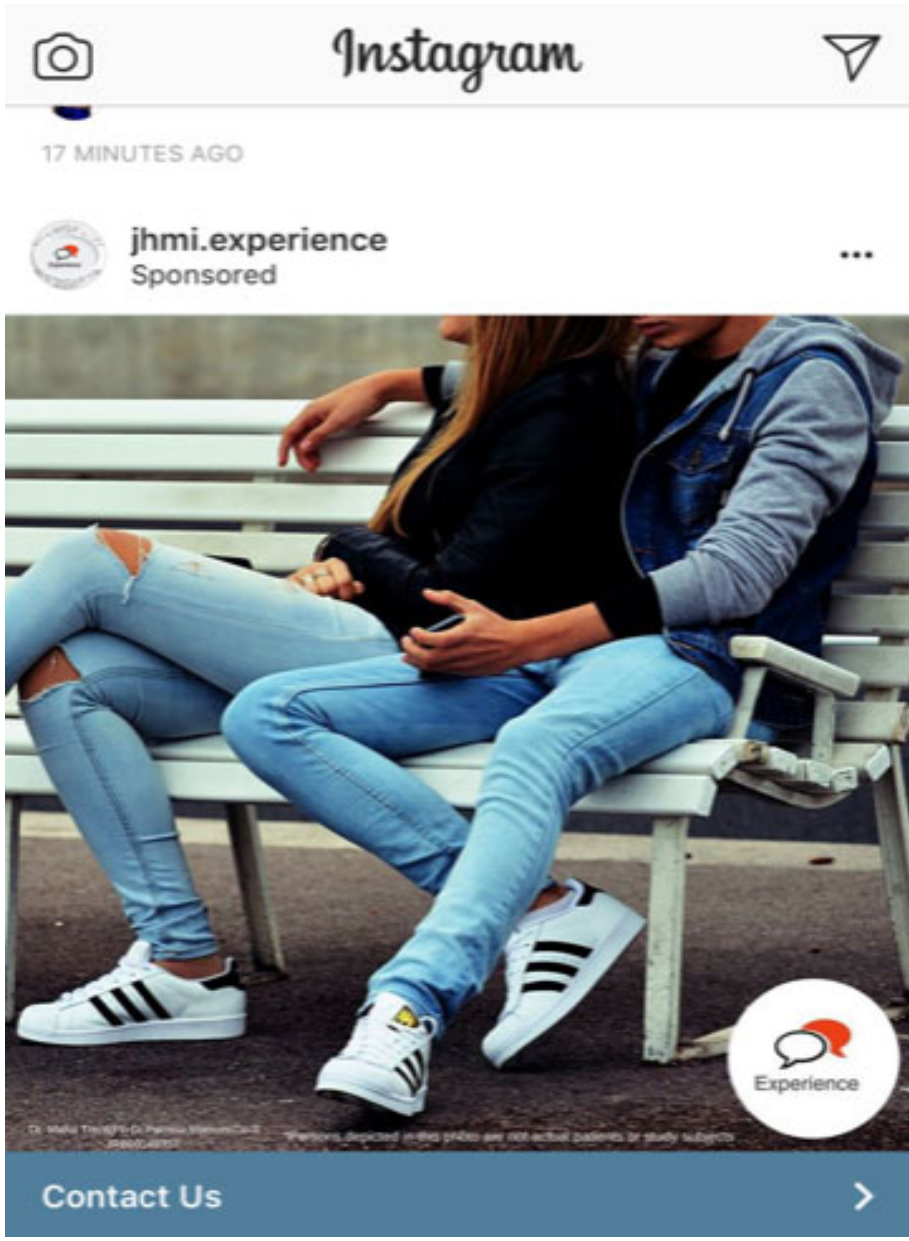
By ANDREA K. MCDANIELS
THE BALTIMORE SUN | NOV 14, 2018 AT 7:00 AM



Dr. Maria Trent, M.D., M.P.H.
Johns Hopkins Medicine

<https://www.baltimoresun.com/health/bs-hs-new-std-mgen-20181114-story.html>

Meet Adolescents Where They Are



The image is a screenshot of an Instagram post. At the top, the Instagram logo and navigation icons are visible. Below the header, it says "17 MINUTES AGO". The post is from the account "jhmi.experience" and is marked as "Sponsored". The main content is a photograph of two adolescents sitting on a white wooden bench. The adolescent on the left is a young woman with long brown hair, wearing a black jacket, light blue jeans with a tear at the knee, and white Adidas sneakers. The adolescent on the right is a young man wearing a blue denim vest over a grey hoodie, light blue jeans, and white Adidas sneakers. They are both looking towards the right. In the bottom right corner of the photo, there is a circular logo with a speech bubble icon and the word "Experience". At the very bottom of the post, there is a blue bar with the text "Contact Us" and a right-pointing arrow.

“We must become more powerful on behalf of children [and adolescents]”

-Ben Hoffman, President-elect, American Academy of Pediatrics

