MAPPING THE TEENAGE BRAIN

Four key lessons from UVA psychologist Joseph Allen's study of the teenage brain

By JANE KELLY | 07.16.19

In 10 more words "Twilight" : pop protagonist Betty Swan fall for vampire Edward Cullen and get pregnant. Or, a pop video between Cullen and a train vampire who was set on hurting Swan dies.

In the movie, Swan, played by Kristen Stewart, seemed distracted by Edward's unfeeling relationship with her and unable to focus on her work. Especially because she was a bit of one, alienated from her community. "I'd rather die than to stay away from you," she tells Swan in her trademark monotone, premonitory in the first movie.

But what if Bella had made friend? Might that have saved her from succumbing to Cullen and turning into a vampire?

Psychology says: "yes."

Yes, really.

Research at the University of Virginia has found that close teenage friendships, especially same-gender pair relationships, are a great proving ground for young people to practice with intimacy and negotiating differences.

In fact, those healthy teen relationships are a good predictor of strong romantic pairings in adulthood.

"Having a close friend gives teens a degree of security that lets them feel free to explore the ups and downs of relationships with other peers confidently, so they are less likely to fall into some of the traps that cause a Bella's inertia," said psychologist Joseph Allen. He's lead investigator in four several studies on the social lives of teenagers.

Allen's work has helped decode the teenage brain and modeled how teen friends, social support and peer relationships can help young people set up a firm base in life — and that's just one of the lessons Allen can teach us about teenagers.

Here are four key lessons he has learned:

SOLID TEEN FRIENDSHIPS PREDICT HEALTHY ADULT ROMANCES

1

The findings are key to parents of having a close friend come from a 20-year study, the length of which is remarkable in its own right. Allen said he and his team set out to answer a simple, yet consequence-laden question: Do adolescent relationships lay down roots that grow, when concerns life stabilizes.

Interestingly, Allen said the concept of romance in sexual experience is been years old, but probed future romantic fulfillment, because those experiences are already different from adult relationships. They are typically not— unrelated, he says.

> **"They are not necessarily based on common interests or long-term commonalities. This means those young relationships are not the best place to learn the skills you will need to be a romantic partner."**

He and his team interviewed and observed 168 racially, ethnically and socioeconomically diverse people aged 13 to 32. They asked about the quality of their social and romantic relationships, as well as measurements by teens' close friends. When study participants were in their 20s, researchers followed up on quality in late-teen adulthood they were with their romantic lives.

The study found that progress in key social developmental tasks in adolescence predicted future romantic competence at ages 21-32, even through the adolescent teens were in nonromantic areas.

14

At age 14, adolescent abilities to establish positive expectations of relationships with their peers and to be appropriately assertive with peers were the best predictors of future romantic satisfaction.

15

At ages 15 and 16, social competence—teens' ability to establish close friendships and to manage a broad array of relationships with peers—was the best predictor.

16

Ages 16 to 18, teens' ability to establish and maintain close friendships was the best predictor of satisfaction romantically.

TEEN STRESS COULD CAUSE PREMATURE AGING

2

The words "teenage" and "stress" go hand-in-hand. Academic demands, peer pressure, conflicts with friends all contribute to teen stress.

New research from UVA has found that stress may have long-term links to premature aging in adolescence.

Allen's study, "The Body Remembers," focuses on interhandle, a protein associated with cancerous tumors, arthritis, osteoporosis and a number of other problems associated with aging.

High levels of this substance were found in the bloodstreams of 28-year-olds who experienced chronic social conflict beginning at the early age of 13.

The effect was observed in a group of 157 Charlottesville middle school students Allen started following in 1998. Researchers asked the students how well they managed conflict and then passed the same questions to their peers. The researchers then observed the teens interacting with their close friends.

At age 26 blood was drawn from the study participants. Those who had chronic difficulty managing conflict at age 13 had higher levels of interleukin-6 in their bloodstreams.

Allen said he thinks the stress response system that all humans have is extremely sensitive to influence in adolescence.

> **"There is a lot changing in the brain. There is a lot changing in terms of hormone development. We think that this is a critical period for stress responses to be affected by peer relationships."**

The teen is continuing today. Allen's team will get a 10-year-plus follow-up on with the remaining group now these 40s.

"One of the things we know is that significant life stresses influences the aging process," Allen said. "We have good reason to believe, based on this study, that the adolescent period is a critical period for stress response development and that they may actually be as important to how we age as a number of the physical factors that we already know are important — things like obesity and exercise and smoking and such."

18

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'COOL KID' STATUS DOESN'T HOLD UP

3

This Bestseller research, published in 2014, with Kathy Cook Leahy, Allen said:

Teens who engaged in delinquent activities like drinking and smoking, insisted on hanging out with attractive peers and had romantic relationships at the age of 13 were deemed "cool" by others in their class.

But that assessment is fleeting. By the age of 23, peers viewed the former cool kids to be less competent in managing social relationships. Allen is quoting from the study when he says the former cool kids were not good at alcohol and marijuana control and limits.

The information was gleaned by following 200 teens from age 13 to 23, interviewing them and their parents.

> **"The cool kids are suffering because we don't give them enough real ways to be mature and to be grown up," Allen said. "It's not that they are trying to act grown-up too early. It's that kids need to get opportunities to be grown-up in ways that matter. And if you get any taste, they could hide on the footer."**

Allen said meaningful opportunities like these are crucial, given his a lot of kids. They're left with part of the experience of being mature, and then go after that in a way that turns out ultimately to be pretty self-destructive," he said.

Kids used to be asked more to help around the house, rather than participate in extracurricular activities. They were developing their routines and habits more. "There are a lot of parents today who are really hesitant to let their kids do even more," Allen said.

Taken as a whole, Allen's work, which is supported by undergraduate students at UVA, allows parents a blueprint of how to steward their children so that they can thrive and be successful as they age.

13

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23

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NAVIGATING THE DARWINIAN MAZE THAT IS HIGH SCHOOL

4

Teen movie "Mean Girls," written by UVA alumna Tina Fey, is a fictitious tale of family and developing stereotypes of high school cliques. The movie's iconic characters are Regina George, Cady Heron, Gretchen and Karen.

Regina George is the queen bee, the ultimate popular girl, the ultimate mean. Heron is taken in by the shallow cool kids, only to be thrown back out of the group when she develops a crush on the former boyfriend of the clique's queen bee.

From Allen's perspective, Heron's troubles started because she had no solid guidance on how to navigate high school's social networks. While things like cliques, athletic teams and theater troupes offer informal settings to create deep bonds, schools don't offer formal help for teens to create the social connections they need to thrive. Allen said the result is a disproportionate situation up and down grades of all developing school.

Allen believes he has created a solution.

In 2013, he and his team set out to develop that experience and systematically bring it into a low-stakes bounds and extremely. The Connection Project is 12 week long and the mix a typical high school schedule. Each session is an hour long in a close period and involves a small group of seven to 10 students.

The popular UVA Latin-inspired motto "The Breakfast Club" brought together five teens with different, but relatively recognizable, stereotypes in a Saturday morning detention session. There was the jock, the popular girl, the geek, the crime and the brain.

Two could ruin the students in the Connection Project mirror these personalities.

> **Allen calls them "creative" high school students due to little from Deep really best, pointing that characterization out to students in the Connection Project was Illuminating. Allen said.**

"In high school, I would, and UVA students also school, I think people used to hide from they really best," he said. "And then you get to 23 or 22 of things, from the person who does nothing but make jokes, to the person who sets the nothing bulletin board, to the person who Estella it's all about the people who are the nothing bulletin board." Teens see the jock, the popular girl, the geek, the crime and the brain.

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Participants write their answers anonymously on slips of paper, which are then shuffled and redistributed to each member of the group. The session leader asks the students holding the “clown” card, for one example, to stand; sure enough, several students rise to their feet.

Allen said it’s a really powerful exercise. “So, we go through all of the masks and they see everyone standing up and they’re pretty shocked by that. They think ‘I know I do this, but everybody does this.’”

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“We are now in the first year of an effort to spread this nationally,” Allen said. He is partnering with the St. Louis-based Wyman Center, which has a national network of teen service providers.

And for the first time this past fall, Allen recruited several first-year students at UVA to participate in an informal program to help them build peer networks. They met for just over an hour each week for about eight or nine weeks.

He took the same approach in the Connection Project, modifying it so it would be more appropriate to the maturity level of entering college students. “We got just overwhelmingly positive feedback,” Allen said. “We didn’t do any formal, random assignment evaluation, but the qualitative feedback we got was just incredibly positive.”

The program was called “Hoos Connected.” Allen read aloud some of the comments from exit interviews.

“I felt that I was not alone and worrying about certain concerns.”

“This made me realize that everyone has more in common than we initially assume.”

“This made me feel more comfortable around new people and people at UVA.”

Allen is working with the Office of the Dean of Students and the Office of Housing and Residence life to think about expanding “Hoos Connected” this fall, possibly at one of the residential colleges and for transfer students.

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