

# Gen Psych: Exam I Study Guide

Chapters: 2, 4, and 5

Disclaimer: I took this class fall of 2015, and I hope I can help! So here is my version of Professor Updegraff's exam review with the answers! I hope this helps you study for your exam! Good Luck! 😊

## **Ch. 2- Research Methods:**

Operational Definition: Statement of a procedure that is used to define research variables

- Defining variables in practical terms
- Taking complicated Independent & dependent variables and explaining them
- This is important so we can understand how we can prove the hypothesis

Falsifiability: Possibility that a hypothesis can be proven false by an observation or experiment

Pros and Cons of research methods:

<b>Method:</b>	<b>Pros:</b>	<b>Cons:</b>
Case Study	Large groups	It is not a good representation of everyone
Survey	Easy, Behavior, and opinion	Can be done dishonestly (people lying on survey), can easily be tampered with
Naturalistic Observation	Observing something in its natural habitat	-
Experimental Method	Random selection and accurate	-

Random Sampling: When a participant has an equal chance of being assigned to any group of an experiment

Correlation: Relationship between two variables

- *Positive correlation:* If **high** levels of one variable are associated with **high** levels of another variable then the correlation is **positive**
- *Negative Correlation:* If **high** levels of one variable are associated with **low** levels of another variable the correlation is **negative**

Experimental Method: Allows researchers to make conclusions about causality

- Random assignment: Used to ensure that every observation is accurate/equal/fair
- Independent Variable: Variable controlled by experimenter

- Dependent Variable: The outcome of the independent variable

## Ch. 4- Neuroscience:

**Afferent (in) vs Efferent (out)**

Afferent (in)	vs	Efferent (out)
Takes in info from 5 senses		Sends messages to muscles & glands
Kinesthesia (known body parts)		Messages from brain
Messages to brain		

### Sympathetic Nervous System:

- Responsible for Flight-or-Flight response and arousal (ex. Heart racing, adrenalin)

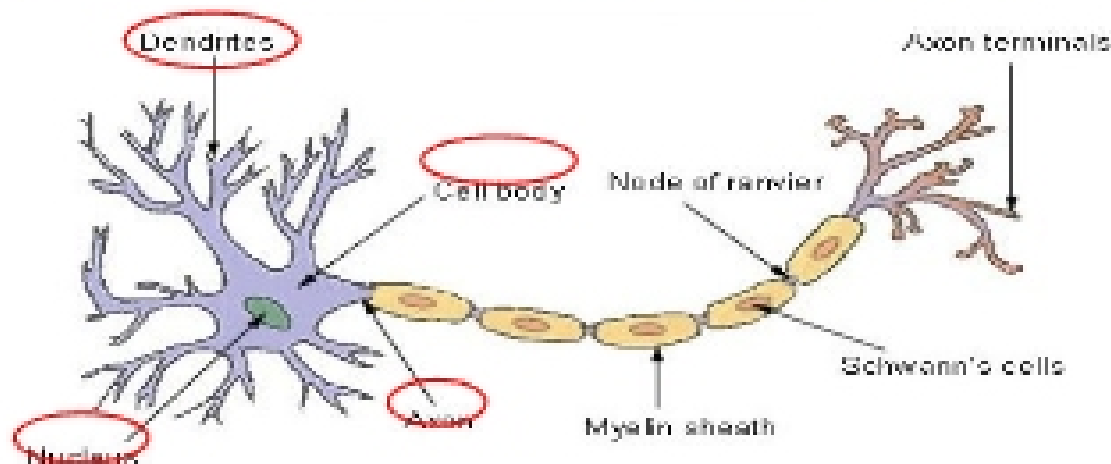
### Parasympathetic Nervous System:

- Rest & Repair ☺

### Neurons:

- Dendrites: A branch from the neural cell body that receives input from other neurons
- Cell Body: A large central mass of a neuron containing the nucleus
- Axon: The branch of a neuron that is responsible for transmitting info to other neurons
- Synapse: A point of communication between two neurons

Google.com



### 5 Key Neurotransmitters:

- Dopamine: Responsible for movement, Learning, Attention, Positive emotion
- \* Too much dopamine = Schizophrenia \* Not enough dopamine = Parkinson's disease
- Serotonin: Responsible for sleep, appetite, arousal, pain suppression, mood, and depressed feelings
- SSRI: selective serotonin reuptake
- Norepinephrine (NE): Increases heart rate, arousal, and slows digestion
- Acetylcholine (ACH): Muscle action, cognitive functioning, and memory

- Alzheimer's is tied to deterioration of ACH
- GABA: Major inhibitory neuron
- Low levels associated with anxiety

fMRI: Functional magnetic resonance imaging

- A neuro imaging procedure using an MRI

### Brain/Noggin/Peanut Terms:

#### Brainstem:

- Innermost region of the brain
- Controls breathing and heartbeat
- Point where nerves connect with opposite side of brain

#### Cerebellum:

- Coordinates voluntary movement and balance
- Tells brain what to expect from your body's own movement

#### Limbic System-

##### Hippocampus:

- Participates in long term memory

##### Hypothalamus:

- Regulates thirst, Hunger, and sexual behavior

##### Amygdala:

- Influences aggression & fear
- Responds to Fight-or-Flight

#### Cerebral Cortex-

##### Frontal Lobe:

- Involved in making plans & morals
- Sends output messages to muscles

##### Parietal Lobe:

- Sensory complex (5 senses)

##### Occipital Lobe:

- Visual Processing

##### Temporal Lobe:

- Auditory Processing