



## Developmental Science and Adolescent Sexual Health: Peer Presence and Influence

Adolescence is a period of significant transformation that starts with physical changes at the onset of puberty and ends with the social transition into adulthood. Where children spend a higher percentage of their time with their caregivers, adolescents seek out and are influenced by interactions outside of the family - including with peers and romantic partners. This important part of development allows young people to learn about their identity and discover broader social support systems. Promising research from the field of developmental neuroscience provides new insights on the ways peers can influence adolescent behavior. This science provides valuable guidance for educators, applied researchers and program developers to improve young people's sexual health and relationships.

### WHAT THE DEVELOPMENTAL NEUROSCIENCE SAYS

As young people engage in new types of social relationships - like romantic partnerships or close friendships - they may also engage in increased risk-taking and sensation-seeking behaviors. Developmental neuroscience highlights that being in the presence of peers, whether in physical or virtual spaces, activates reward circuitry in the brain. This "peer effect" increases the rewarding feelings that are generated from engaging in a wide range of risk-taking or sensation-seeking behaviors. For example, one study compared adolescents and adults on a simulated driving task. When adults and adolescents performed the task alone, they performed the same. However, when they performed the task in front of their peers, adolescents were twice as likely to take more driving risks compared to adults and showed more activation in the regions of the brain that process rewards (see Albert et al, 2013). The peer effect may also increase the sense of reward associated with romantic and sexual behaviors, such as asking someone out on a date, holding hands or having sex.

Adolescence is a period of significant learning about processing social cues. New experiences and changes in the brain lead to shifts in how adolescents process facial expressions and gestures, evaluate others' thoughts and feelings, and predict others' actions and communication. As adolescents mature, they become very sensitive to how they are perceived by others, which can influence their decision-making and behavior. For example, in another driving study, adolescents completed a driving task in front of peers before and after those same peers excluded them from a game. After experiencing social exclusion, adolescents who took more risks in the driving task also showed more activation in regions of the brain associated with processing social cues. This suggests that increased sensitivity to social context may lead to greater risk-taking behavior (see Peake et al, 2013).

Young people can be influenced by reward sensitivity and by social context. Both of these factors may lead to health harming behavior if adolescents perceive the potential for positive social outcomes, even if they know the risks associated with that behavior.

### WHY PEER PRESENCE IS IMPORTANT FOR ADOLESCENT SEXUAL HEALTH

Both peers and romantic partners are present in social contexts when sexual decision-making occurs - either when talking about or when engaging in sexual activity. Just being with peers is naturally exciting for adolescents, and talking about sexual behavior in the presence of peers may elicit even more

excitement! On one hand, this peer effect may lead to increased sexual risk-taking even for young people who are aware of the potential consequences because the immediate social rewards outweigh the assessment of risks. We can support young people in examining these influences through strategies like story telling with analysis and reflection activities. This is an area of further exploration and conversation.

On the other hand, educators and providers can leverage the power of peer presence to promote engagement in beneficial and prosocial activities that reduce sexual risk behaviors. For example, peers could motivate one another in public, positive social experiences such as sports, community service, arts, or other extracurricular activities. Educational strategies can leverage peer presence to facilitate student engagement and deeper learning with influential peers, like seniors or college students, leading conversations about sexual health with younger adolescents.

Educators and providers can also support adolescents in perspective taking by strengthening their ability to understand the thoughts and perspectives of others and reflect on how their perceptions of others can influence their own sexual decision-making, particularly after experiences of social rejection. For example, the period after experiencing a break-up with a romantic partner may be particularly vulnerable for young people. Adolescents need additional supports and skills to navigate these difficult emotions.

Given these findings, three key questions have emerged as areas for exploration in the sexual health field:

### KEY QUESTIONS

**Q:** How do we teach teens about the power of peer presence in adolescent sexual health programs?

**Q:** How do we leverage the power of peer presence to increase health promoting behaviors and improve sexual health outcomes?

**Q:** In what ways can adolescent sexual health programs extend skill practice for perspective-taking in the context of sexual health?

## WHAT THE SEXUAL HEALTH FIELD CAN DO

### Educators and Youth Workers

- Understand and embrace the role that peer presence plays in healthy adolescent development. Utilize programs and strategies that promote the importance of building healthy relationships.
- Simulate experiences that demonstrate and teach adolescents about the power of peer presence. For example, play a game that challenges youth to do something “risky” both alone and in the presence of peers (e.g., a betting game or an ice bucket challenge). Encourage youth to reflect on the influence of peer presence in their decision-making about whether to engage in the behavior.
- Engage adolescents in social learning in the presence of peers and friends; for example, invite influential peers to share positive messages about sexual health, like using in-class peer leaders to model and facilitate key activities.
- Provide opportunities for adolescents to discover and find rewards in positive, health-promoting experiences, such as service learning or extracurricular activities with peers and friends.
- Provide opportunities to strengthen and reflect on perspective taking to guide relationships and sexual health decision-making – in both in-person and social media contexts.
- Provide opportunities to discuss situations that may cause social rejection (e.g., being rejected by a romantic interest or going through a break-up). Frame these experiences as growth opportunities and support adolescents to develop skills to manage and learn from the rejection.



### Applied Researchers and Program Developers

- Focus on building better relationships – both social and romantic. Tease out what friendship means and feels like in face-to-face relationships and online relationships. Identify and clarify the qualities and skills required for healthy face-to-face and online relationships, examining the literature on social and emotional learning approaches.
- Examine the influence of peers and romantic partners on adolescent identity formation and the role of peers and identity in influencing sexual behaviors.
- Identify strategies that effectively promote prosocial behaviors at critical time-points (e.g. transition between middle and high school) when adolescents are forming new peer groups and identities.
- Identify and implement interventions with peers serving as social influencers, such as peer education or support groups, or training friends on how to support each other to notice and support relationship challenges.

## READING LIST

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## KIRBY SUMMIT

To honor ETR scientist Dr. Douglas B. Kirby for his lifetime contributions to the field, ETR and its partners created an invited summit—known as the Kirby Summit—to foster collective dialogue on current research, promising interventions, and the role of policy to promote the sexual and reproductive health of young people. The 2017 Kirby Summit brought together a transdisciplinary group of experts to explore how findings from developmental neuroscience can translate into adolescent health programs and policies.