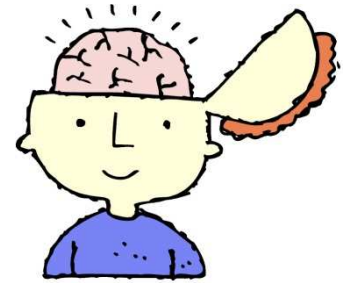


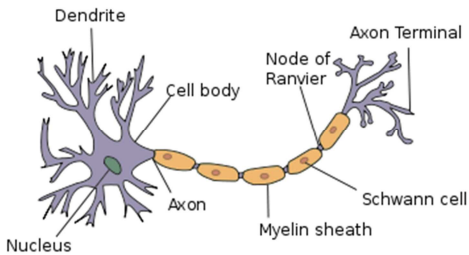
Mental & Emotional Health

Basic Brain Anatomy The Brain



- _____—largest part of the brain; analyzes and stores information
 - Two hemispheres
 - Divided into lobes by function
 - _____—site of most conscious and intellectual activity
 - Prefrontal Cortex—_____
- Hippocampus—_____
- Amygdala—_____
- Cerebellum—_____

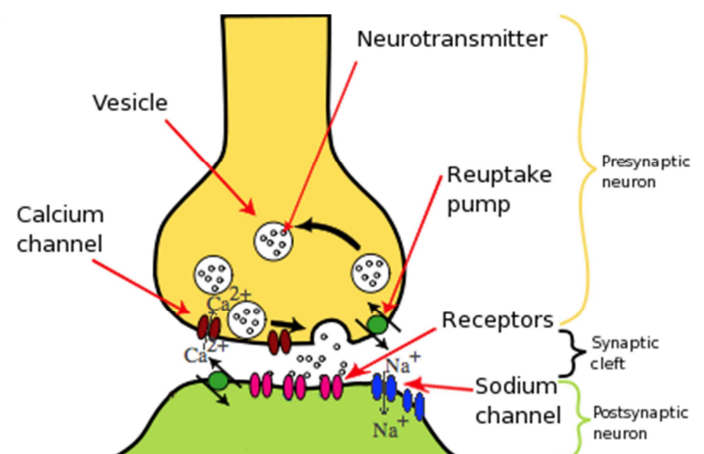
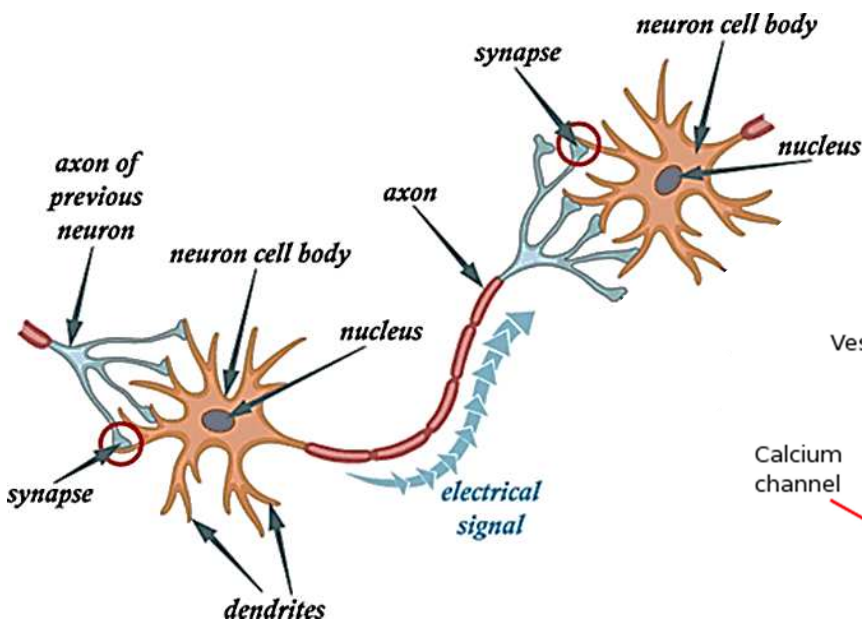
Neurons—the cells of communication in the nervous system



- Cell Body—_____
 - Dendrites—_____
- Axon—_____
- Foot—_____
 - Synaptic Terminals—_____

Neural Communication 101

- Action Potentials—_____
- Synapses—“connections” between neurons; site of inter-neural communication
 - Pre-Synaptic Neuron—_____
 - Synaptic Cleft—_____
 - Post-Synaptic Neuron—_____
- Synaptic Terminal (on pre-synaptic neuron)—_____
 - Neurotransmitters (from pre-synaptic neuron)—_____
- Receptor Sites (on post-synaptic neuron)—_____



Memory

- We know very little about how memory works or how memories are stored
- Critical to our survival; allows us to foresee future events to avoid injury & death
- Declarative vs. Non-Declarative Memory: _____



Four Stages of Memory

1. _____

- Automatic Encoding (sensory in nature):

- Effortful Encoding (conscious effort):

2. _____

- Goal is to get short-term memories into long-term memory
- Can increase storage by repeating info at particular intervals; “practice makes permanent”:
 - Such intervals are at _____ seconds after receiving new information and again within _____ - _____ minutes. If the information is not repeated at these intervals the memory/information will be forgotten.
 - Memory is improved/strengthened if you make the new information more _____ (i.e. relating new information to a personal experience is one example of strengthening a memory).

3. _____

- Often used as a means of measuring memory/learning

4. _____

- Typically forget 90% of new information within _____ days, most of which is forgotten within the first few hours

Techniques and Tips for Being Your Best Learner

Taking Notes

- Always take the notes for a particular class in the same notebook/binder.
- Date each note entry so you remember when it was covered.
- Your notes should record what the teacher said, not just what is present in a PowerPoint (or in the note outline I provide you).
- If possible, try to take your notes in outline format

Be involved in your classes!

- Raise your hand and offer answers to teacher questions. Do not be afraid to be wrong...it is in our mistakes where we truly learn!
- If the teacher is moving too quickly, let them know.
- Ask questions if you are confused or unsure about something.
- Engagement = effortful encoding

Review content everyday

- Research has shown that reviewing new material within 24-hours of hearing it increases your storage of that material by about 60%!
- It enables you to identify points of confusion or omission in your notes so you can ask questions the following class day.

Preparing for Exams

- Create a study area at home (should reflect the classroom's environment) and designate a particular period of time each day to study.
- Do not wait until the night before an exam to study! A little bit each day goes a loooooong way.
- Always utilize any tools your teachers provide you in preparing for exams.
- Manipulate material you are trying to learn by reformatting it into (encoding!):
 - Charts, diagrams, graphic organizers and lists



- ## On Exam Day

- ## Miscellaneous

- ## Sleep

- We can only speculate how much sleep a person needs...it's very *individualized* and can change with:

- Health becomes compromised if one gets too little OR too much sleep
- Sleep is critical to learning, particularly in certain types of tasks
- Sleep deprivation can cause (among other things):
 - Metabolism to drop by a 1/3 which can lead to _____
 - The body to struggle making *insulin* which moves *glucose* into cells (like *brain cells*) that use it for energy resulting in “_____”
 - Stress hormone levels to increase in the blood = _____



“Inside the Teenage Brain” Video Notes:

[illegible]

Emotions

Learned Emotions—

- Love
 - Human beings need to love and be loved
 - Feelings include strong affection, deep concern and respect
 - Expressed through words, actions, facial expressions, touch and good deeds
- Guilt
 - An emotional response when you think you have done something wrong
 - Usually results when one acts against one's values or does not act at all
 - Guilt and low self-esteem go hand in hand
 - Can motivate you to make positive changes
- Disgust
 - A feeling of revulsion or profound disapproval aroused by something unpleasant or offensive

Primary Emotions—

- Happiness
 - A response to pleasant events in one's life
 - Engage in activities that you enjoy to sustain happiness
- Sadness
 - A response to disappointing events in one's life
 - May result in crying, changes in eating habits, feelings of fatigue and/or the need to withdraw from those around you

Emotional Responses to Grief/Loss

Denial—
Anger—
Bargaining—
Depression—
Acceptance—

- Surprise
 - A response to unexpected events, whether pleasant or disappointing
- Fear
 - Needed for survival; "fight, flight or (freeze)" response
 - Rational or irrational (phobias)
 - Inherited or learned
- Anger
 - Includes annoyance, rage, hostility, irritability
 - Should be handled constructively, otherwise damage can happen to things or people
 - Researchers now think hostility is a key personality trait in predicting heart disease (4-7 times more likely to die from heart disease and cancer)
 - "Silent seethers" are even more prone to the same conditions



Unhealthful Coping Strategies

- Use of *defense mechanisms*—
- Substance abuse
- Withdrawing from friends and family
- Use of violence toward people, animals or objects
- Self-Injury (SI)

Healthful Coping Strategies

- Use the Decision-Making/Problem-Solving Model to *objectively* address emotional situations, seeking the advice of others
- Talk through your feelings with a trusted friend, family member or adult
- Journal/diary your thoughts and feelings
- Do something you enjoy!
- Take relaxing breaks...b r e a t h e
- Exercise!

Stress

The body's and mind's reaction to everyday demands and/or threats

- —negative stress; inability to cope



- _____—positive stress; achieving goals

Stressors—Any stimulus that produces a stress response:

- _____—those that come from biomechanical imbalances, mental/physical illness, disabilities or injuries
- _____—the way you perceive a situation or what you expect from it
- _____—negative reactions in the body or mind caused by tobacco, alcohol and/or other drugs, or not exercising
- _____—a relative or pet dies, parents who separate or divorce, trouble in relationships with peers
- _____—poverty, pollution, crowding, noise or natural disaster

Responses to Stressors

- _____ Stage—"fight, flight or (freeze)" response; release of adrenaline heightens awareness, heart rate, blood pressure, respiration rate
- _____ Stage—the body adapts to the stressor
- _____ Stage—body is overwhelmed by stressor either in intensity or duration resulting in physical and emotional breakdown

Signs and Symptoms of Chronic Stress (check all that occur at least 3 times per week):

Physical Signs/Symptoms

- ☐ Headaches
- ☐ Trembling
- ☐ Upset stomach
- ☐ Migraines
- ☐ Sweating
- ☐ Rash
- ☐ Constipation
- ☐ Diarrhea
- ☐ Pounding heart
- ☐ Muscle aches & tightness
- ☐ Trouble sleeping
- ☐ Grinding teeth

- ☐ Dry mouth

- ☐ Nervous twitches
- ☐ Dizziness
- ☐ Back pain
- ☐ Ringing in ears

Emotional Signs/Symptoms

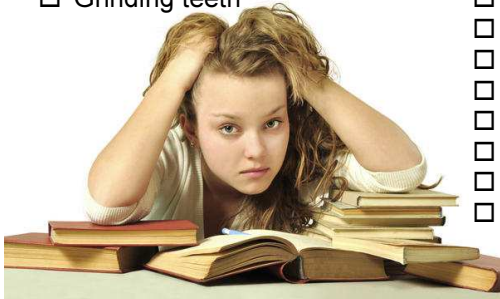
- ☐ Frustration
- ☐ Nervousness
- ☐ Boredom
- ☐ Edginess
- ☐ Feeling powerless
- ☐ Being quick to anger
- ☐ Impatience
- ☐ Mood swings
- ☐ Worrying
- ☐ Loneliness
- ☐ Confusion
- ☐ Crying
- ☐ Low self-esteem
- ☐ Easily upset

Behavioral Signs/Symptoms

- ☐ Not eating
- ☐ Overeating
- ☐ Compulsive talking
- ☐ Fidgeting
- ☐ Using drugs
- ☐ Gambling
- ☐ Verbal/physical outbursts
- ☐ Tapping feet
- ☐ Drumming fingers
- ☐ Hurry
- ☐ Forgetting one's values
- ☐ Withdrawing
- ☐ High-risk behaviors

Mental Signs/Symptoms

- ☐ Trouble reading or thinking
- ☐ Lack of creativity
- ☐ Constant worry
- ☐ Obsessive thoughts
- ☐ Inability to make decisions
- ☐ Forgetting
- ☐ Lose sense of humor and/or perspective



Too much stress...

- Can cause an increase in cholesterol, resulting in high blood pressure
- When stressed, muscles on the head and neck contract, resulting in tension headaches
- Asthma attacks can be triggered by stress
- Prolonged stress can compromise your immune system, resulting in frequent sickness and even early death (shortened life expectancy)

Stress Management

- Identify the problem or stressor
- Make a plan to tackle the stressor; seek support
- "Re-channel" negative energy/thoughts into something positive
- Relax and laugh
- Time management—prioritize; use your student planner or a calendar
- Learn to say "no"
- Slow down and practice...

The key to happiness is letting each situation be what it is instead of what you think it should be.

- Mindfulness
 - Increases brain density (increased neural connections) and improves attention/awareness/focus
 - Strengthens the immune system
 - Combats obesity and high blood pressure
 - Regulates emotions and fights depression
 - Draws us to others and improves empathy
 - Mindfulness techniques may include:
 - Breathing exercises
 - Stretching/Yoga
 - Guided imagery
 - Progressive muscle relaxation
 - Checking in with one's self within a moment; ask "How am I feeling?" and explore why

Abnormal Psychology—Diagnoses

Anxiety Disorders

- _____ (PTSD)—Bearing witness to a traumatic event (i.e. war), patient becomes high strung and over protective of loved ones
- _____ (OCD)—Characterized by rituals and repetitive behaviors such as counting, excessive hand washing or reading something over and over

Eating Disorders

- _____—An eating disorder characterized by extreme weight loss and little to no eating
- _____—An eating disorder characterized by bingeing and purging
 - Both eating disorders stem from a need to have _____ in one's life

Learning Disorders

- _____ (ADD/ADHD)—Learning disorder resulting in inattention, hyperactivity, misbehavior and/or poor concentration

Dissociative Disorders

- _____—Often results from severe trauma during childhood (sexual/physical abuse)

Personality Disorders

- _____—Patient often has a history of setting things on fire and hurting animals as a child; outwardly mean, does not get along with others

Psychotic Disorders

- _____—Overwhelming fear that they are being watched, experience hallucinations and often commit suicide to stop the paranoia and voices

Mood Disorders

- _____—Characterized by periods of extreme euphoria and extreme depression, and may be accompanied by hallucinations
- _____—Presents itself as fatigue, poor sleep, loss or gain of appetite, lack of pleasure in interests and feelings of sadness/hopelessness. Can be genetic.

Adolescent depression signs and symptoms may include:

- Irritability
- Overreaction to criticism
- Problems with authority
- A drop in school performance
- Indecision, lack of concentration
- Poor self-esteem
- Frequent physical complaints

Suicide

- 2nd leading cause of death for 15-20 year olds
- Attempts can often be a cry for help, to bring awareness to others about their problem



Risk factors for Suicide Ideation—Often a combination of the following:

- A previous suicide attempt or family history of suicide
- Having a mental disorder
- Substance abuse
- History of trauma (abuse, bullying, neglect, accidents/disasters, etc.)
- LGBTQ/Sexual minority youth
- Sleep issues
- Non-suicidal self-harm and/or exposure through family/friends self-harming
- Some anti-depressant medications for adults have been known to increase suicidal thoughts/attempts in teens

Myths About Suicide

- Talking about suicide will plant the idea in a person's head
- People who use social media are more likely to attempt suicide
- There are no warning signs before a suicide takes place

Warning Signs of Suicide Ideation

- Engaging in high-risk behaviors; reckless
- Dramatic mood swings and/or changes in personality/appearance/hygiene
- Giving away prized possessions and/or "putting affairs in order"
- Withdrawing from friends and family
- Hopelessness, anger, violence, impulsivity, anxiety
- Self-injury
- Talking, drawing and/or writing about death or suicide
- Decline in academic performance/participation
- Procuring a means and/or making a plan

What Does NOT Help...

- Ignoring or dismissing the issue: _____
- Acting shocked or embarrassed: _____
- Challenging: _____
- Passing Judgment: _____
- Giving harmful advice: _____

How You CAN Help...

- Ask them if they are thinking about killing themselves in a caring, but straight forward manner
- Show the individual empathy and compassion
- Actively listen to the person
- Take threats seriously, even if they say they're joking
- Involve a trusted adult, even if they swear you to secrecy (parents, teachers*, school counselors*, coaches*, clergy, healthcare professionals*, hotlines, etc.)
- Do not leave a person who has attempted suicide; call 911 and stay with them until medical help arrives
- Utilize available resources:
 - King County Crisis Clinic 1-866-427-4747
 - National Suicide Prevention Lifeline 1-800-273-TALK
 - 1-888-628-9454
 - 1-866-4-U-TREVOR
 - www.yspp.org
 - Teen Link Directory (on the course website)

How WE Can Protect Against Suicide Ideation

- Positive social support; having a sense of belonging, connectedness and safety
- Spirituality; having a sense of purpose
- Having a sense of responsibility to family
- Having pets/animals
- Avoiding substance abuse
- Focusing on positive self-image & self-esteem for girls and emotional self-discovery for boys
- Teach positive coping strategies and problem-solving skills for life's challenges and emotions
- Effective clinical care/management of mental disorders

Clinicians Who Can Help

- Counselors/Therapists—_____

- _____—researchers or clinical healthcare providers, typically PhD's; CANNOT make medical diagnoses; typically not able to prescribe medications
- _____—clinical healthcare providers, MD's; CAN make medical diagnoses, CAN prescribe medications

Often, a patient will have a “team” of professionals to help them, including (in addition to the clinicians above):

- General practicing doctors
- Dietitians/Nutritionists (eating disorders)
- Variety of other medical professionals as needed

