

Applying Research to Practice:

Factors that Influence the Avoidance and Cessation of Sexual Risk Behaviors Among Youth and Potential Implications for Programs

Partnering to Promote Positive Outcomes for All Youth
U.S. Department of Health and Human Services Administration on Children, Youth and Families (ACYF)
Family and Youth Services Bureau (FYSB) Adolescent Pregnancy Prevention Program Grantee Conference

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Sponsorship

- **Sponsored by the Office of the Assistant Secretary for Health at the U.S. Department of Health and Human Services**
 - The Office of Planning, Research, and Evaluation (OPRE) within the Administration for Children and Families oversees the work Mathematica carries out
- **Project officers at OPRE**
 - Tia Brown and Caryn Blitz
- **Project staff at Mathematica:**
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Objectives

By the end of the workshop participants will be able to:

- **Understand key concepts of the conceptual models for sexual risk avoidance and cessation**
- **Identify factors that research shows influence outcomes related to youth sexual behavior, including those that can be modified by intervention**
- **Gain insights about different programming strategies through connections with other grantees**
- **Apply findings from the conceptual models to programs, specifically to inform program improvements and innovations**



Project goals

- **Develop two complementary conceptual models related to preventing youth risk behaviors**
 - Sexual risk avoidance
 - Sexual risk cessation
- **Identify factors that research suggests influence outcomes related to youth sexual risk avoidance and cessation**
- **Inform ongoing program innovations and improvements**
- **Contribute to an optimal health model for youth**



Iterative process to develop initial models

- **Developed working definitions and methods**
- **Consulted with eight outside experts**
- **Conducted literature review and synthesized findings**
- **Identified factors with evidence of an influence on key sexual risk avoidance and cessation outcomes**
- **Developed figures and accompanying narrative to describe relationships between factors and outcomes**
- **Shared initial models and memo and revised based on comments from OPRE, OASH, and experts**



Working definitions

- **Conceptual model:** A pictorial representation of the factors that influence key outcomes of interest
- **Sexual risk avoidance:** Not engaging in consensual sexual activity
- **Sexual risk cessation:** Discontinuing consensual sexual activity after having engaged in it

Expert consultation

- **Assessed literature review plans**
- **Suggested theoretical frameworks for models**
- **Confirmed and identified key factors and outcomes to explore**
- **Encouraged a focus on rigor and objectivity**

Purpose of the literature review

- **Identify applicable behavior change theoretical models and frameworks**
- **Assist in understanding key underlying concepts of the models**
- **Gather existing empirical evidence on factors influencing sexual risk behaviors associated with avoidance and cessation**
- **Synthesize research evidence to support the development of sexual risk avoidance and cessation conceptual models**



Process to identify and select literature

- **Identified 1,035 articles related to sexual activity and decision making among U.S. youth and young adults (ages 24 and younger) for the period 2003 to 2018**
- **Screened in 679 articles focused on key outcomes—sexual risk avoidance, sexual risk cessation, sexual delay, sexual reduction—for youth age 24 and under in the United States**
- **Narrowed to 248 articles focused on factors, decision making, and/or skills related to key outcomes, behavior change theories, or public health messaging**
- **Selected & prioritized a diverse set of 88 articles for review**
 - Quantitative, qualitative, meta-analyses, theoretical
 - $\frac{3}{4}$ from peer-reviewed sources; $\frac{1}{4}$ from grey literature



Multi-step extraction and analysis process

- **Built qualitative database to capture characteristics and findings for each article**
- **Assessed and rated rigor of evidence for each article**
- **Identified 55 factors, then assigned article's evidence rating to each factor, calculated average rating for each factor**
- **For each factor that met a rating cut-off, examined existence of an effect or association and whether risk or protective**
- **Synthesized evidence across articles for each factor— overall, was there an effect or association with key outcomes? In what direction? Interactions? Subgroups?**
- **Assigned factors with sufficient evidence to conceptual models (36 to sexual risk avoidance, 21 to sexual risk cessation)**



Key outcomes examined

Non-behavioral

- Knowledge
- Skills
- Attitudes
- Values
- Intentions
- Perceptions

Sexual behaviors

- Avoidance:
 - Sexual initiation or delay
 - Age at first sexual intercourse
 - Level of pre-sexual activity
- Cessation:
 - Recent intercourse (e.g. in 3 or 6 months)
 - Relationship status at time of sex

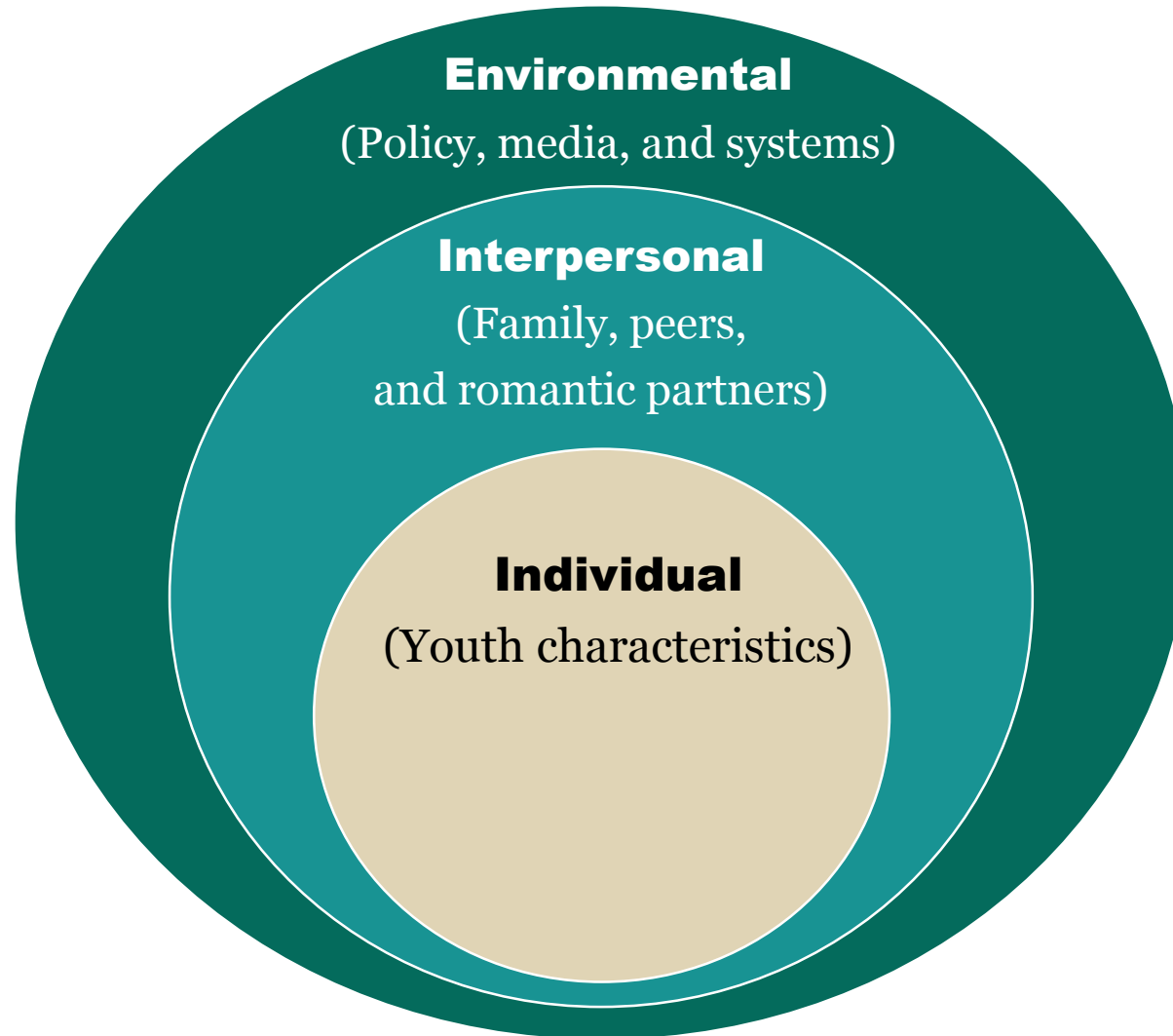
Non-sexual

- Depression or anxiety
- Alcohol or substance use
- Delinquency
- Non-sexual risk-taking behavior
- Academic achievement

Health status

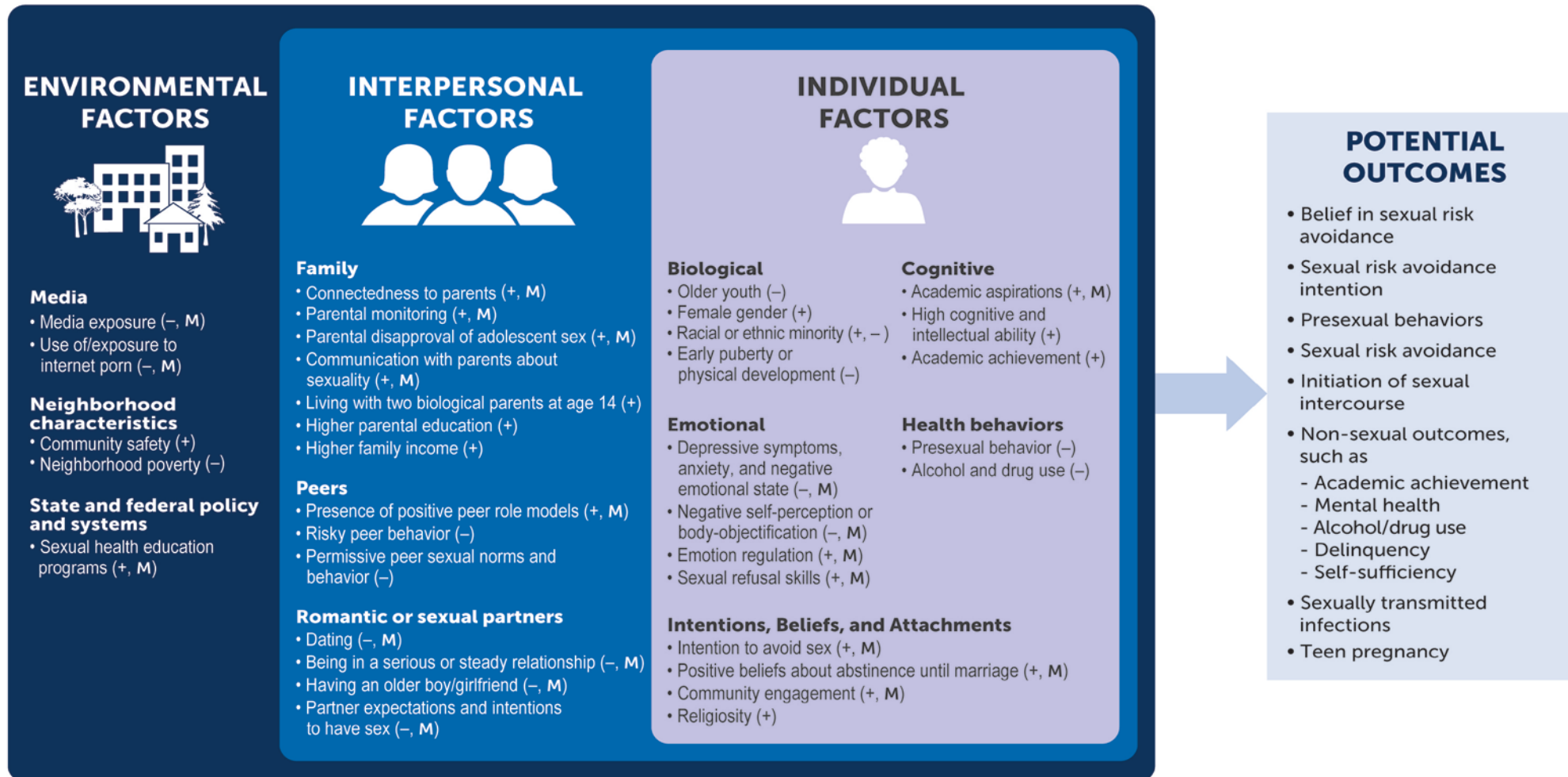
- Teen and unintended pregnancy
- Sexually transmitted infections

Guiding framework: The social-ecological model



Note: Adapted from Bronfenbrenner 1977.

Initial Sexual Risk Avoidance Conceptual Model



Sexual risk avoidance is defined as not engaging in sexual activity. This figure displays factors identified through a literature review as influential for sexually inactive youth on at least one of the potential outcomes. Only those factors identified as having sufficient evidence are included. Factors fall into three interrelated categories: environmental, interpersonal, and individual. They are grouped in order from distal to proximal in relation to the outcomes. Factors are marked as a protective factor or a risk factor based on whether the evidence showed that the factor was a positive (protective) influence (+) on the intended SRA outcomes or a negative (risky) influence (-) on the outcomes. Factors may interact with each other to influence outcomes. Factors that are considered potentially modifiable by program intervention are marked with an "M".

Modifiable factors for sexual risk avoidance

Environmental factors

- Media
 - Media exposure
 - Use of/exposure to internet porn
- State and Federal Policy and systems
 - Sexual health education programs

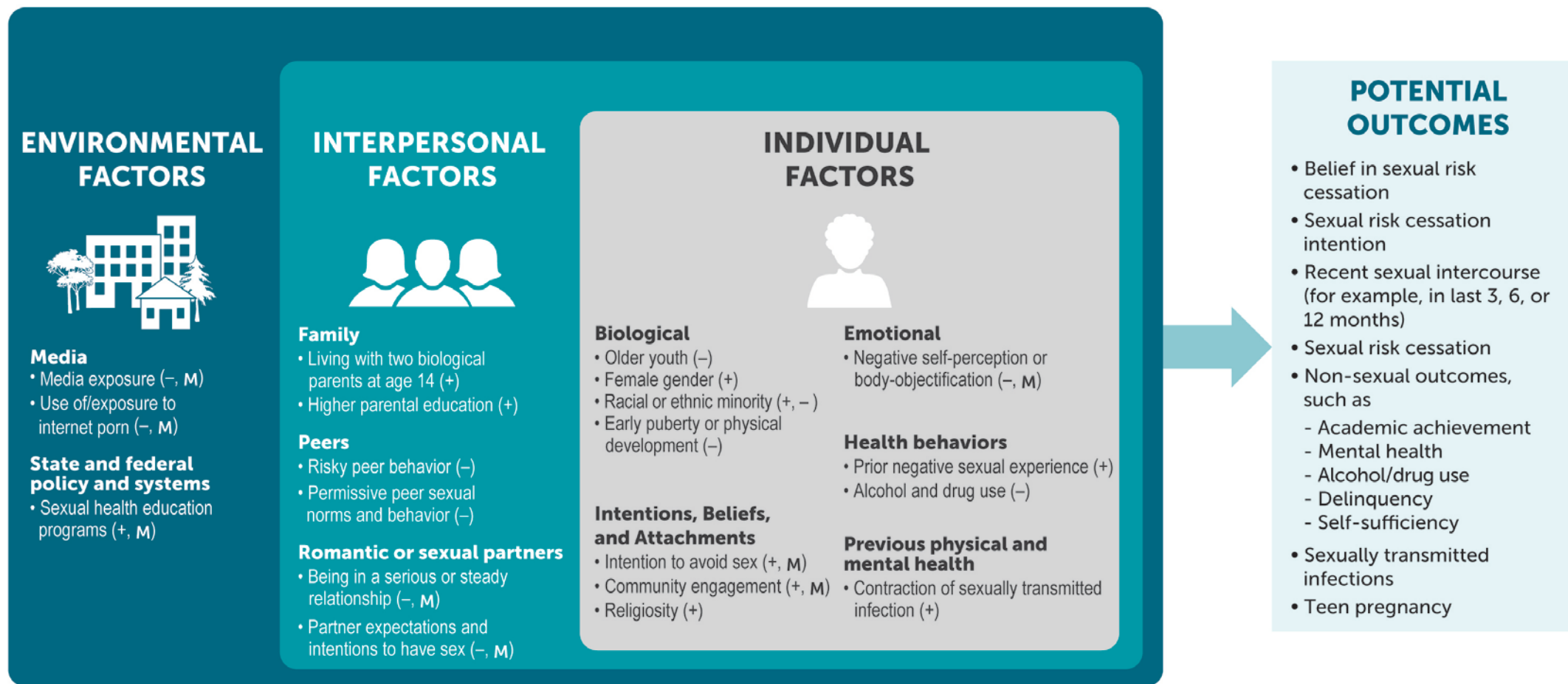
Interpersonal factors

- Family
 - Connectedness to parents
 - Parental monitoring
 - Parental disapproval of adolescent sex
 - Communication with parents about sexuality
- Peers
 - Presence of positive peer role models
- Romantic or sexual partners
 - Being in a serious or steady relationship
 - Having an older boyfriend/girlfriend
 - Partner expectations and intentions to have sex

Individual factors

- Cognitive
 - Academic aspirations
- Emotional
 - Depressive symptoms, anxiety, and negative emotional state
 - Negative self-perception or body-objectification
 - Emotion regulation
 - Sexual refusal skills
- Intentions, beliefs, and attachments
 - Intention to avoid sex
 - Positive beliefs about abstinence until marriage
 - Community engagement

Initial Sexual Risk Cessation Conceptual Model



Sexual risk cessation is defined as discontinuing consensual sexual activity after having engaged in it. This figure displays factors identified through a literature review as influential for sexually active youth on at least one of the potential outcomes. Only those factors identified as having sufficient evidence are included. Factors fall into three interrelated categories: environmental, interpersonal, and individual. They are grouped in order from distal to proximal in relation to the outcomes. Factors are marked as a protective factor or a risk factor based on whether the evidence showed that the factor was a positive (protective) influence (+) on the intended SRC outcomes or a negative (risky) influence (-) on the outcomes. Factors may interact with each other to influence outcomes. Factors that are considered potentially modifiable by program intervention are marked with an "M".

Modifiable factors for sexual risk cessation

Environmental factors

- Media
 - Media exposure
 - Use of/exposure to internet porn
- State and federal policy and systems
 - Sexual health education programs

Interpersonal factors

- Romantic or sexual partners
 - Being in a serious or steady relationship
 - Partner expectations and intentions to have sex

Individual factors

- Emotional
 - Negative self-perception or body-objectification
- Intentions, beliefs, and attachments
 - Intention to avoid sex
 - Community engagement

Factors not included in the models that warrant further review

Environmental factors

- Exposure to media campaigns
- Contraceptive access
- School characteristics
- Exposure to alcohol, tobacco, drugs, or firearms

Interpersonal factors

- Connection to a positive adult role model
- Permissive parental sexual norms
- Positive peer values
- Use of social media
- History of physical abuse by caregivers
- Being born to teen parents
- Housing instability

Individual factors

- General risk-taking
- Self-efficacy
- Self-esteem
- Impulsive personality
- Attachment vulnerability
- Values
- Academic achievement (SRC only)

Next steps

- **Finalize a research brief on the initial models**
- **Refine models based on additional information**



Questions?



Reflections from practitioners

- **Bernadette Vissani**
Director, Project YES You Can!
- **Gregg Johnson**
Director of Training, More Than Conquerors, Inc.



Using the conceptual models to inform practice: Table group activity and discussion



Today's challenge

- **How might the conceptual models be used to help design or refine programming?**
- **Each person should choose to focus on either/or**
 - SRA (sexually-inexperienced youth)
 - SRC (sexually-experienced youth)
- **See posters on “conceptual models”**



Identify what you already do

- **How does your current program—and its existing strategies and features—aim to modify influencing factors identified in the conceptual models?**
- **Start with individual brainstorming**
 - Use sticky notes to briefly record your thoughts—one thought per sticky note
 - Consider strategies or features related to, for example:
 - Staffing (hiring/training/support)
 - Youth engagement
 - Program activities
 - Curricula and materials
 - Organize your ideas on the first grid (highlighted on next slide) by the factor category—*environmental, interpersonal, or individual*—that the strategies or features aim to address
- **Team discussion and prioritization**
 - Which program strategies and features seem most important for modifying factors?



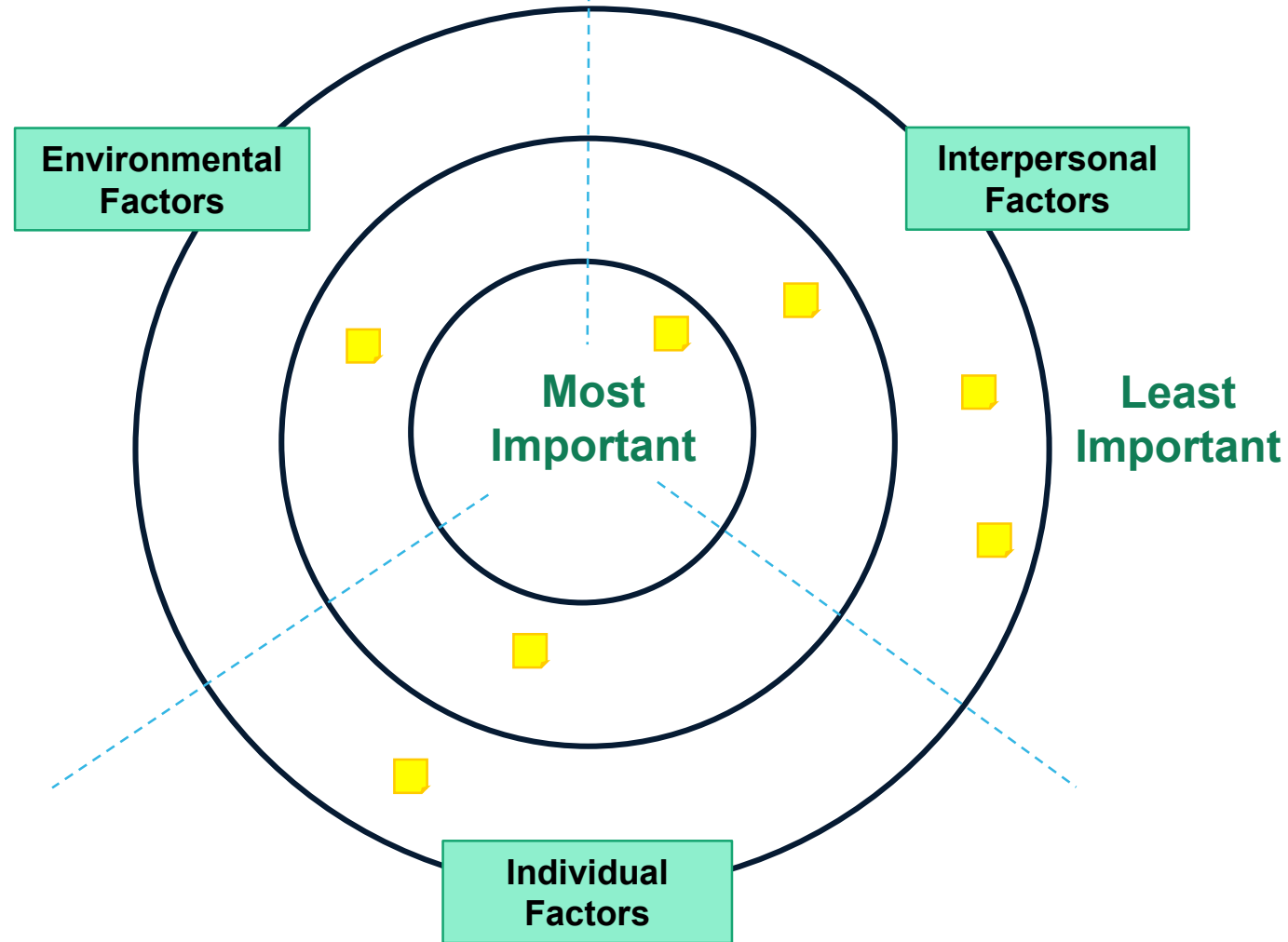
Identify what you already do

5 min

- Brainstorm individually about strategies/features
- Plot your sticky notes in a factor category

8 min

- Discuss as a group
- Identify which seem most important



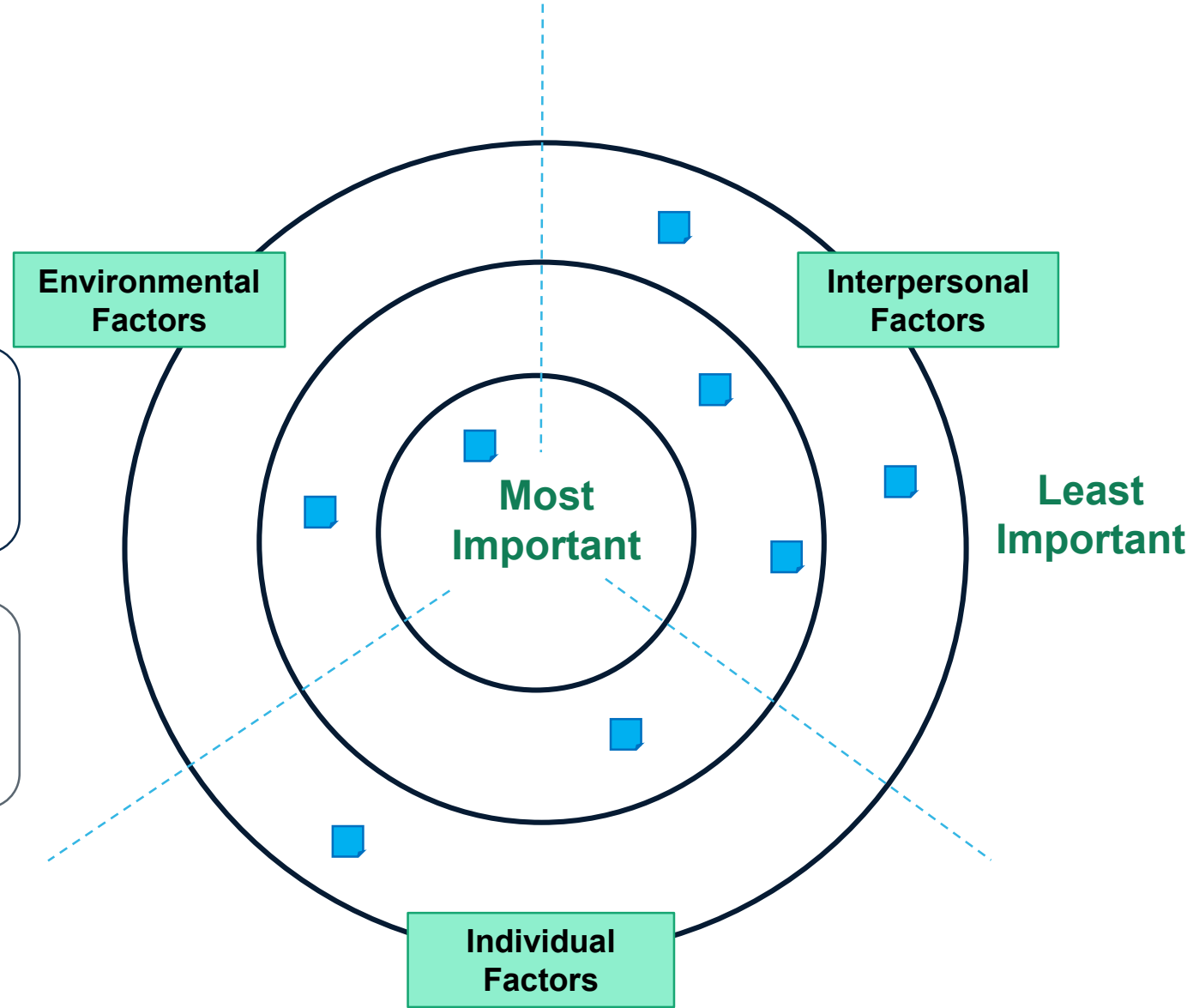
How might you innovate?

- **What could you do to refine your program approach and its strategies and features to better influence the key factors?**
- **Start with individual brainstorming**
 - Use sticky notes to briefly record your ideas for potential program innovations or refinements to better align with the conceptual model(s)
 - Consider strategies or features related to, for example:
 - Staffing (hiring/training/support)
 - Youth engagement
 - Program activities
 - Curricula and materials
 - Organize your ideas on the second grid (highlighted on next slide) by the most relevant factor category—*environmental, interpersonal, or individual*
- **Team discussion and prioritization**
 - How might programs improve or innovate?
 - Which ideas for innovation feel most feasible? Most promising?



Identify what you might do to innovate

- 5 min**
 - Brainstorm individually about strategies/features
 - Plot your sticky notes in a factor category
- 8 min**
 - Discuss as a group
 - Identify which seem most important



Small group reflections and report out

- **Briefly summarize your group's reflections for the larger group (one spokesperson per table)**
 - Program strategies and features that seem most important
 - Program successes
 - Potential program improvements or innovations



For more information

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Reference

Bronfenbrenner, U. “Toward an Experimental Ecology of Human Development.” *American Psychologist*, vol. 32, no. 7, 1977, pp. 513-531.

