

## DOPAMINE

### The Key to Increased Motivation and Focus in Children and Teens

Have you ever wondered why children and teens seem to be so addicted to their smart phones and other devices? Parents are frustrated with their children's lack of attention and motivation but what do their devices have to do with this? The answer is found in science!

Often referred to as the "motivator molecule," dopamine is a "feel good" chemical that is released in the brain which helps us focus and feel motivated. When dopamine levels are low, it can result in symptoms such as difficulty focusing, decreased motivation, trouble problem-solving, and social anxiety. Therefore, many ADHD medications target dopamine levels.

When children and teens have low dopamine levels, we often find that they spend more time on video games and smartphone apps, and some tend to be thrill seekers. These things give a boost of dopamine, which makes them feel good and then leads to them seeking out more of the same thing. This constant boost of dopamine keeps them coming back for more.

The reason is because dopamine is part of the reward pathway of the brain. When something is interesting or exciting, a surge of dopamine rushes to the brain. Much like the excitement we feel when we are preparing for a trip or waiting for dessert, the anticipation of receiving a reward tells the brain to release dopamine. This release tells our brain that this event is worth getting more of. And so, the cycle begins.

The great thing about dopamine is that it can help modify behavior in a positive way, when done correctly. Because of the pleasure that dopamine makes us feel, we are more motivated to learn and, therefore, we retain information better. This is because the dopamine creates new neurological pathways in the brain. When we find activities that are pleasurable, we learn more from them and keep doing them.

Now that we understand the neuroscience surrounding dopamine, how can we, as parents, teachers, coaches, and anyone who works with children, use this information? We must create a learning environment that is exciting and produces the "anticipation of accomplishment."

The SKILLZ program does this by teaching with the brain in mind and utilizing game-based learning. Along with this, two of the Teaching SKILLZ that are used in class are specifically designed to increase the students' dopamine levels.

- 1) **Trickery:** The use of "trickery" as a teaching skill in class helps the students focus, which ultimately leads to better listening skills. For example, when playing a game and the students are waiting for the instructor to say "go," the instructor can trick the students by saying "goose" or "go cart" instead. This excites the students but also motivates them to listen better and, therefore, be more focused.
- 2) **Intrinsic Motivation:** The use of "intrinsic motivation" in class helps the students become more motivated, which leads to more confidence. For example, to get students more motivated from within, the instructor can say "You only have to do 5 pushups but if you want to be a Black Belt do 10 pushups, if you want to be a master do 5 pushups, but if you want to make me and your parents proud and show you are the best student, do 20 pushups."

By utilizing these techniques, students get a rush of dopamine because they anticipate the events in class, stay focused, listen better, and are motivated to do their best. They feel good in class and they come back wanting more!