Learning to love: Leveraging the developmental science of adolescence to improve sex education

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Objectives

At the conclusion of this session:

1. Describe three current research findings from developmental science relevant to adolescent sex education

2. Describe how neural and biological transitions during adolescence lead to changes in motivation, cognition, behavior, and relationships

3. Give two practical examples of ways that the developmental science of adolescence can be leveraged to improve sex education.
Advancing understanding of adolescence through innovative transdisciplinary developmental science, and connecting emergent brain research to programs and policy.

Adolescence represents a maturational period of great vulnerabilities and opportunities — with lifelong impact on health, education, well-being, and social as well as economic success.
Adolescence

Biological – onset of puberty

Social – rights, roles and responsibilities of adulthood
“The United States spends about a billion dollars a year on programs to counsel adolescents on violence, gangs, suicide, sex, substance use and other potential pitfalls. Few of them work.”

- D. Dobbs (October 2011) – Beautiful Brains. National Geographic
“Adolescence is not for the faint of heart. The to-do list for the decade between ages 10 and 20 includes separating from your parents, finding your place among your peers at school, beginning to make decisions about your own future, and—oh yes—figuring out how to relate to the world, and yourself, as a suddenly and mystifyingly sexual being.”

-Dana Stevens  (Slate Magazine March 21, 2014)
There is no way, magic isn’t involved.

Puberty
Brain regions vs. brain networks
**Myth** of the ‘broken’ brain or ‘missing’ brain and ‘immature PFC’

- "What may seem backward and needing to be changed...may in fact be an inventive, brilliantly complex (cultural) adaptation to a particular environment or ecosystem."

What does the developing adolescent brain expect to learn?
Adolescent Brains

- well adapted for the tasks and challenges of adolescence
- unique *opportunities* for social, emotional, & motivational learning
- learning about the complex social world they must navigate
Neural Plasticity

• Encompasses a wide range of synaptic and non-synaptic processes that underpin the brain’s capacity to instantiate learning.

• A great deal of scientific interest has focused on understanding ‘sensitive’ or ‘critical’ periods of development.

• Windows of opportunity for specialized learning
Adolescent Romantic and Sexual Development
Positive and Negative Trajectories
Trajectories and Inflection Points
Adolescents and Peers
Sensation & Status Seeking
Testosterone

Developmental Science of Adolescence:
Multiple levels of bi-directional interactions

Neurodevelopmental

Technology

Culture

Behavioral

Social (family; peers)

Biological

Environment (media, school, community)
Unique challenges of sex education

**DIMINISH NEGATIVE TRAJECTORIES**

- Intimate partner violence
- Unwanted or unintended sexual activity
- Poor sexual health outcomes (STI’s, unwanted pregnancy, etc)
- Depression associated with break ups

**SUPPORT NORMAL, HEALTHY RELATIONSHIP & SEXUAL DEVELOPMENT**

- Positive romantic relationships
- Sexual socialization
- Development of healthy sexual attitudes and behaviors
- Sex positive approach
- Sex and romantic relationships can be protective
Scaffolding adolescent learning about sex & relationships
Rethinking theoretical underpinnings
Move from cognition to affect

“I’ve learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.” - Maya Angelou
Social Context & Relationships
Identify transferable components of sex and relationship education
Implications and Opportunities

• Expand our understanding of normative developmental trajectories for intimate relationships and sexuality.

• Consider how different types of peers may influence youth in different ways – both socially and neurobiologically.

• Deepen our understanding of what adolescent brains are primed to learn about and implications for delaying learning experiences.
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