

Recent Trends in psychology



Nehal Lotfy, PhD

Educational Psychology Dept. Faculty of Education, SCU

Nehal_lotfy@hotmail.com

Lecture components

- What is psychology?
- Fields of psychology.
- Educational psychology topics (cognitive processes: memory, attention, thinking, etc.)
- Introducing meta into cognition.
- Positive psychology (mindfulness).

Interesting numbers

- According to the U.S. Bureau of Labor Statistics (BLS), employment for psychologists overall will grow by 19 percent between 2014 and 2024, much faster than the 7 percent average growth predicted for all occupations.
- Between 1.2 million and 1.6 million undergraduates take introductory psychology classes each year, according to estimates ([*American Psychologist*](#), Vol. 71, No. 2, 2016)..

What is Psychology?

- The term psychology comes from the Greek roots psyche meaning soul or mind and logos meaning word or study

What is Psychology?

- Psychology is the science of human behavior and mental processes.
- Behavior is anything we do
 - overt actions and reactions
- Mental processes are our internal experiences
 - thoughts, feelings, memories...

Psychology as Science

- The World's First **Psychology Lab** was established in 1879 at the University of Leipzig in Germany. By creating an academic **laboratory** devoted to the study of **experimental psychology**, Wundt officially took **psychology** from a sub-discipline of philosophy and biology to a unique scientific discipline.
- scientific method: An approach to knowledge that relies on a systematic method of generating hypotheses, collecting data, and explaining the data.
- Theory: The systematic explanation of a phenomenon.
- Hypotheses: A specific, testable prediction derived from a theory.

Goals of Psychology

- describe,
- explain,
- predict,
- and control some behaviors

Fields of psychology

- Psychology is such a huge topic and conveying the depth and breadth of the subject can be difficult. As a result, a number of unique and distinctive branches of psychology have emerged to deal with specific subtopics within the study of the mind, brain, and behavior.

Psychology can be roughly divided into two major areas:

- **Research**, which seeks to increase our knowledge base
- **Practice**, through which our knowledge is applied to solving problems in the real world

Branches of psychology

I . Pure psychology

1. General psychology
2. Abnormal psychology
3. Social psychology
4. Physiological psychology
5. Para- psychology
6. Geo-psychology
7. Developmental psychology
8. Experimental

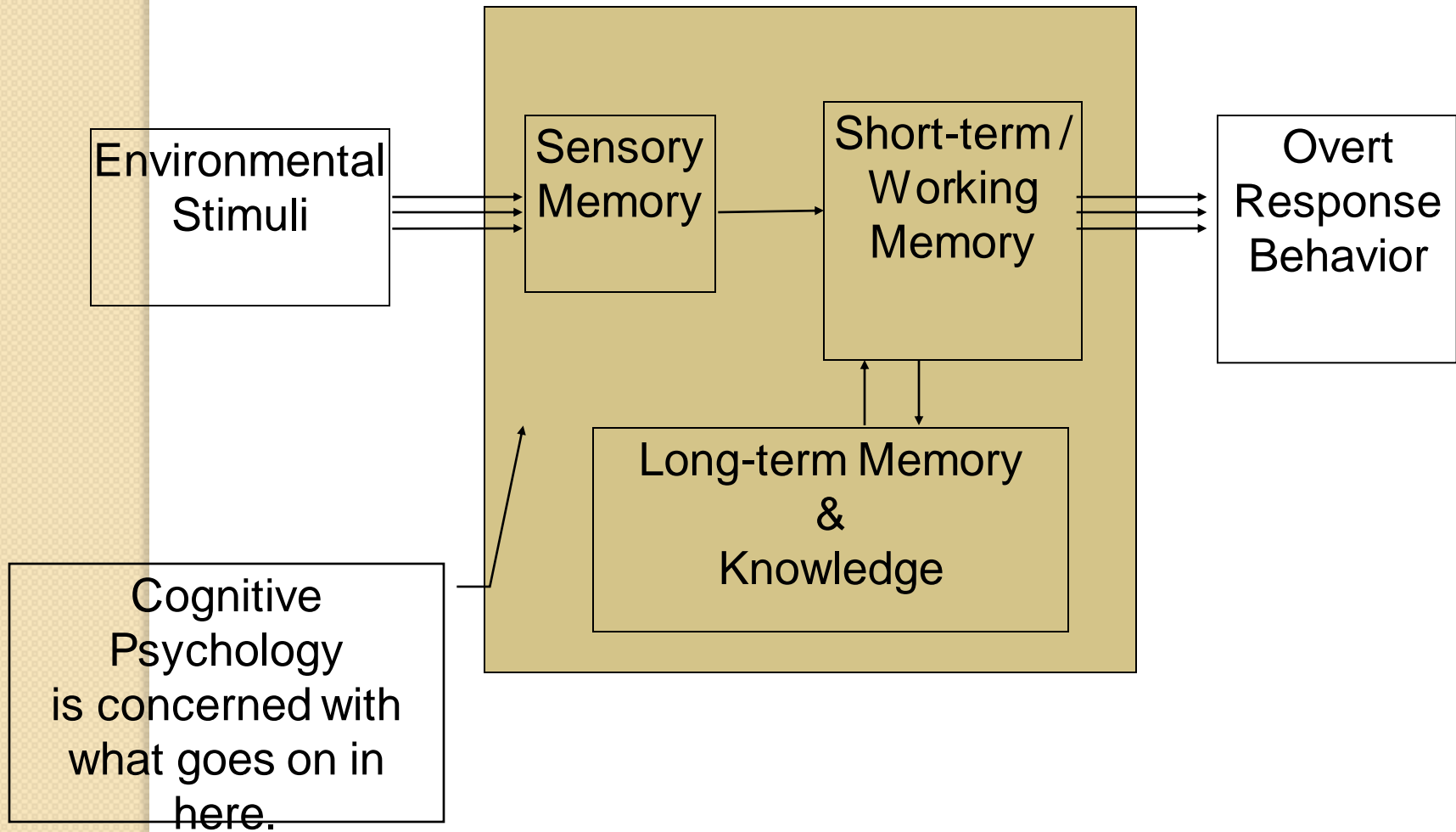
II. Applied psychology

1. Educational psychology
2. Clinical psychology
3. Industrial psychology
4. Legal psychology
5. Military psychology
6. Political psychology

Cognition

- In studying intelligence under the psychometric approach, the end result was the most important. While studying intelligence under information processing approach focuses on the process itself.
- Now intelligence can be enhanced!
- Theory of multiple intelligences (Gardner)
- Triarchic theory of intelligence (Sternberg)

Info. Processing model

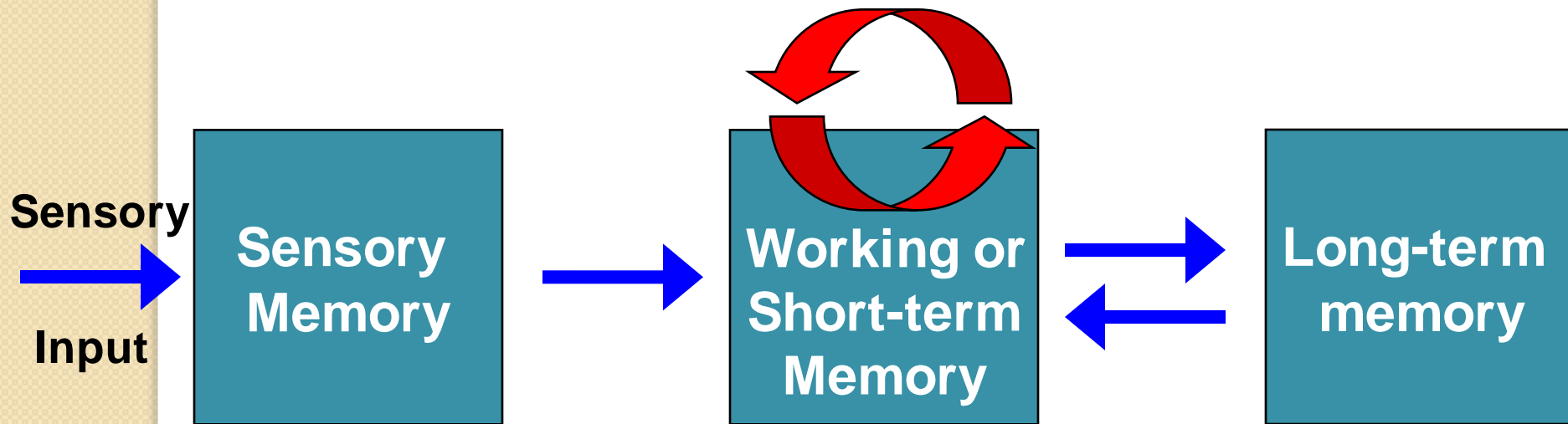


Memory Processes

- Encoding--transforming information into a form that can be entered and retained in the the memory system
- Storage--retaining information in memory so that it can be used at a later time
- Retrieval--recovering information stored in memory so that we are consciously aware of it

Three Stages of Memory

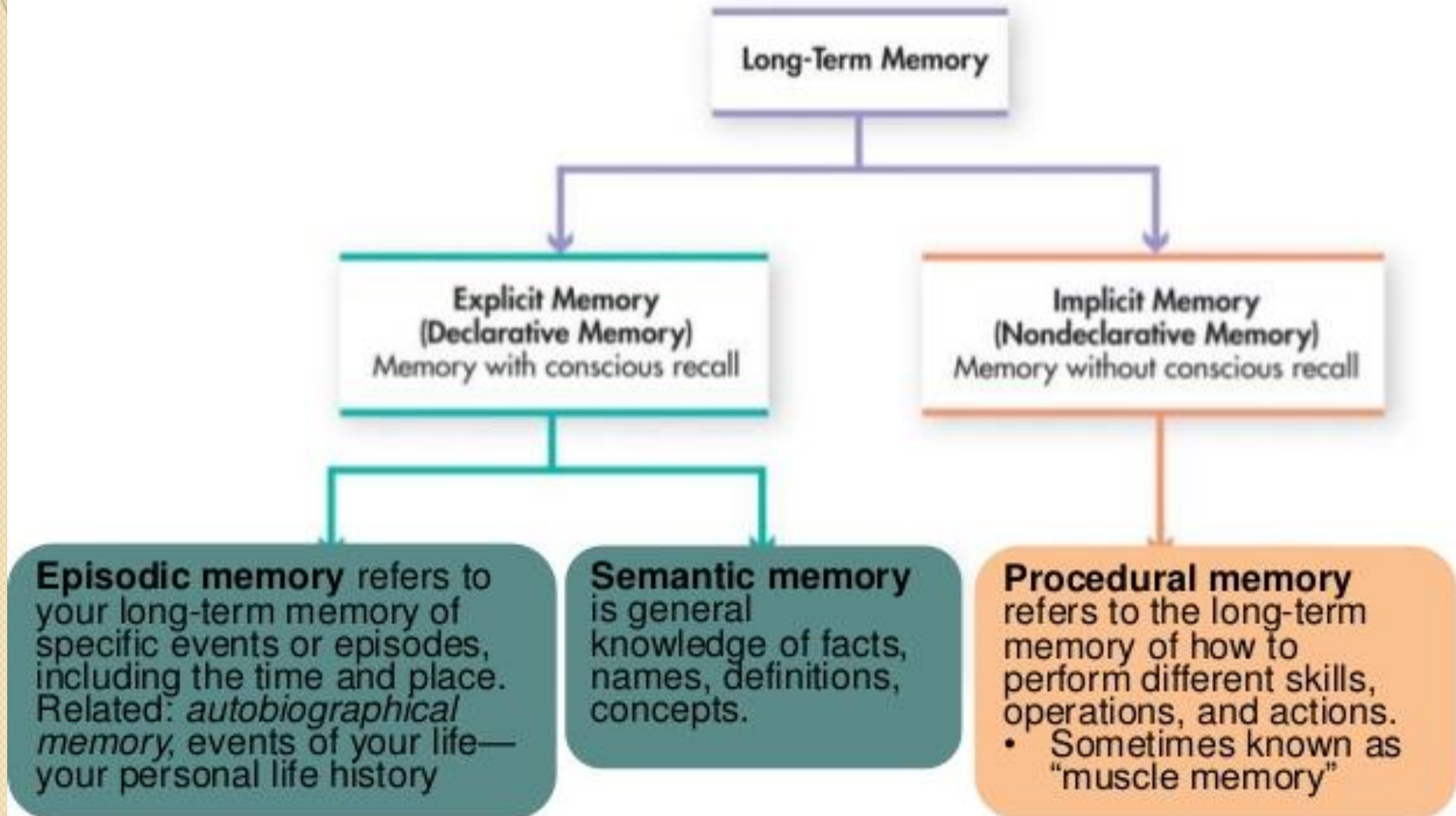
- Three memory stores that differ in function, capacity and duration



Automatic vs. Effortful Encoding

- **Automatic processing**
 - Unconscious encoding of information
 - Example: What did you eat for lunch today?
- **Effortful processing**
 - Requires attention and conscious effort
 - Example: Repeating a phone number in your head until you can write it down

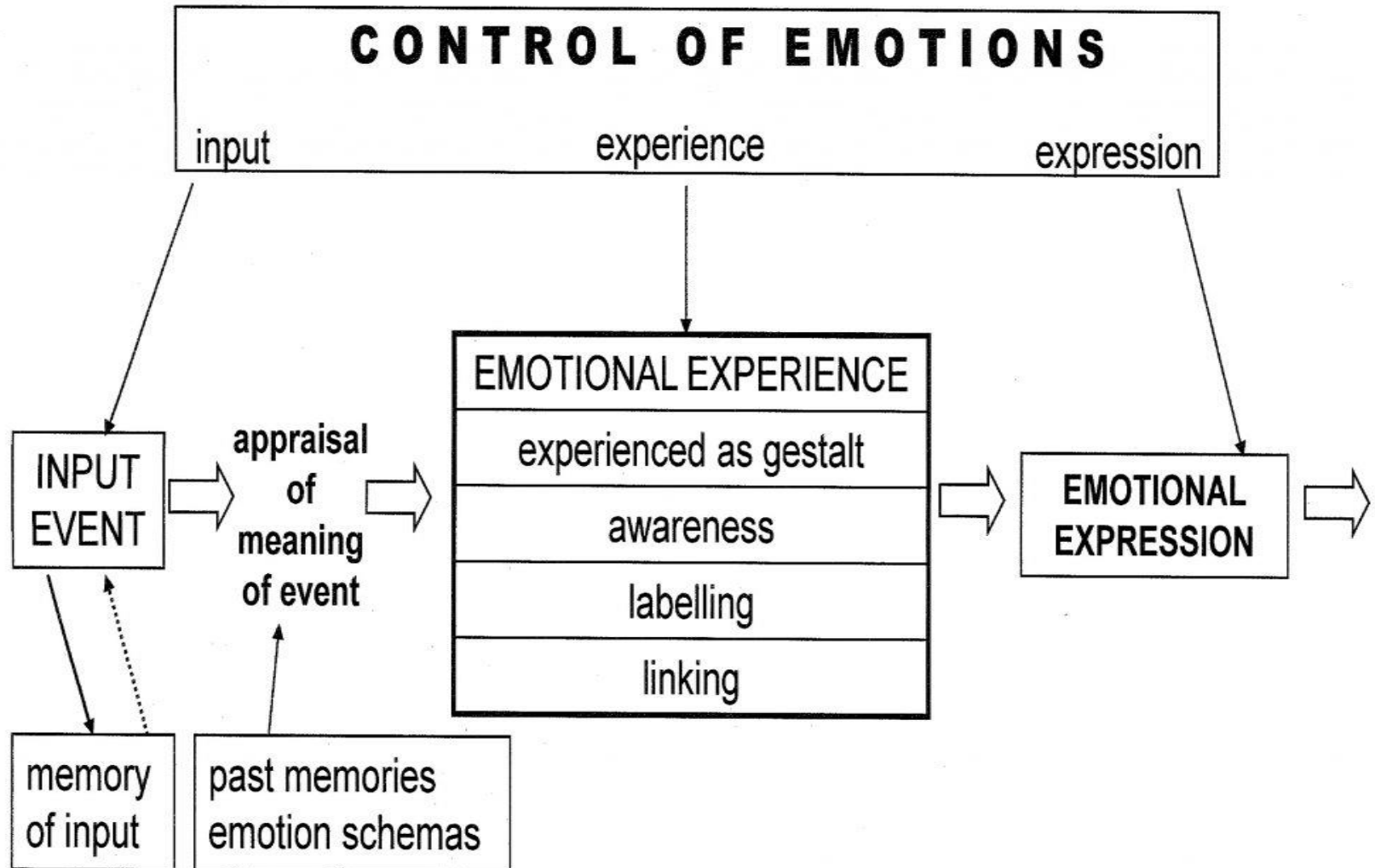
Types of Information in Long-Term Memory: Three Major Categories



Introducing the meta in cognition

- Meta cognition:
- Meta thinking
- Meta memory
- Meta attention
- Meta mood

Emotions as cognitive processing!



Cyber psychology

- Collecting data from users using applications like facebook, instagram, etc
- Modifying the apps for more interesting and enjoyable experience.
- The collected data can be used for better understanding of the communities and it might even guide the decision making!
- This branch of applied psychology is blooming!

Positive psychology

- Martin Seligman is considered the father of positive psychology. He tells the story of a central moment during 1998, a few months before he was elected president of the American Psychological Association:
- “I was weeding the garden with my 5 year old daughter Nikki. She was throwing weeds, singing and dancing while I was actually trying to get the weeding done. I yelled at her, she walked away, then came back and said: Daddy, do you remember before my fifth birthday? I was a whiner. I whined everyday. When I turned five I decided not to whine anymore. That was the hardest thing I’ve ever done. And if I can stop whining, you can stop being such a grouch.”

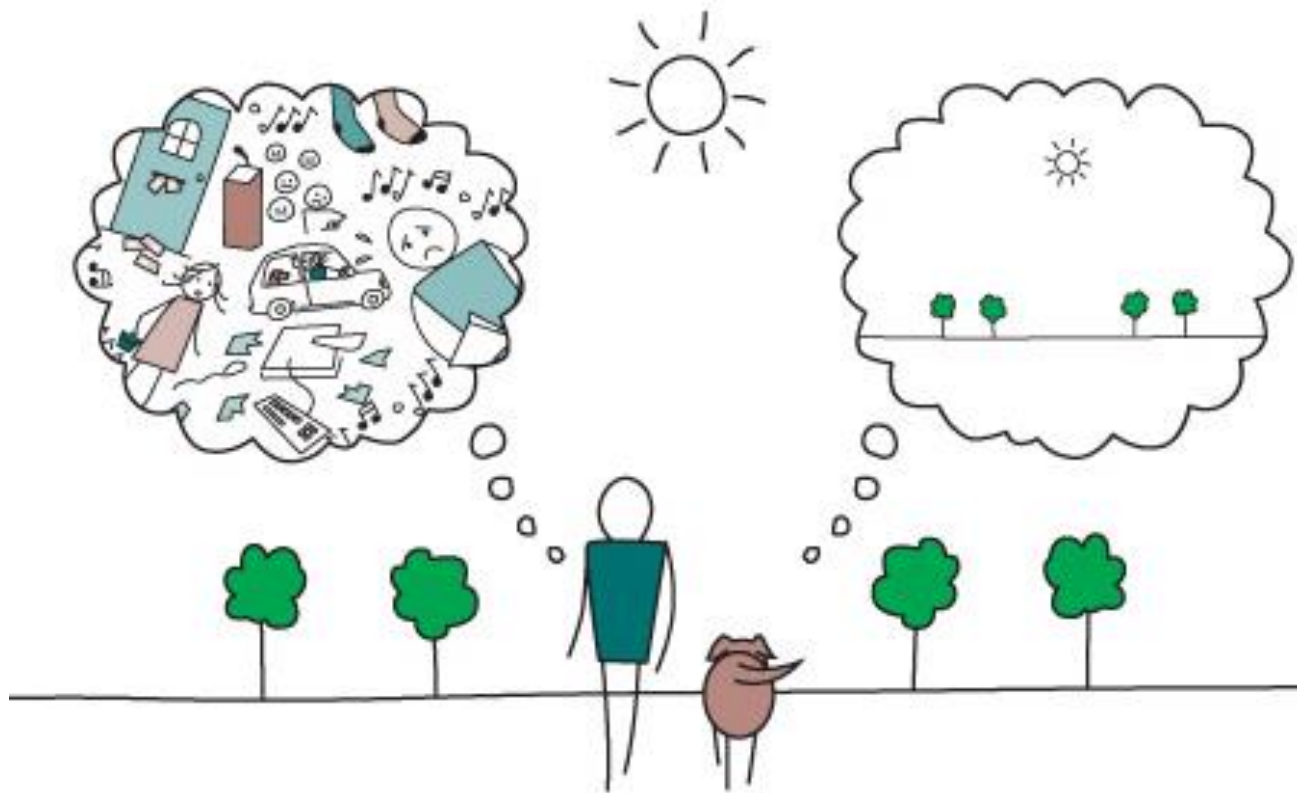
What is Positive Psychology?

Positive Psychology is the scientific study of human flourishing, and an applied approach to optimal functioning. It has also been defined as the study of the strengths and virtues that enable individuals, communities and organizations to thrive.” Source: **Positive Psychology** Institute. Apr 20, 2018

Positive psychology focuses on the positive events and influences in life, including:

- Positive experiences (like happiness, joy, inspiration, and love)
- Positive states and traits (like gratitude, resilience, and compassion)
- Positive institutions (applying positive principles within entire organizations and institutions)

Mindfulness as a tool of positive psychology



Mind Full, or Mindful?

What is Mindfulness?

- Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and non judgementally to things as they are. This means paying attention to things as they really are in any given moment not what we want them to be.

Breaking it Down

You can break down the meaning of mindfulness as follows:

- **Paying attention:** To be mindful, you need to pay attention, whatever you choose to attend to.
- **Present Moment:** The reality of being in the here and now means you just need to be aware of the way things are as they are now. Your experience is valid and correct just as it is.
- **Non reactively:** Normally, when you experience something you automatically react to that experience according to your past conditioning. Example: if you think, “ I still haven’t finished my work”, you react with thoughts, word and actions in some shape or form. Mindfulness encourages you to respond to your experience rather than react to thoughts. A reaction is automatic and gives you no choice; a response is a deliberate and considered action.

Breaking it Down

- **Non-judgementally:** The temptation is to judge experience as good or bad or like/dislike. I want to feel bliss; I don't like to feel afraid. Letting go of judgements help you to see things as they are rather than through the filter of personal judgements based on previous conditioning.(experiences)
- **Openheartedly:** To be openhearted is to bring a kindness, compassion, warmth, and friendliness to your experience

Informal vs Formal

- Informal meditation is when you focus your mind to which ever activity you are doing during your day. This could include: brushing your teeth, cooking, cleaning, etc.
- Formal meditation is when you take time out of your day to complete a meditation practise. Some practises include the body scan, mindfulness of the breath, mindful yoga, etc.

What Can Mindfulness Do For You?

- Help Battle Depression
 - Help Battle Anxiety
 - Reduce Stress Levels
 - Reduce Physical Pain
 - Improve Sleep
- Increase Dopamine Levels in The Brain

What Types of Mindfulness Are There?

- Mindful Breathing
- Mindful Walking
- Body Scan
- Mindful Eating
- Mindful Yoga

Neuroplasticity

(The brain's ability to reorganize itself by forming new neural connections throughout life)

- Recent research in neuroscience shows that we have the power to influence our brains.
- When we think certain thoughts, it strengthens those neural circuits. *Mental States Become Neural Traits!*
- Self-Directed Neuroplasticity = Nurture positive states of mind to strengthen and build those neural networks. *Make Happiness a Habit!*

The brain is like a muscle that we can build through practicing skills.



The Resilient Zone

In our “Resilient Zone” we have the best capacity for flexibility and adaptability in mind, body and spirit.

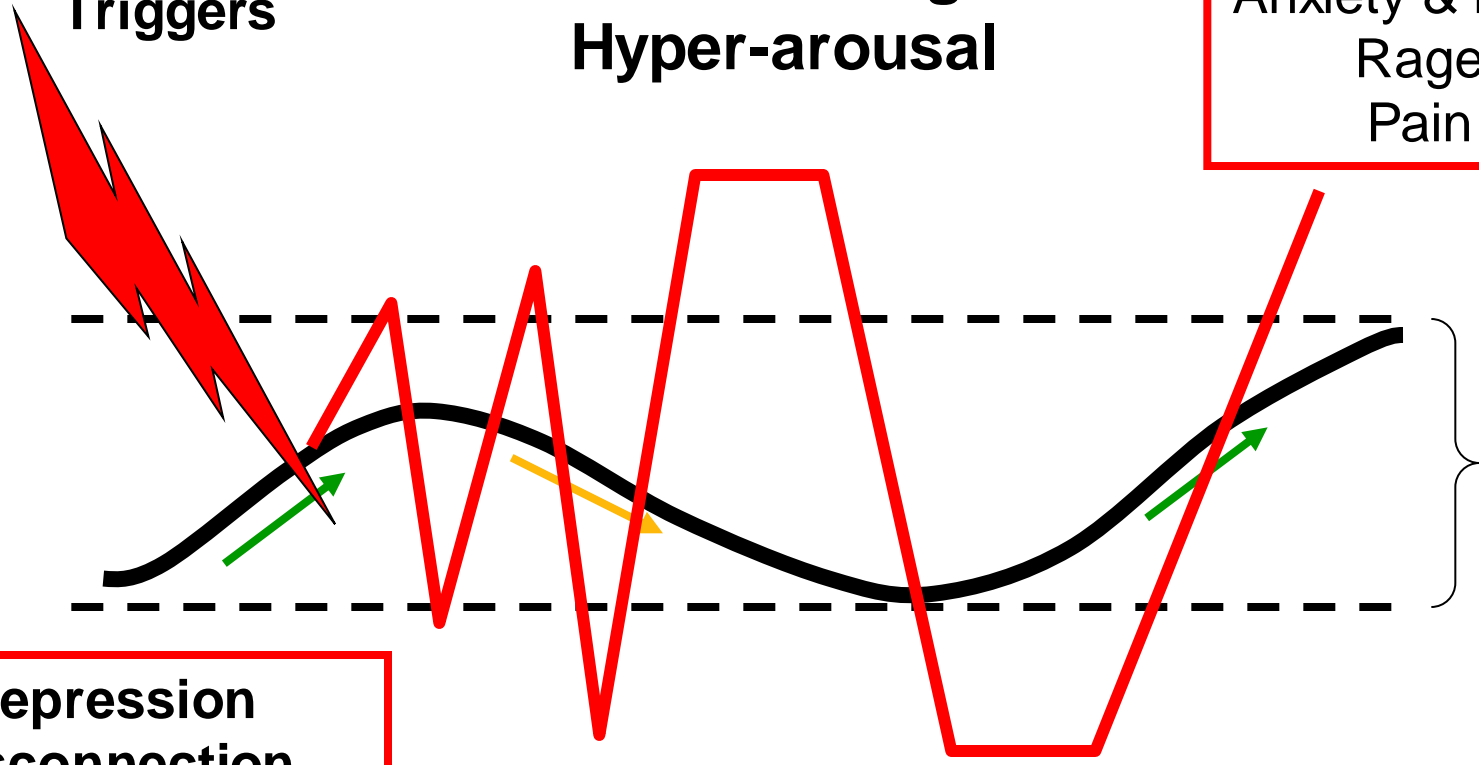


Mindfulness helps deepen the Resilient Zone

**Stressful/Traumatic
Event
or
Stressful/Traumatic
Triggers**

**Stuck on “High”
Hyper-arousal**

Hyperactivity
Hypervigilance
Mania
Anxiety & Panic
Rage
Pain



resilient zone

Depression
Disconnection
Exhaustion/Fatigue
Numbness

**Stuck on “Low”
Hypo-arousal**

Graphic adapted from an original graphic of Peter Levine/Heller

Questions ???