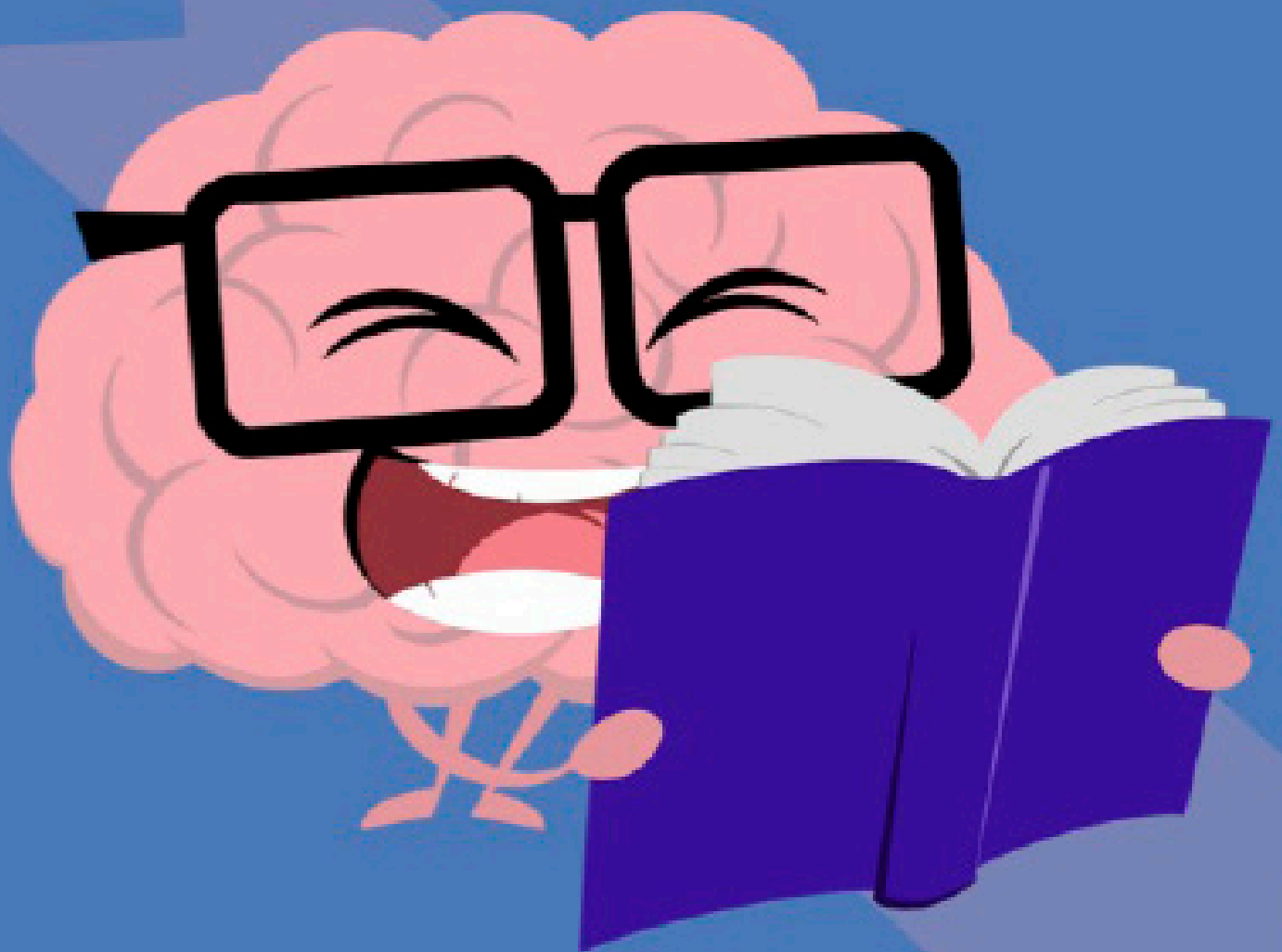


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LETTER FROM THE EDITOR

Dear Readers,

Thank you for picking up a copy of the Psyched! Magazine and welcome. To our old readers, please join us in congratulating and thanking 2021-2022 Masthead for their hard work and dedication to the publication. Now, as the new Masthead, we'd like to present an issue that focuses on relevant psychological topics of high school life. Each article represents the mission of Psyched! Magazine: to educate the community and further engagement and interest in the field of psychology.

Thank you to all the writers who have contributed to our publication in the past years, and we are always looking for new writers who are passionate about psychology to bring in new perspectives. We hope you all enjoy this issue as much as we did, and special thanks to our club advisor Mr. Davidson for his support.

As a branch of the Psychology Club, Psyched!'s mission is to continue working with this community to foster growth and facilitate learning in the wonderful field of psychology, and we hope that you'll join us in this journey!

Best,
Cathy

TABLE OF CONTENTS

- 5 The Impact Of Ostracism:
The Wild Boy of Aveyron
- 6 Last Piece of Chocolate... I Promise
- 7 The Nature vs. Nurture Debate
- 8 Do Physical Surroundings Influence
Our Mood and Thoughts?
- 10 Preventive Behavior Today Can Forestall
A Future Life of Drug Abuse and Addiction
- 12 Mindsets:
Do They Make or Break Athletic Performance?
- 13 Stress to Strength:
Controlling the Unavoidable
- 14 The Cognitive and Intellectual
Development of Children
- 16 The Relationship of Failure and Success
- 17 Decoding Food Labels:
*How Consumers Use Nutritional Information to Make
Purchasing Decisions*
- 18 Food, Nutrition, and Eating Disorders

THE IMPACT OF OSTRACISM: THE WILD BOY OF AVEYRON

By Rio Federman '26

In 1797, a naked, twelve-year-old boy was spotted living in the Lacaune woods in France. Though young, he was only four-and-a-half feet tall. In mid 1799, the boy was found by three hunters who took him to the village of Lacaune and left him in the care of an old widow. The widow offered the boy various foods including raw and cooked meat, but the only foods he accepted were chestnuts, walnuts, and potatoes. After eight days with the widow, the boy escaped.

In early 1800, the boy was discovered in Saint-Sernin, a village in Aveyron province, where he was sent to Saint-Affrique to live in an orphanage. When spoken to, the boy would not respond, and often stared into the distance. This led many to believe he was mute and deaf. Within two weeks, however, the boy uttered cries and inarticulate sounds. Soon, countless newspaper titles read: ***"L'enfant sauvage de l'Aveyron"*** meaning "The wild child of Aveyron".

As word spread, the boy was sent to Rodez, France, to be studied by Pierre-Joseph Bonnaterre, a professor of natural history. Bonnaterre wrote the "Historical Notice on the Sauvage de l'Aveyron" in which he described the wild boy. He wrote that over twenty scars were discovered and examined on the boy's body: four scars on his face; six wide scars on his left arm; a one-inch horizontal scar above his trachea; and several more scars scattered around his body. Because the boy did not have a tongue deformity or cleft palate, Bonnaterre suggested that the boy's lack of speech could have been due to the scar above his trachea. He noted that the boy had many animalistic traits: he would not react when others would speak, cry, or sing to him, but would react to the sound of a cracking walnut; he would sniff food to distinguish good vs. bad; he only showed affection for his caretaker as an expression of need rather than gratitude; and if he was too full to eat, he would bury his food in the ground, making sure to return to it later.

By the end of 1800, the boy was sent to Paris to the Institute for Deaf-Mutes. There he was studied by multiple men including Philippe Pinel, the medical director of the Paris asylums for the insane, and a man considered to be the first psychiatrist. Pinel called the boy a "prétendu sauvage" meaning "fake savage" because he believed the boy was an idiot who was abandoned in the woods by his family, rather than an idiot as a result of abandonment. Pinel recommended the boy be committed to an asylum, how-

ever, a young physician named Jean-Marc Itard disagreed with Pinet's conclusion and requested to study the boy himself. Itard believed he could teach the boy how to live a normal life in society.

Itard took the boy home and left him in the care of the housekeeper, Madame Guérin. Between the boy's new

mother-figure, Madame Guérin, and Itard's lessons, the boy was able to improve his memory, learn how to spell, use utensils, respond to voices, and be affectionate with others. Itard grew a strong bond with the boy, and eventually named him Victor. (1) While most scientists had given up on Victor and dehumanized him, Itard patiently learned Victor's mannerisms and taught him how to function in society. As a result, Itard proved that although

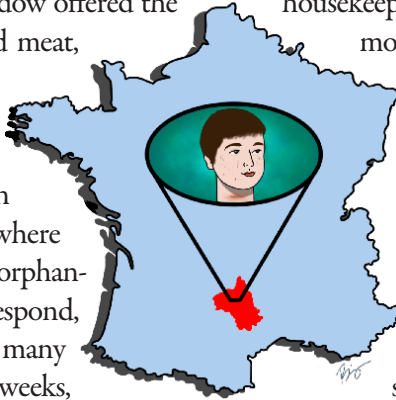
a lack of socialization can have a massive impact on one's behavior, with practice, one can learn the most basic skills.

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Itard took the boy home and left him in the care of the housekeeper, Madame Guérin. Between the boy's new mother-figure, Madame Guérin, and Itard's lessons, the boy was able to improve his memory, learn how to spell, use utensils, respond to voices, and be affectionate with others. Itard grew a strong bond with the boy, and eventually named him Victor (1). While most scientists had given up on Victor and dehumanized him, Itard patiently learned Victor's mannerisms and taught him how to function in society. As a result, Itard proved that although a lack of socialization can have a massive impact on one's behavior, with practice, one can learn the most basic skills.

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LAST PIECE OF CHOCOLATE... I PROMISE

By Emma Wang '26

Everyone has experienced craving in some way, how your hand moves subconsciously to a bag of doritos or a large carton of ice cream. It's not really the hunger itself that drives the feeling, but rather the strong urge that is associated with it. In some way, all our excuses for these cravings are different.

According to an article from Psychology Today, there could be a few reasons for these cravings. The main three are self medication, addiction, and sensitivity. Self medication is when your body requires sustenance and food in order to gain nutrition. Addiction is the craving that we are most familiar with, when you subconsciously reach out to get a coke at the vending machine because everytime you walk past that place you just always have to get one. Finally, and most surprisingly, food sensitivities or even allergies could cause specific attachment to that food. Obviously, some of these could be extremely malicious to one's health.

This is why there are also offered solutions to these types of cravings. The most straightforward one has to be the allergy-caused cravings. There really isn't any other way than to do an allergy test. Addiction is slightly more difficult and requires a bit more effort and self-control. When you have a craving that is not aligned with your own health goals, you could always try and find a healthy substitute that could satisfy the craving but also lead to less significant unhealthy consequences. You could plan, hide, and avoid cravings that you've already identified. Another method is also using distractions, although riskier as another type of addiction either to television, video games and such could develop over time. Personally, I never eat popcorn unless I'm fixated on a screen. It's important to know your patterns in order to improve current craving tendencies and avoid new ones. Self medication, on the other hand, is quite an interesting and under-appreciated case where psychology connects to health needs. Nutritional deficits, stress, and other factors that the brain considers threatening can cause us to crave certain foods. By discovering the root of the craving, you can achieve the brain's goal of health in a more efficient way; Cravings actually pave a path for you to understand what's best for your body.

Another pertinent topic would be pregnancy cravings, a highly debated subject. The National Library of Medicine referenced a paper saying "An estimated 50–90%

of U.S. women experience cravings for specific foods during pregnancy". Pregnancy comes with many "symptoms" that could mislead one into thinking those are the reasons behind cravings. This includes more levels of hormones, a heightened sense of smell and taste, and nutritional deficiencies as the baby grows inside you. However, studies have shown that commonly craved foods during pregnancy don't actually provide specific nutrients beneficial for a healthy pregnancy in terms of nutrition and weight. Another theory discovered by Veronique Greenwood, an essayist with degrees in Molecular, Cellular, and Developmental Biology from Yale, wrote that a study noted that providing the cravings was a sign of love and support from one's family. Maybe, wanting a whole feast at midnight isn't because of necessity, but because it demonstrates devotion from your loved ones.

In the end, cravings heavily depend on psychological factors where the brain actually controls the desire of certain foods based on needs or sometimes weaknesses. Additionally, addiction and cultural influences can also impact psychological reactions, leading to the craving feeling.

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THE NATURE VS. NURTURE DEBATE

By Evelyn Stanley '24

The nature vs. nurture debate is one at the forefront of the psychological field, as it has been analyzed for years. Are humans most impacted by nature or nurture? Or are they impacted by nature via nurture? And what exactly does that mean? Each argues a different perspective on how humans develop; is it influenced more by someone's genetics, or their environment and outside influences?

Nature, more commonly referred to nowadays as genetics, explains how a person's brain is wired from birth and what genetic and biological factors influence brain development. In support of the nature perspective is the Nativism School of Psychology, arguing that characteristics are inherent and genetic, and certain characteristics (ranging from hair color to personality) will occur regardless of environmental influences. Psychologists such as Chomsky and Freud, widely in support of nativism and the nurture perspective, believe that we all have a "biological clock" that automatically switches on and off. However, the nature perspective falls short in many experiments, such as one done on identical twins. Although, genetically, the twins were the same, they developed vastly different personalities and interests.

The nurture perspective takes the influence of external factors after conception, such as trauma, environment, experiences, culture, and parenting. Environmentalists or empiricists argue that the human mind is a tabula rasa—a blank slate to be built upon at birth—that is then filled with thoughts and beliefs, ultimately building one's personality. This perspective argues that characteristics emerging throughout childhood and infancy result from education and learning. This can be seen through Bandura's Bobo Doll experiment, in which aggression was determined to be acquired through observation and imitation. However, the nur-

ture perspective is lacking when considering genetically inherited traits, such as alcoholism and mental illness.

So which is correct? Well, there isn't really an answer to that, but a generally agreed upon idea among many psychologists is the nature via nurture perspective. This argues that the two are inherently linked and both play a vital role in human development. This can be seen in cases such as perfect pitch, the ability of a person to identify a musical note without a reference. Researchers believe that this ability tends to be genetic, but children still need musical training to acquire the skill. Aiming to understand the relationship between nature and nurture is the field of epigenetics, which studies how environmental influences (or nurture) can affect genetics (nature). There isn't an answer to which opinion is correct or incorrect, but generally, psychologists agree that nature and nurture are linked to one another, both equally influencing development.

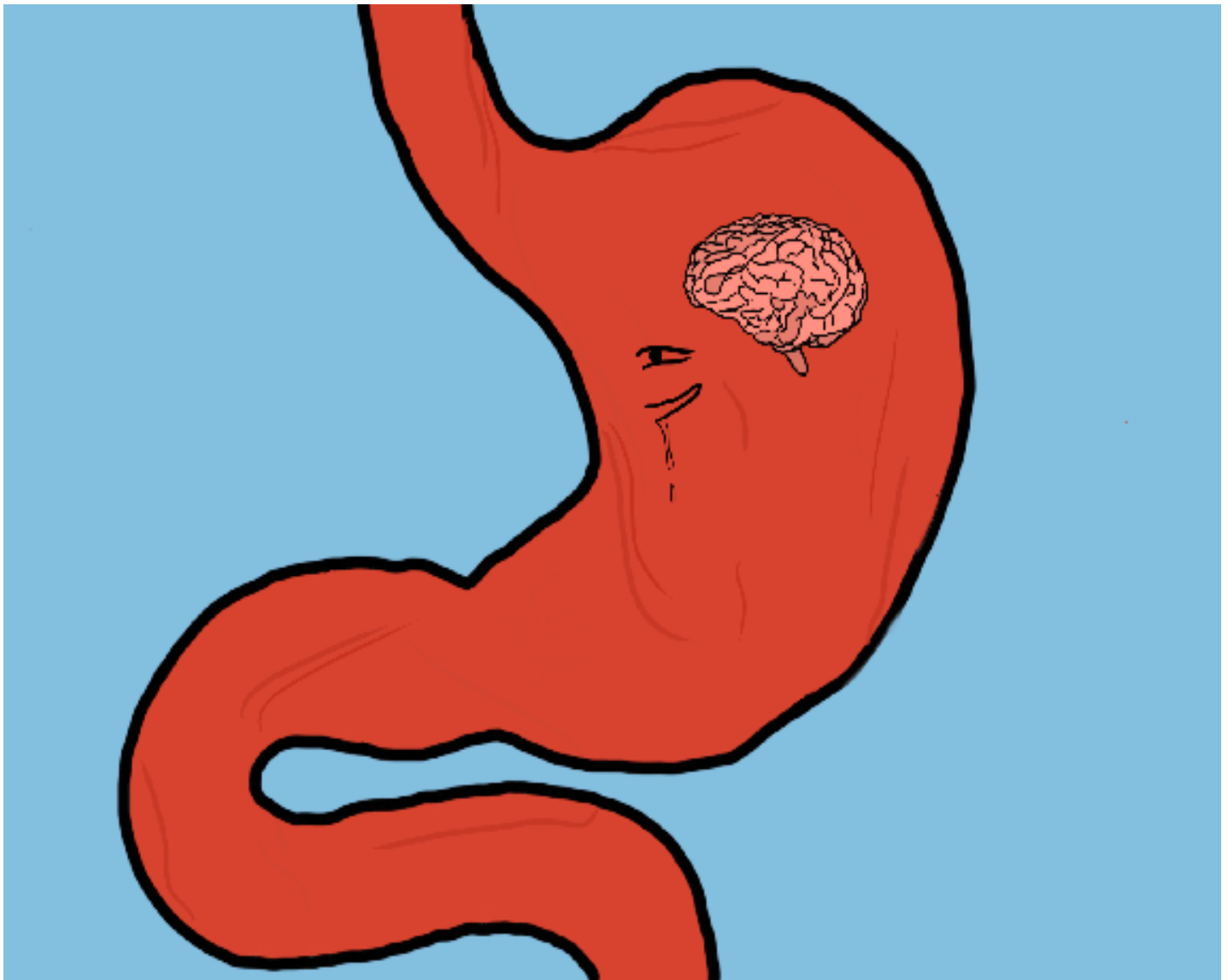


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DO PHYSICAL SURROUNDINGS INFLUENCE OUR MOOD AND THOUGHTS?

By Rella Wang '26



Why do some people work more efficiently in cafes and others in their room? Psychologists have demonstrated that our daily environments have a significant impact on our thoughts and

emotions. Surroundings can affect emotions and mental health, and change in environment can be used to benefit mental wellness.

Humans have always needed to be sensitive to their environment in

order to survive, so we are innately aware and drawn to surroundings that have specific traits. Two studies have proved that details people may not care about in daily life, such as the view outside the window or

the adjustment of indoor lighting, will have a certain impact on every individual mentally. Roger Ulrich, an environmental psychologist, did a study that proves how the view of the room in the hospital might affect the recovery speed of patients who just underwent gallbladder surgery. Based on nurses' notes, Ulrich discovered that the patients who were placed in rooms with a view of a forest filled with trees generally recovered more quickly than those whose windows overlooked a brick wall. (2) The Neuroscientists at the University of Pennsylvania conducted an experiment that shows the lights of a room can also affect our physical and emotional well-being. Our circadian rhythms—the biological clock that signals when it's time to sleep—are directly impacted by light, and sleeping patterns are strongly correlated with our mood. The neuroscientists from the University of Pennsylvania also did an experiment that observed the effect of light on mice. They discovered that rats held in the dark for six weeks exhibited sad behavior. According to the result of the experiment, "the parts of the rats' brains responsible for producing norepinephrine, dopamine, and serotonin, the neurotransmitters involved in emotion, were also damaged, the researchers found". (3) In persons with depression, the same parts of the brain that are underactive in depressed individuals are involved. Overly bright nighttime lighting also disturbs sleep, which ultimately affects mood.

A relaxed and comfortable living or working environment can help people reduce some psychological anxiety and stress. So how can we create an environment that is theoretically beneficial to our physical and mental health? Here are some tips:

- Let the sunshine light up your room: Maintaining a bright and cheerful environment will improve your mood and make you feel less "stuck." Swap out your curtains for blinds that can be drawn all the way up during the day and all the way down at night. Natural light not only brings positive energy to us, but it's also good for our vision.
- Decorate your room with your favorite color. Different colors can represent various emotions and elements of the natural world. Yellow encourages positivity and happiness. Green mimics nature. Blue resembles clear skies and the ocean.
- Surround yourself with things that make you happy: Print out some pictures of family, friends, pets, or your favorite celebrities and put them on the wall.
- Stay away from your technology when you are sleeping. As Choate students, we always have a lot on our plate. If you have a tendency to stay in bed with your laptop, you are not alone! If your room is spacious enough, utilize a desk for work, and save your bed for rest and leisure. Your daytime concentration will increase, and your nighttime sleep will as a result, be better.

There is more to your environment's ability to affect you than just how it looks. Building a delightful environment is not particularly difficult, but sometimes we would inadvertently turn the environment around us a little bit messy. The Newport Institute shares the concept of "attentional blindness". When we neglect to manage our space nicely, the mountain of paperwork piling

up on your work-from-home desk or the mounds of laundry spilling out of your closet seem to vanish. But they are actually taking a toll on our mental health. (3) Since we don't want these small things to have a negative influence on our mental health, we are encouraged to throw out the food from our room so it won't take away the fresh air. Remember to go downstairs when the trash bin is full. Don't forget to organize your clothes in your closet after you do the laundry. Our environment can change our state of mind. Everyone can do some small things in order to avoid a vicious cycle.

As you finish reading this article, take a look at your current surroundings. If you want to improve how you feel about the present, try to follow the tips provided above or create a soothing environment for yourself in your own way.

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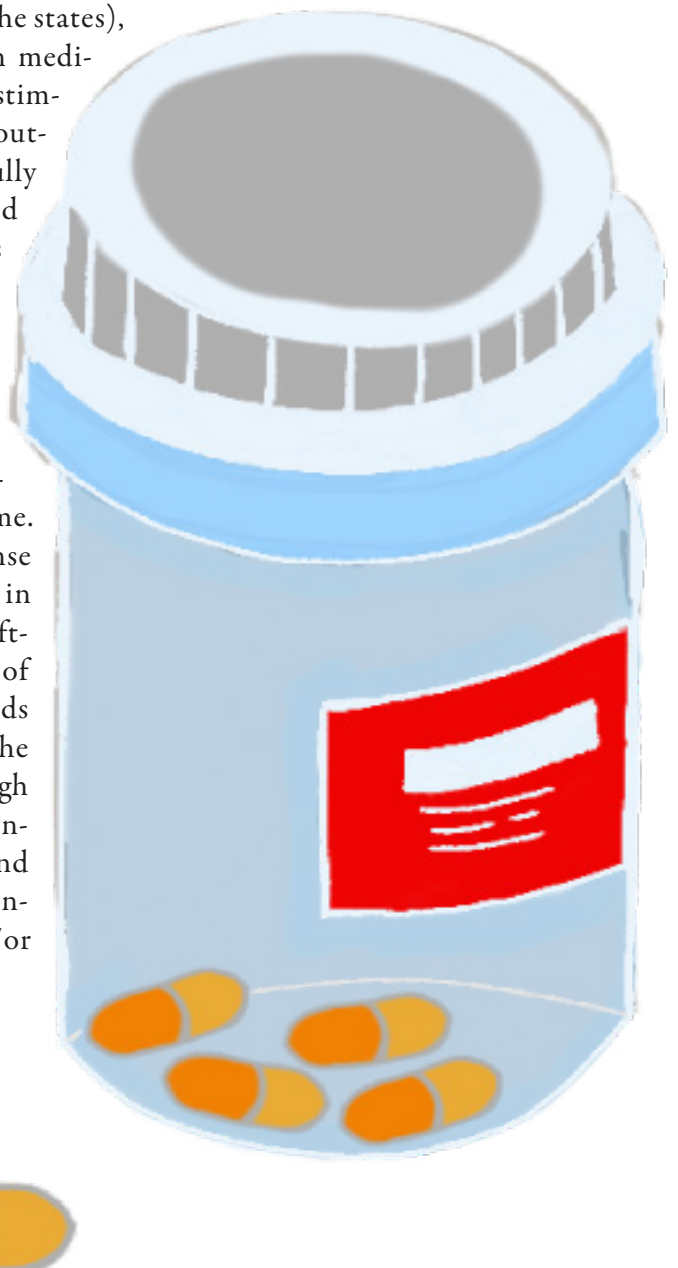
PREVENTIVE BEHAVIOR TODAY CAN FORESTALL A FUTURE LIFE OF DRUG ABUSE AND ADDICTION

By Janice Wu '25

A staggering 50% of individuals in the United States over the age of 12 have used illicit drugs at least once in their life. Of that 50% (roughly 139 million individuals), over 42%, or 59 million people, have illegally consumed drugs within the last year, according to 2020 statistics from the National Center for Drug Abuse Statistics. (1) The Centers for Disease Control and Prevention (CDC) also revealed that nearly 92,000 people died in the United States in 2020 from drug overdose, contributing to the total of over 932,000 deaths since 1999. (2) Accidental death from drug overdose remains a leading cause of death for people under the age of 45. Additionally, the average life expectancy in the United States dipped between 2015 and 2017 due to opioid overdoses (1).

Illegal drugs such as cocaine, marijuana, LSD, methamphetamines, and heroin used to be the main causes of addiction. However, astonishingly, topping the list of drug abuse nowadays among all age categories are legal substances such as marijuana (it is important to note, though, that marijuana is

not legal in about half of the states), opioids, prescription pain medication, and prescription stimulants (1). When used outside the intended, carefully monitored, and prescribed limits, these “legal” drugs may lead to the same addiction and health problems that arise from illegal drugs. Whether involving illegal or legal drugs, the steps to addiction are quite the same. A person develops a sense of euphoria, reduction in stress or anxiety, an uplifted mood, or avoidance of reality as dopamine floods the brain. However, the brain soon wires through its chemistry, leading to increased tolerance levels and desire, where there is an increase in frequency and/or



amount of drugs that are needed to produce the same effects. As addiction progresses, young adults succumb to lapses in judgment, mental health disorders, impaired driving, high-risk sexual activity, and declining performance at school (3). At a physiological level, there is a weakened immune system, heart problems such as abnormal heart rates, risk of heart attack, or collapsed blood vessels due to drug injections, strain on the liver, appetite and weight loss, seizures, and brain damage, and eventually a high likelihood of death from one or more of these physical effects (4).

With all these negative consequences of drug abuse and addiction, what can society do to prevent a teenager or young adult from becoming just another overdose statistic? According to the National Center for Drug Abuse Statistics, 70% of users who try an illegal drug before the age of 13 develop substance abuse within the next seven years, compared to 27% who try an illegal drug after age 17. (1) So, prevention of drug use at a much younger age is paramount to addressing and partially solving the nation's drug abuse and dependence problem.

The first step is for responsible adults and parents to openly talk to young adolescents about the dangers of drug abuse. These should always be in non-confrontational ways that focus on the negative impact that drugs can have on a pre-teen or teen's interests in life, such as friends, school, and sports, and always being attentive to the pre-teen's concerns or opinions. Honesty is paramount, and young adolescents usually are able to respond well if the responsible adult

can speak to his or her own experience with drugs, whether it may be in resisting them or trying them in the past or experiences on how to handle and fend off peer pressure. By breeding trust and open communications, young adolescents will often trust the instincts and judgment of older individuals and understand earlier on the harmful effects of drugs, therefore reducing the likelihood of trying them even for the first time at a young age. Adults should also recognize the signs of drug abuse; in case this has already occurred. These include unexplained changes in friends, habits, school performance, or physical appearance, poor judgment or detachment from general interests or day-to-day life, withdrawal from family, and the presence of unexplained medical containers in a bedroom or backpack. Early intervention with treatment may prevent long-term drug abuse from taking a further foothold and help restore an adolescent's life and health back to normalcy. Such intervention can include honesty in communications, focus on the drug dependency itself rather than on the person as the culprit, more time spent with the adolescent to know his or her whereabouts and social circles, and the help of a doctor or counselor for professional assistance. (3)

Statistics show that early trials with drugs during pre-teenage years positively contribute to the likelihood of future, sustained drug abuse, so it is important for parents and society to begin addressing the issue before it becomes a problem. This will require a concerted effort between parents, children, and school com-

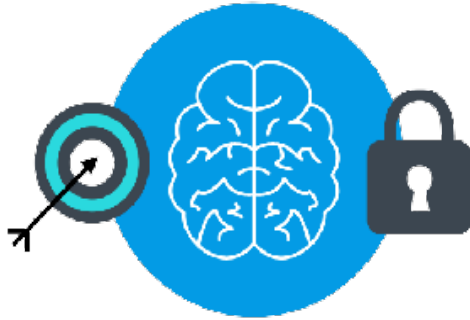
munities. Drug abuse is preventable, provided it is stopped before it happens. Young adults should be open about their concerns and seek help if there are any concerns.

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MINDSETS: DO THEY MAKE OR BREAK ATHLETIC PERFORMANCE?



By Gioia Segui '26

Sports are approximately 90% mental and 10% physical. An athlete's mindset when competing almost completely determines the outcome of their performance. If an athlete wishes to perform successfully, they must practice a positive mindset. By practicing a negative mindset, an athlete may experience mental blocks, injuries, lack of focus, and insufficient preparation—all of which will result in poor athletic performance. Working towards a positive mindset is an extremely crucial part of achieving athletic success. Setting goals and maintaining a growth mindset will allow success in athletic performance.

When practiced correctly, goal-setting is one successful strategy that an athlete can practice to succeed in their performance. Ohio University Professor, Laura M. Miele states, "Goals should be designed in small increments that are genuinely achievable in the short term" (1) For example, let's say a basketball player sets a goal to increase the number of points scored per quarter. They begin with six points per quarter. Once the desired six points are achieved, they move on to eight points per quarter. Once eight points are achieved, the athlete pushes for ten, and so on. The athlete is only increasing the number of points scored by two each time, which is equivalent to one 2-point shot or two free throws. Therefore, this is a reasonable goal designed in small increments that is achievable in the short term, exemplifying Professor Laura M. Miele's logic. This correct form of goal-setting boosts an athlete's confidence and self-esteem, as they can mark each small accomplishment within the overall goal. Professor Laura M. Miele also states, "It is incredibly important not only to make attainable goals but also to break them down into small components to understand how a goal is going to be achieved" (1). For example, if that same basketball player sets a goal to win their next three games, they are wishing

to accomplish a goal, but have not yet created a plan to do so. The goal is exaggerated and unattainable, and therefore, it can cause a loss of confidence and low self-esteem, resulting in poor performance. Once an athlete's goals are complete, checking them off is a visual way to see their accomplishments. This will empower and instill confidence in them. Reasonable goal-setting guides athletes to practice maintaining a positive mindset, which will ultimately lead to successful athletic performance.

Maintaining a growth mindset is a second successful strategy that an athlete can practice to improve their performance. As Psychologist Carol S. Dweck states in Mindset Rule #2, "Don't work too hard or practice too much. In a growth mindset, the rule is: Work with passion and dedication—effort is the key" (2). Athletes with a fixed mindset think that they were born with talent, therefore it will always be there no matter how hard they work. They are okay with "getting by" and usually do not reach their full potential, but as long as they are winning with minimal effort, they are satisfied. Although fixed-minded athletes are content with their ways of training and competing, this type of mindset can be very problematic for them in the future. Because these athletes spend so much time "getting by" in their athletic careers, they never actually learn how to work hard. Later, once they realize that their minimum amount of effort isn't enough anymore, they will not know how to persevere, resulting in poor and weak performance. However, an athlete with a growth mindset understands that passion, drive, effort, and hard work are key factors to improve their skills. They realize that no matter how exceptional they are, there is always room for improvement. These are the athletes who are practicing every day and putting their blood, sweat, and tears into their training. The characteristics of a growth mindset benefit athletes in their long-term performance.

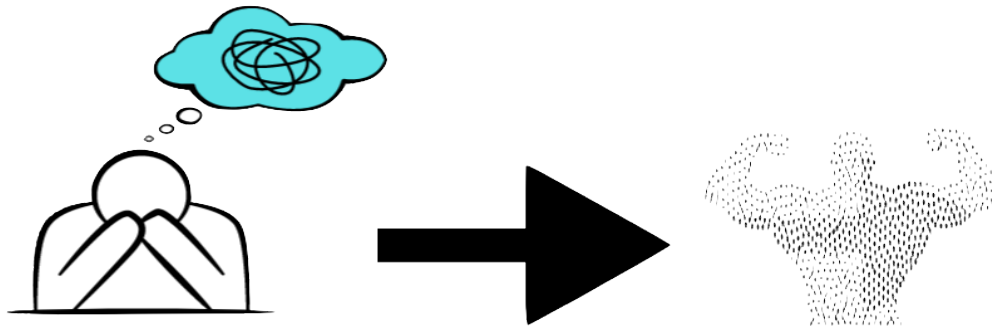
The mental aspects of athletic performance are the most important, while physical performance is there for backup. Going into competitions with specific, reasonable goals will allow athletes to improve both their mental and physical skills in the long run. Persevering through setbacks and challenges using a growth mindset, setting realistic and achievable goals, and overall practicing the strategies to positively affect the mindset will lead athletes to success in their athletic performance.

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STRESS TO STRENGTH: CONTROLLING THE UNAVOIDABLE

By Darren Lin '26



No one is a stranger to stress. Whether it be from a high-stakes interview or having ten assignments due the next day, stress is a universal feeling. However, as Choate students, stress doesn't come from life-threatening danger, but rather, it often acts as a dead-weight, preventing relaxation and causing burnout.

Contrary to what it seems, stress can actually be helpful in improving performance. Kelly McGonigal, a psychologist, and lecturer at Stanford University proposed that thinking about stress in a positive light could provide functional benefits (1). Furthermore, in a study on the reappraisal of stress, conducted by the department of psychology at Harvard University, participants that were informed that stress was beneficial showed increased physiological and cognitive performance, in comparison to the control group who received no instructional information concerning stress (2). Therefore, by thinking about stress differently, the body reacts differently.

In one of her lectures, McGonigal speaks about the pituitary gland, which pumps out oxytocin, the hormone associated with relationship-building and positive social interaction (3), during moments of stress (1). Meaning that when the body is stressed, the brain wants to have social interaction. A study by the Department of Psychology at the University of Buffalo showed that stress can be relieved by helping others (4).

Stress is inevitable, but stress doesn't have to be so detrimental to mental health. Reappraisal of stress and social interaction is not the only way

of dealing with stress since everyone experiences stress differently. So instead of trying to eliminate stress, learn to acknowledge, reframe, and control it.

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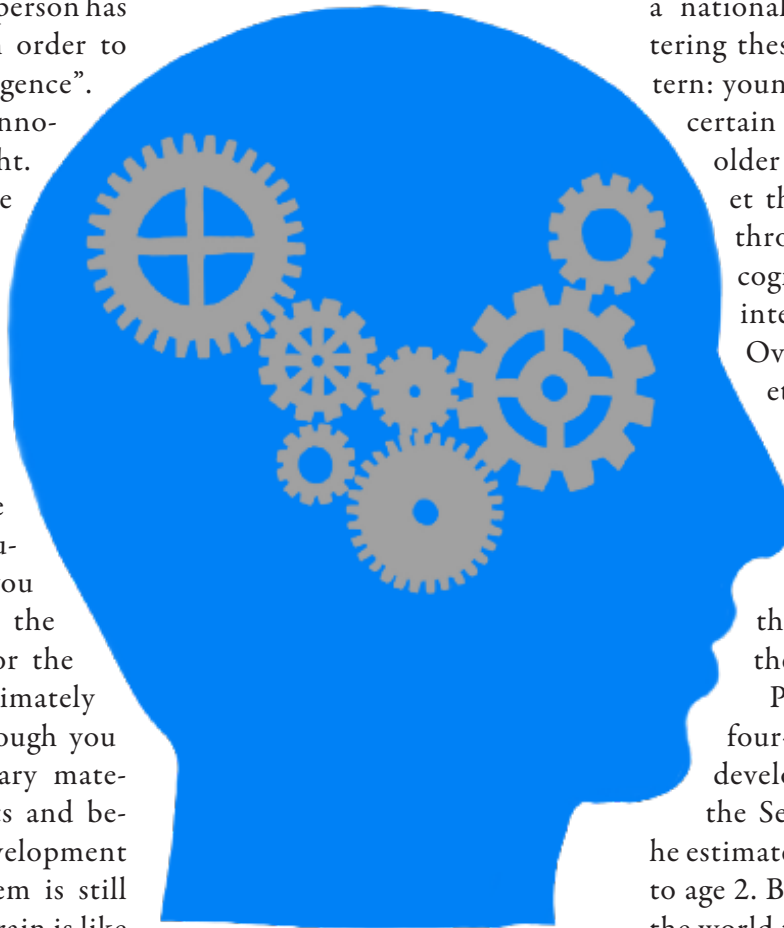
THE COGNITIVE AND INTELLECTUAL DEVELOPMENT OF CHILDREN

By Analy Vega '25

Humans are brilliant species who can create magnificent art, mesmerizing music, novel architecture, etc. However, in order for humans to be able to do such feats, each person has to develop cognitively in order to reach “full human intelligence”.

The basis of all human innovation starts with a thought. “Thought” falls under the umbrella of cognition, which describes all mental activities associated with thinking, remembering, and knowing. During prenatal development, the body makes approximately 4000 nerve cells per second. Since neurons don't regenerate, you are born with almost all the neurons you will have for the rest of your life, approximately 10 billion of them. Although you may have all the necessary material for complex thoughts and behaviors, during this development period, the nervous system is still immature. A newborn's brain is like a puzzle, one may have most of the puzzle pieces, but they are missing the neural networks that lead to many basic life skills, such as walking, running, and talking. There is a need to create a distinction between maturation and development. Maturation can be described as the biological process that

enables orderly changes in behavior. On the other hand, development is the experience that leads to different neural networks being built. (1)



In the early 1920s, childhood development was not a heavily researched subject as psychoanalysis, researched by Sigmund Freud, was a prevalent area of study at the time. Jean Piaget was a pioneer in the field of cognitive development who helped pioneer this field and

cemented the path for other researchers. In 1918, Piaget went to France to measure children's testing aptitudes and abilities through a national exam. When administering these tests he noticed a pattern: younger children kept getting certain answers wrong, while older kids did not. (2) Piaget theorized that humans go through specific stages of cognitive development and intellectual progression. Over the next 50 years, Piaget published more than 60 books related to childhood development. Piaget proposed that there are four stages in cognitive development that children undergo in their journey to adulthood. Piaget went on to devise a four-stage theory of cognitive development. The first stage is the Sensorimotor stage, which he estimated to occur between birth to age 2. Babies begin to experience the world through their senses such as touch, vision, and hearing, as well as action. The major achievement in sensorimotor development is the lack of object permanence, which is the awareness that things still exist when they're out of sight. For example, if a blanket disappears, children will know that it has not disappeared, but just gone elsewhere. Ad-

ditionally, they repeat movements that bring some sort of reaction either for themselves or for people they have begun to recognize. (3)

The second stage is called the Preoperational stage which occurs between ages 2 and 7. It is a stage that is characterized by “egocentrism” as what drives actions is what the child thinks and says. As a result, they have a hard time imagining a person’s point of view, and this never fully disappears. Another characteristic of this stage is animism, a belief that an inanimate object has feelings. Around four in ten adults sleep with a stuffed animal from childhood. (4) In all, children start forming their theory of mind and ability to understand other people’s feelings, thoughts, and perceptions, as well as their own, and how to predict behavior.

The third stage, Concrete Operational, ranges from age 7 to 12, and involves logical thinking about concrete events they have experienced. Children experience deccentration which means they are able to see beyond one aspect of an object or problem. As a consequence, problems with reversibility and conservation cease to be considered problems. For instance, the child can understand the principles of cause and effect, size, and distance.

The last and final stage is called Formal operational, which starts at age 12 and continues for the rest of your life. During this stage, one’s reasoning, abstract thinking, problem-solving, and ability to generate hypothetical questions expands. One begins to think and tackle problems in a very logical and systematic way. (5)

This four-stage model has been criticized for oversimplification

and the rigidity in how it classifies certain abilities by age, as researchers have detected these stages of development earlier than Piaget. While Piaget was a pioneer for his time and most of his research is still being used, there are other viewpoints that tackle development in other ways. Lev Vygotsky, a Soviet psychologist in the mid-1800s, emphasized that early development occurs through parental instruction and interaction with social environments. Vygotsky put emphasis on language as a way of assigning meanings to things. He also suggested that the way kids develop may vary across cultures.

In all, how a child is raised and cared for can have a profound impact on their personality. Thus, it is important to keep an open mind to see development as a serious and different process from child to child.

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THE RELATIONSHIP OF FAILURE AND SUCCESS

By Isabelle Jiao '26



What motivates people to get up when they fall, keep going when they lose, or persevere even if they are afraid to fall short? What causes them to know when to discontinue? Some people might find it difficult to push through in times of hardship or failure, while others might find the incentive to persist. By learning different ways in which failure can lead to success, one may discover methods that work best to achieve one's goals.

One reason why one might strive for success even after failure, is because one's desire to achieve success is often dependent on one's circumstances. Research from Northwestern University's Kellogg School of Management recorded that scientists who were unable to receive sufficient funding early in their careers were 6.1% more likely to publish a meaningful paper because they were willing to put in extra work to achieve their goals (1). Mealy Cronin '23, one of the captains of the varsity swim team at Choate, gave her viewpoint that failure is the key to success with her statement that great athletes "aren't great because they never fail—they're great because they've failed and are willing to fail again". Athletes need to be goal-driven by nature because they are constantly faced with the prospect of failure. However, because athletes experience setbacks on a regular basis, they are able to learn what needs improvement, and many are also able to develop mental resilience when faced with disappointment (2). Essentially, in order to bounce back from failure, learning from past failures, adjusting what was done wrong, and motivating oneself to continue striving for a goal, is the key to moving toward success.

With that said, for failure to be the key to success, one must be willing to recognize and learn from one's failure. Ayelet Fishback and Lauren Eskreis-Winkler, professors at the University of Chicago, conducted an experiment where they asked participants two questions. The first question had two answers, only one of which was correct. After the testers answered, they were then asked the same question, but slightly rephrased, and were provided the same two answer choices.

The professors found that those who answered correctly the first time remembered the answer and got the second question correct as well. Additionally, they concluded that the participants who answered the first question incorrectly did not learn from or even pay attention to their mistake due to their self-esteem or motivation. Fishback reasoned, "It just doesn't feel good to fail, so people tune out". To fortify their findings, the professors took the participants' egos away by having them observe others make mistakes. The participants who originally answered incorrectly ended up learning more from the mistakes of others than their own, showing how self-esteem can affect a person's recognition of their own mistakes (3). Lacking the motivation to succeed, being indifferent to the reason for failure, and letting self-esteem prevent learning opportunities can hinder success.

Evidence proves that understanding how to deal with failure and its mental challenges promotes mindfulness and improvement. The concept of failure may not be the essence of success, but learning from failure and being cognizant of its effects can open doors for self-growth which in itself is a success.

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DECODING FOOD LABELS: HOW CONSUMERS USE NUTRITIONAL INFORMATION TO MAKE PURCHASING DECISIONS

By Erin Li '24

Food labels provide consumers with nutritional information, price, taste, and other attributes of the product. Consumers examine food labels before purchasing a product to ensure that the product meets their dietary needs, checking for ingredients if they have restrictions or allergies.

Brands aim to increase demand for their products through labels, so they would purposely leave out certain information if they had the choice. However, most food labels are regulated by the U.S. Food and Drug Administration (FDA), so brands are required to include certain nutritional information, including warnings that might decrease purchase probability. In 2016, the FDA revised the regulations for nutritional facts labeling with the intention of helping consumers identify the correlation between dietary choices and health problems such as heart disease and obesity. With the new label, it should be easier to make healthier food choices because consumers will have access to information from nutrition and public health recommendations. With the current nutritional label, the FDA includes information on sugar, vitamins, realistic serving sizes, and the daily values of different nutrients (3).

Most customers focus on the nutritional aspects of a particular product by examining the labels for certain ingredients that strongly influence their purchasing decisions. They also take into account the brand's reputation, the origin of food, environmental protection, and food safety when making the decision to purchase a product (1).

While some customers read nutritional labels with the intention of eating a well-balanced diet, other consumers don't read the labels carefully. They often choose to ignore the nutritional facts and just disregard warnings if a product is high in sodium, sugar, saturated fats, and trans fats. This is largely due to habit because as people become used to eating a product from a certain brand, it is difficult for them to stray away and nutritional labels have little effect on their habitual behavior (3).

Some consumers might take the wrong information from the nutritional facts, so the presence of nutrition labels might still lead to unhealthy choices. For example, an experiment conducted by Dr. Brian Wansink and Dr. Pierre Chandon, found



that low-fat labels gave customers the wrong idea about how healthful a food they were consuming was. Participants ate more M&M candies when they were labeled with “Low Fat” compared to when they were simply unlabeled (2). The overwhelming nature of the information might lead consumers to draw the wrong conclusions about whether a product is actually beneficial to their health.

Customers are also influenced by other food products they buy, so they might choose to purchase a particular product based on previous purchases, not the nutritional facts. For example, if they buy something healthy, their next shopping

choice might be highly filled with sugar to reward themselves for their previous healthy purchase. This problem is beyond the control of nutritional labels and depends on the principle that shopping choices are not independent (3).

While food labels can offer nutritional facts that are aimed to improve consumer decision-making to benefit their health, many consumers base their purchasing decisions on other factors.

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FOOD, NUTRITION, AND EATING DISORDERS

By Cora Slowe '26
Trigger Warning



In the United States, there are about 30 million people struggling with an eating disorder. Eating disorders can be the result of preexisting mental health issues such as depression, anxiety, or obsessive-compulsive disorder. Those with eating disorders often do not consume enough nutrients, which may result in malnutrition, where the body is deprived of the nutrients necessary for all systems and organs in the body to function properly. Malnutrition can occur for those who do not consume enough food, as well as those who eat high-calorie diets. When the body is malnourished, its functions begin to weaken. There are numerous eating disorders, but the most common are bulimia nervosa, binge eating disorder (BED), and anorexia nervosa.

Anorexia nervosa is an eating disorder where the person goes through extended periods of fasting or eats minimal amounts of food. Commonly, those who suffer from anorexia are women between the ages of 12 to 25. Those who suffer from anorexia do not consume enough food and therefore are typically deprived of iron, magnesium, zinc, and many of the essential vitamins and nutrients. People who suffer from anorexia can also have a permanently slowed metabolism rate, as a result of the body moving into starvation mode, attempting to conserve energy. The low caloric intake leads to fatigue, which can lead the body to begin rationing nutrients, which can lead to the thinning of hair and the weakening of nails. The brain needs glucose to function properly, and those who suffer from anorexia show signs of shirking in their brain's gray matter along with lower cognitive functioning. Mood swings, forgetfulness, depression, or anxiety can be a side effect of the deficiency of glucose in the brain. Additionally, the lack of iron can lead to anemia and the lack of calcium leads to bone weakness, making those who suffer from eating disorders prone to osteoporosis later in life.

Another common eating disorder is bulimia nervosa, commonly called bulimia. Bulimia occurs when a person goes through periods of binge eating, then purging to offset the overeating. Purging is not only vomiting but also includes over-exercising and the overuse of laxatives. Those who suffer from bulimia also lack many of the necessary nutrients to keep the body fully functioning. Moreover, they commonly crave sugary foods, which are often comfort foods giving the body the sensation of fullness or satisfaction. The intake of sugary foods along with the purging leaves people who suffer from bulimia at a higher risk of tooth decay. Bu-

limia also throws the body's electrolytes including sodium and potassium out of balance. Sodium is crucial to balance out fluids in the body and without it, the blood may become diluted leading to weakness, brain fog, and fatigue. A deficiency in potassium can lead to nausea, muscle cramps, irritability, and confusion.

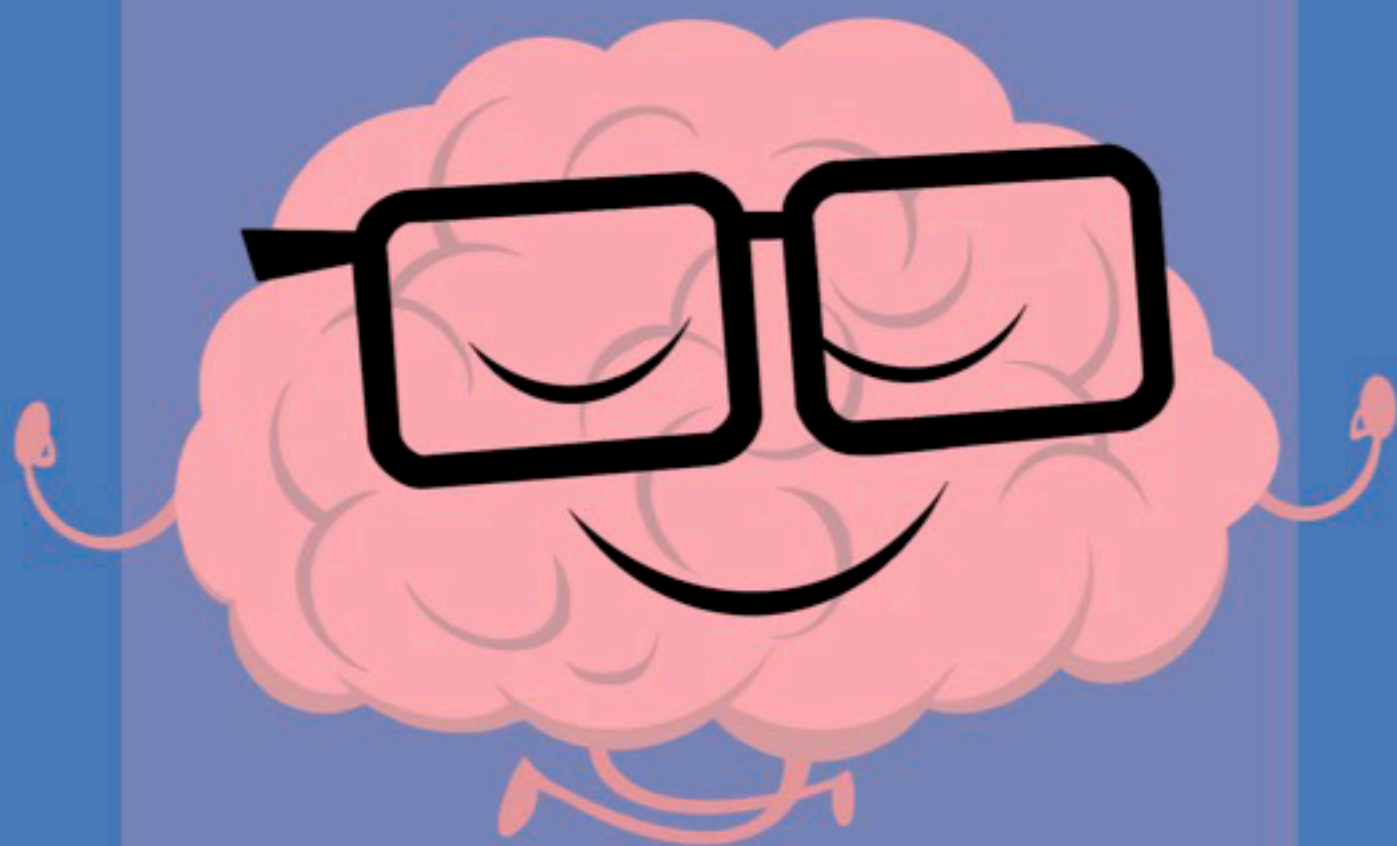
Binge eating disorder or BED is when the patient eats an excessive amount of food without purging. Those who suffer from BED are prone to weight gain and obesity. Obesity can lead to many health complications including heart disease, diabetes, and high blood pressure. The brain of an individual with BED is desensitized to food because their brain releases dopamine as they overeat. On the other hand, those with anorexia or bulimia are overstimulated by food, and their brain releases cortisol, the stress hormone. Such differences in the neurobiology of eating disorders affect mood, anxiety, personality, and decision-making.

There are more eating disorders to acknowledge aside from bulimia nervosa, binge eating disorder, and anorexia nervosa. Furthermore, eating disorders are caused by a constellation of factors such as genetics, behavior, psychology, and biology. Eating disorders are dangerous and need to be taken seriously. The lack of nutrition and proper food intake can have permanent long-term effects on the body. If you or anyone you know is suffering from an eating disorder please seek professional help.

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