**NOTES OF A PSYCHOLOGY WATCHER**

Book Review

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Steinberg, Laurence. *Age of Opportunity. Lessons from the New Science of Adolescence.* New York: Houghton Mifflin Harcourt Publishing Company. 2014.

*Youth is one long intoxication: it is reason in a fever.*

 --- La Rochefoucauld

None other than Martin E.P. Seligman, former APA President, and maven on learned helplessness, optimism, resilience and positive psychology says Professor Steinberg’s book is:

*Simply the best book I have ever read about adolescence, and I say this as both the father of seven and as a scientist who works in the field. Steinberg guides us through truly novel findings on what happens during adolescence and tells us how, as parents and teachers, we should change our ways*.

Given that Dr. Seligman has read more than one book on adolescence, this is quite an endorsement.

 So I quickly ordered five copies of this book for the seminar on adolescence I teach to orthodontic students at University of Detroit Mercy, School of Dentistry. These students are in the top 10% of their dental school class, and since 1974, I know the meaning of the phrase, “To Teach is to Learn Twice.”

Enough of my adolescent ramblings – back to the review.

Professor Steinberg is a Developmental Psychologist, one of the world’s leading experts on adolescence, is a Distinguished Professor and the Laura H. Carnell Professor of Psychology at Temple University, in Philadelphia. Dr. Steinberg is the author of more than 350 articles and essays on development during the teenage years, and the author or editor of 17 books.

In Steinberg’s new book “Age of Opportunity,” he uses brain science and years of studying adolescents around the world to tell us many teenagers do not waste their strength and health of youth to triumph over crises.

Steinberg’s book has 10 chapters:

1. Seizing the Moment
2. The Plastic Brain
3. The Longest Decade
4. How Adolescents Think
5. Protecting Adolescents from Themselves
6. The Importance of Self-Regulation
7. How Parents Can Make a Difference
8. Reimagining High School
9. Winners and Losers
10. Brains on Trail

According to Steinberg, the present stage of adolescence is much longer than most of us learned. Adolescence starts earlier because the onset of puberty starts earlier. Adolescence ends later because of the longer training for careers, later age of marriage, and delayed onset of financial independence. Adolescence now goes from eight to twenty-five years of age. Not only is adolescence longer, but Steinberg says many of our assumptions about adolescence are wrong.

 Steinberg spends much time linking brain science to events of adolescence. He describes adolescence as a vulnerable period – where there are increases in psychiatric disorders, homicides, suicides, crime and loads of stupid stuff.

 Now I always wondered why the stupid, silly stuff of adolescence is so vivid in my mind. Whenever I run into a high school classmate, we quickly exchange memories about what happened at school. I remember, for example, as if it were yesterday, the time Josh brought a live goldfish to shop class to put in his liquid Plexiglas keychain --- pennies and quarters were not good enough for Josh.

 To explain why I still remember what happened in shop class almost 50 years ago, Steinberg mentions the Reminiscence Bump --- a finding that indicates the clarity of adolescent memories is very common. Apparently, the adolescent brain is extremely sensitive to the environment during this period of heightened neuroplasticity.

 Now neuroplasticity is a crucial finding during adolescence. In fact, Steinberg compares the adolescent brain to the plasticity of brains of youngsters zero to three years of age. A plastic brain is a brain that can be molded which allows us to acquire new information. Experiences change our neuroplastic brain.

 Steinberg describes the **three R’s** of adolescent brain development. These three brain systems are the **R**eward System, the **R**elationship System, and the **R**egulatory System --- three places where the brain changes during adolescence.

 Should you want to dance to the themes of the three **R’s**, I list some golden oldies that capture the **three R’s** of adolescent brain development:

* (I Can’t Get No) Satisfaction – Rolling Stones
* Light My Fire – Doors
* You’ve Lost That Lovin’ Feelin’ – Righteous Brothers
* Bring It On Home to Me – Sam Cooke
* Somebody to Love – Jefferson Airplane
* Are You Lonesome Tonight? – Elvis Presley
* Will You Still Love Me Tomorrow? – Shirelles
* Sunshine of Your Love – Cream
* The Wanderer - Dion

 So why do so many good adolescents temporarily go bad? --- invite 10 people to a party when their parents are away and 300 show-up; run from the police when they are looking into the windows of a house on a vacant lot; drive 100 miles an hour in front of a police station. If adolescents are so smart, why do they do such stupid things?

 Brain development is the answer. Adolescent risk-taking is not just about the immature prefrontal cortex. Adolescents are for more sensitive to rewards than adults are. Intellectually, adolescents can understand the consequences of their actions, but emotionally they are less sensitive to these potential outcomes than other groups.

 The good news is that adolescence is most likely the last real opportunity we have to provide good experiences to put adolescence on a healthy road and we can our interventions often have deep, enduring positive effects. As psychologists, we all have listened to adults who passionately recall stories about people or projects during their adolescent years that set them on a path of health and success.

 Adolescents that learn the capacity for self-regulation – not to eat the marshmallow – are on their way to mental health, good relationships, and high achievement.

 Yet, I often can’t resist telling some of my adolescent patients my definition of maturity. I tell them they will understand all the words in the definition, but still have to ponder the meaning:

*You know you are mature when you do something, even though your parents told you to do it.*