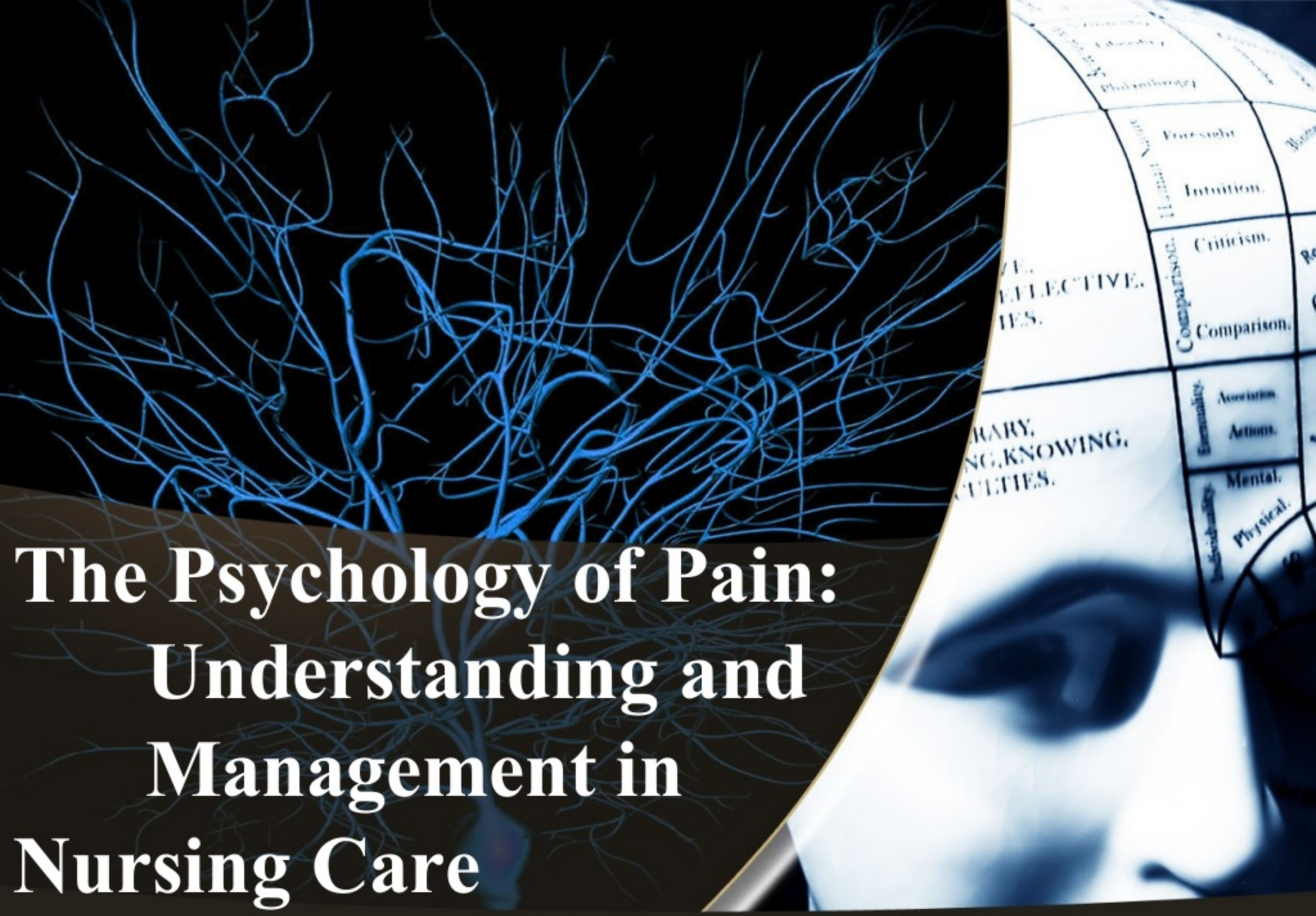


The Psychology of Pain: Understanding and Management in Nursing Care

Group Presentation

SHAHID HUSSAIN

OBJECTIVES

At the end of this session, students will be able to:

1.Define pain.

2.Explain the types of pain.

3.Explain physiological perspective of pain (brief).

4.Discuss psychological perspective of pain (gate-control theory, bio-psychosocial model of pain, etc.).

5.Factors affecting pain perception including psychological, social and biological.

6.Discuss treatment approaches for pain management (recent researches).

7.Discuss the role of nurses in pain management.

DEFINITION OF PAIN

- Pain is an unpleasant sensory and emotional experience associated with the actual and potential tissue damage .

(Fishman, Ballantyne and Rathmell. 2011)

TYPES OF THE PAIN

There are several types of the pain. Main types of the pain are listed below.

1.Acute pain

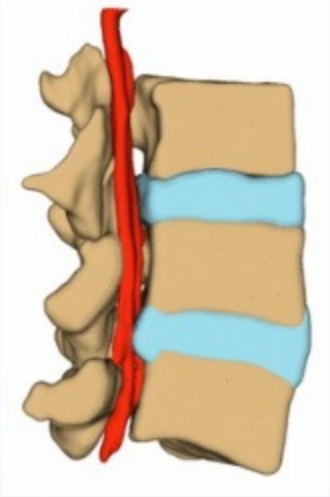
2.Chronic pain

3.Referred pain

4.Phantom pain

ACUTE PAIN:

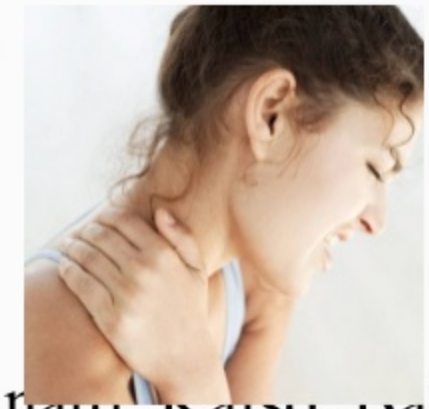
Acute pain is characterized by injury of body tissues and activation of nociceptive transducer at the site of local tissue damage. Acute pain is severe as compare to the chronic pain .



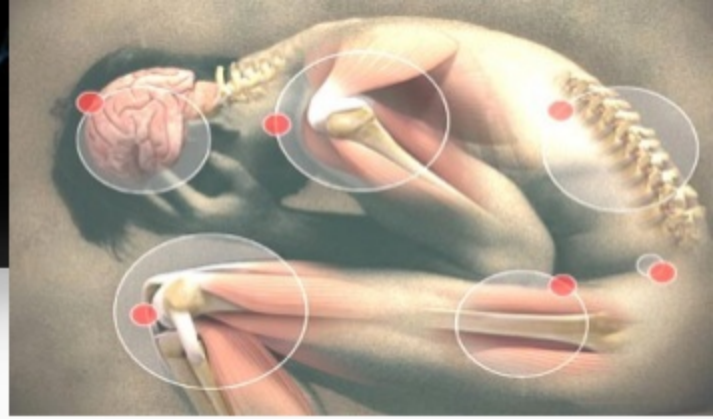
(Picone, 2012)

CHRONIC PAIN:

Chronic pain is characterized by injury or disease that is caused by remote factors. The chronic pain extend for long period of time. It's represented level of pain is low as compared to acute pain.



(Stannard, Kalso, Ballantyne (Eds.) 2010)



REFERRED PAIN:

Referred pain is defined as the perceived pain at a site nearby or even at a distance from the pain's origin.

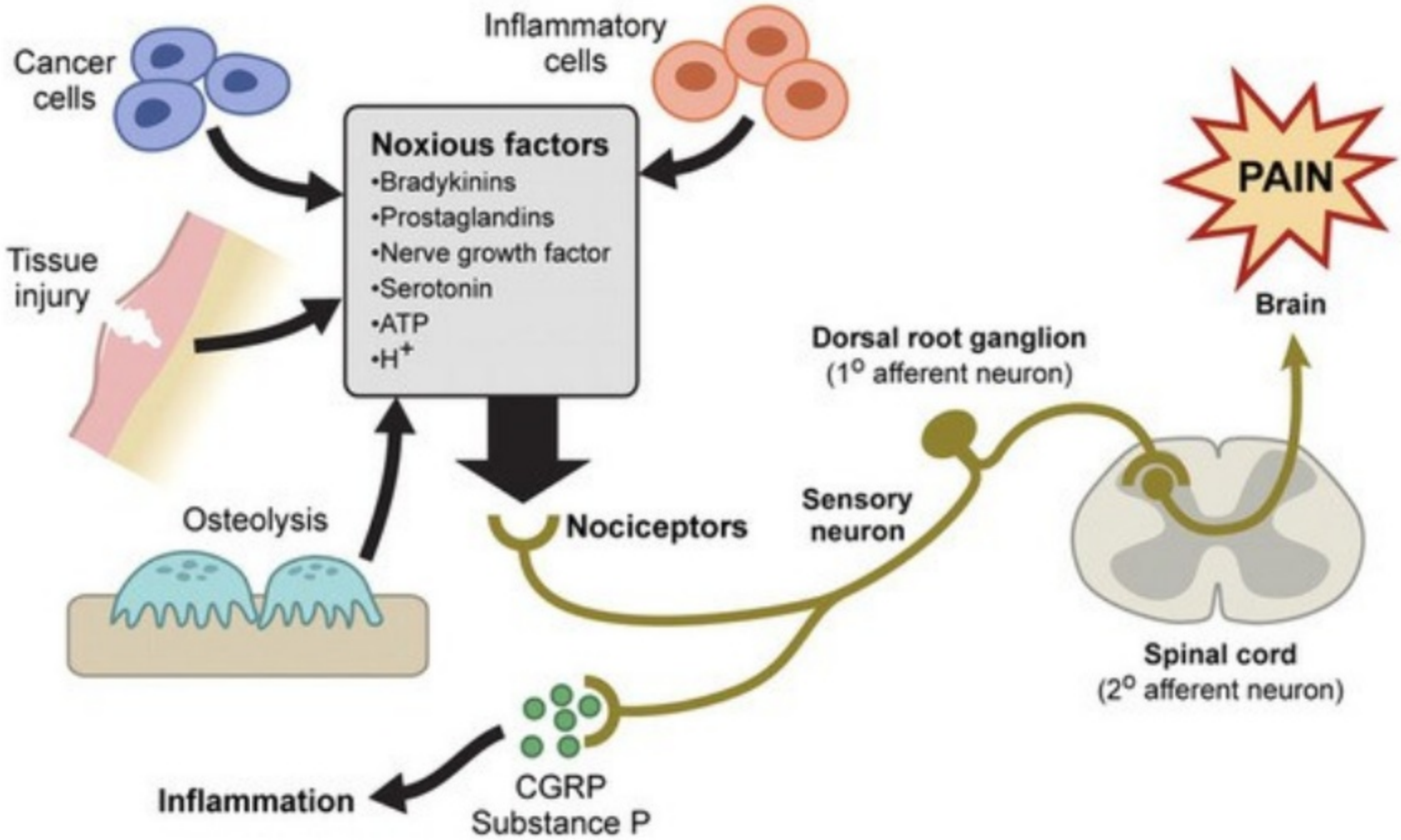
(Fishman, Ballantyne and Rathmell. 2011)

PHANTOM PAIN:

Phantom pain sensation refers to the perception of a variety of physical feelings in a part of the body that has been removed. Although this is generally associated with limb amputation.

(Flor, Nikolajsen, Jensen, MacIver, Lloyd, Kelly, and Nurmikko, (2010).

PHYSIOLOGY OF PAIN



(Yoneda, Hata, Nakanishi, Nagae, Nagayama, Wakabayashi, and Hiraga, 2011)

SPECIFICITY THEORY

- Earliest theory of pain proposed by Rene Descartes in 17th century.
- There is a direct relationship between nerve endings and pain spots on our body.
- Pain travels to the brain in only one pathway, which is the same path used by other sensations.
- The Specificity Theory stated that pain is "a specific sensation, with its own sensory apparatus independent of touch and other senses".
- Severity of injury is directly proportional to the level of experienced pain.

CRITICISM:

- All nerve fibers in our body are not pain receptors, but there are some specialized pain receptors in our body.
  - Example: severely wounded soldiers in battle complain of less pain contrary to extreme pain in minor injuries.
- A single stimulus type (e.g., a blow, electric current) can produce different sensations depending on the type of nerve stimulated.

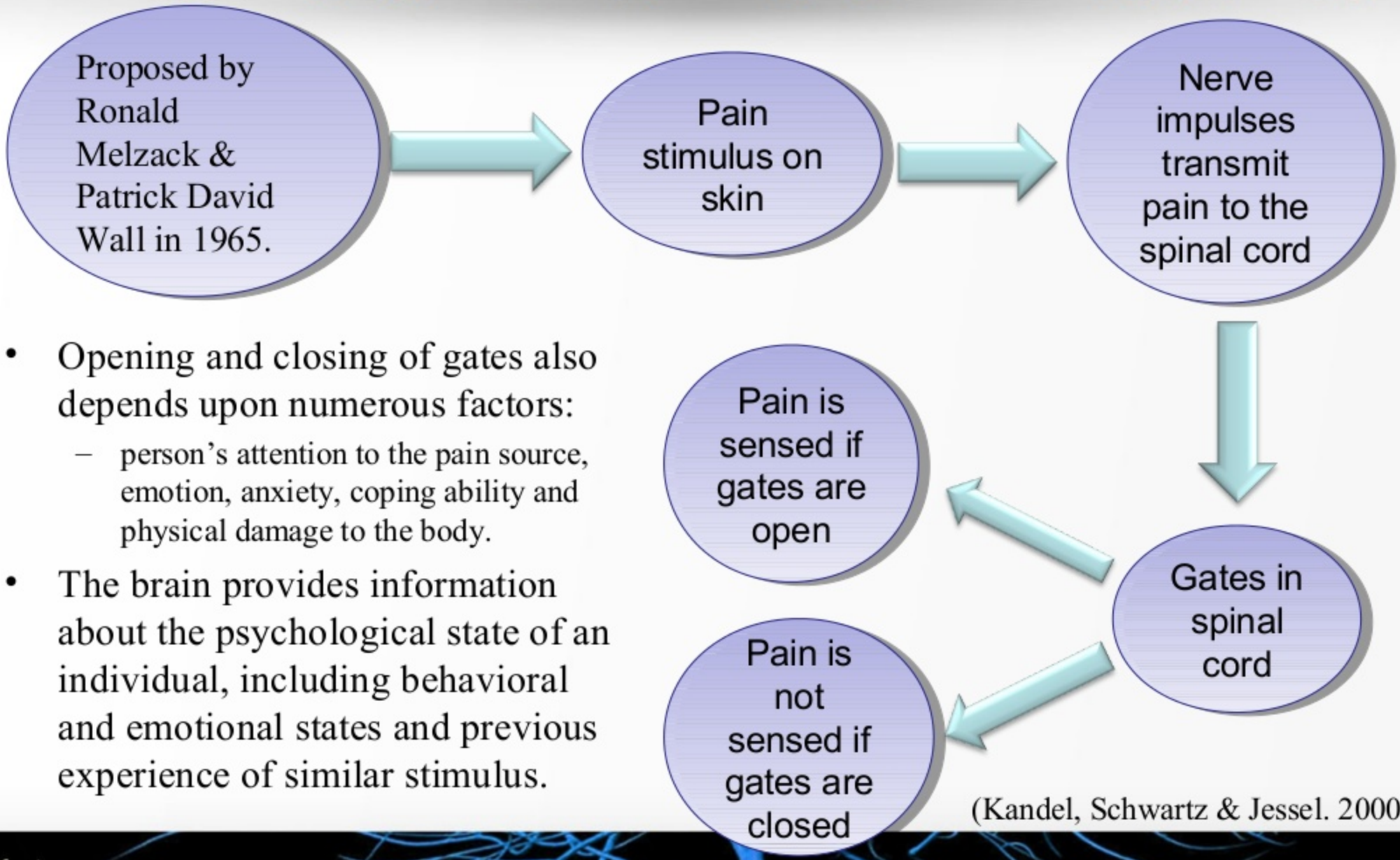
(Dean, Gwilym, Carr. 2013)

Nerve Fibers For Pain

Fiber Type		What they Transmit	Characteristics	Effect on Gate
Small Fibers	A δ	Sharp, Prickly Pain	Thin, myelinated, slow	Opens
	C-Fibre	Dull, Aching Pain	Thin, unmyelinated, slow	Opens
Large Fibers	Aβ	Non-painful Stimuli	Thick, myelinated, fast	Closes

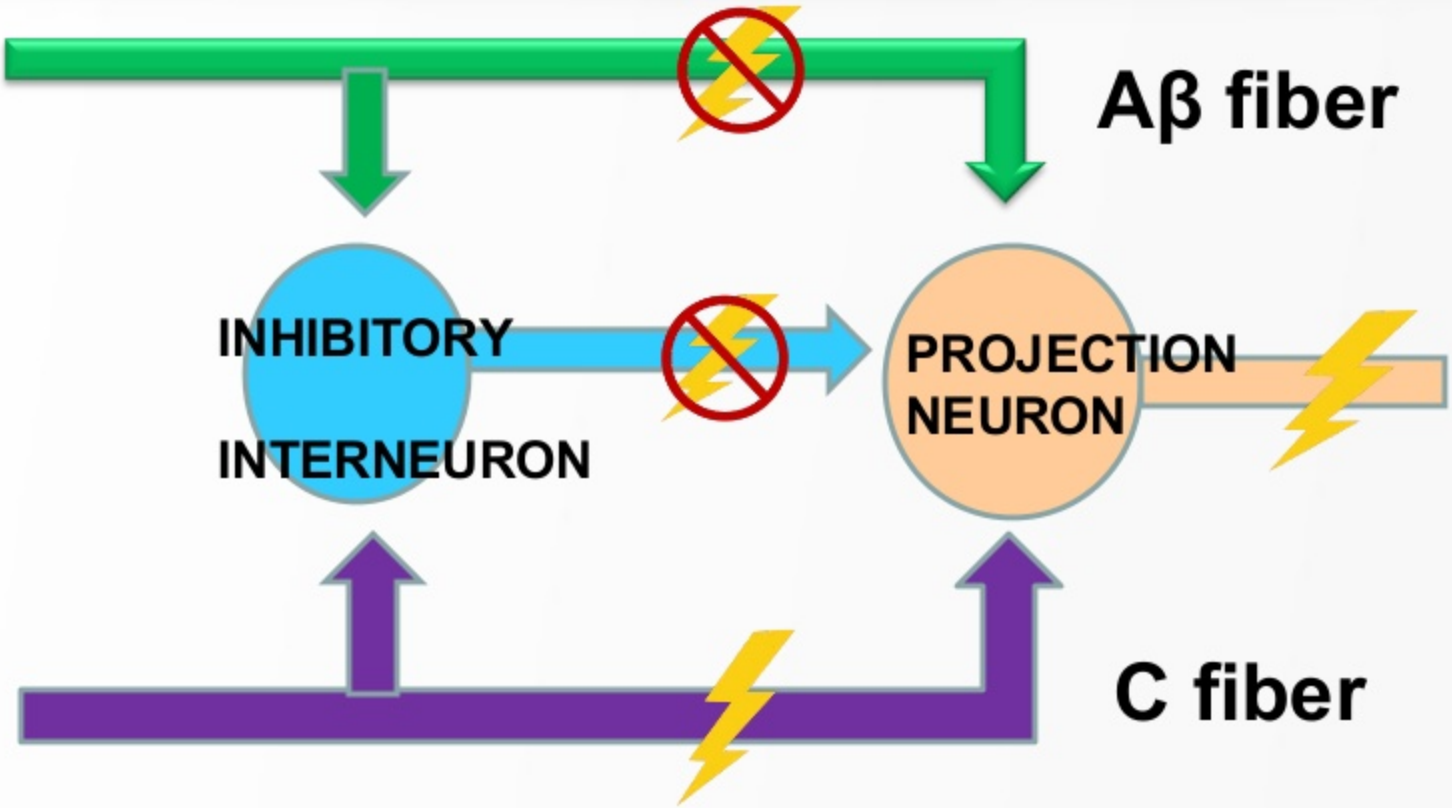
(http://ucalgary.ca/pip369/mod7/tempain/theories

GATE-CONTROL THEORY

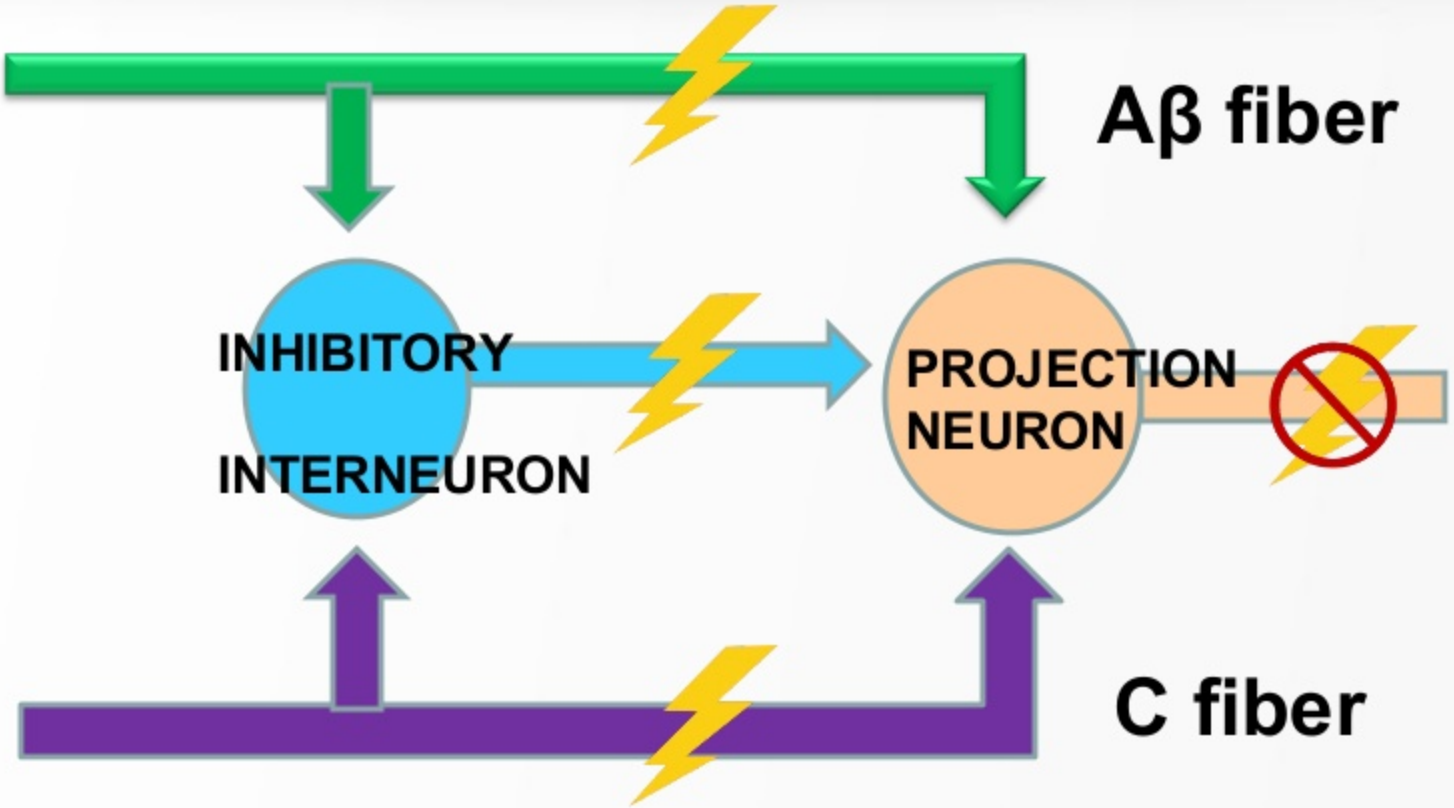


- Opening and closing of gates also depends upon numerous factors:
  - person's attention to the pain source, emotion, anxiety, coping ability and physical damage to the body.
- The brain provides information about the psychological state of an individual, including behavioral and emotional states and previous experience of similar stimulus.

(Kandel, Schwartz & Jessel. 2000).



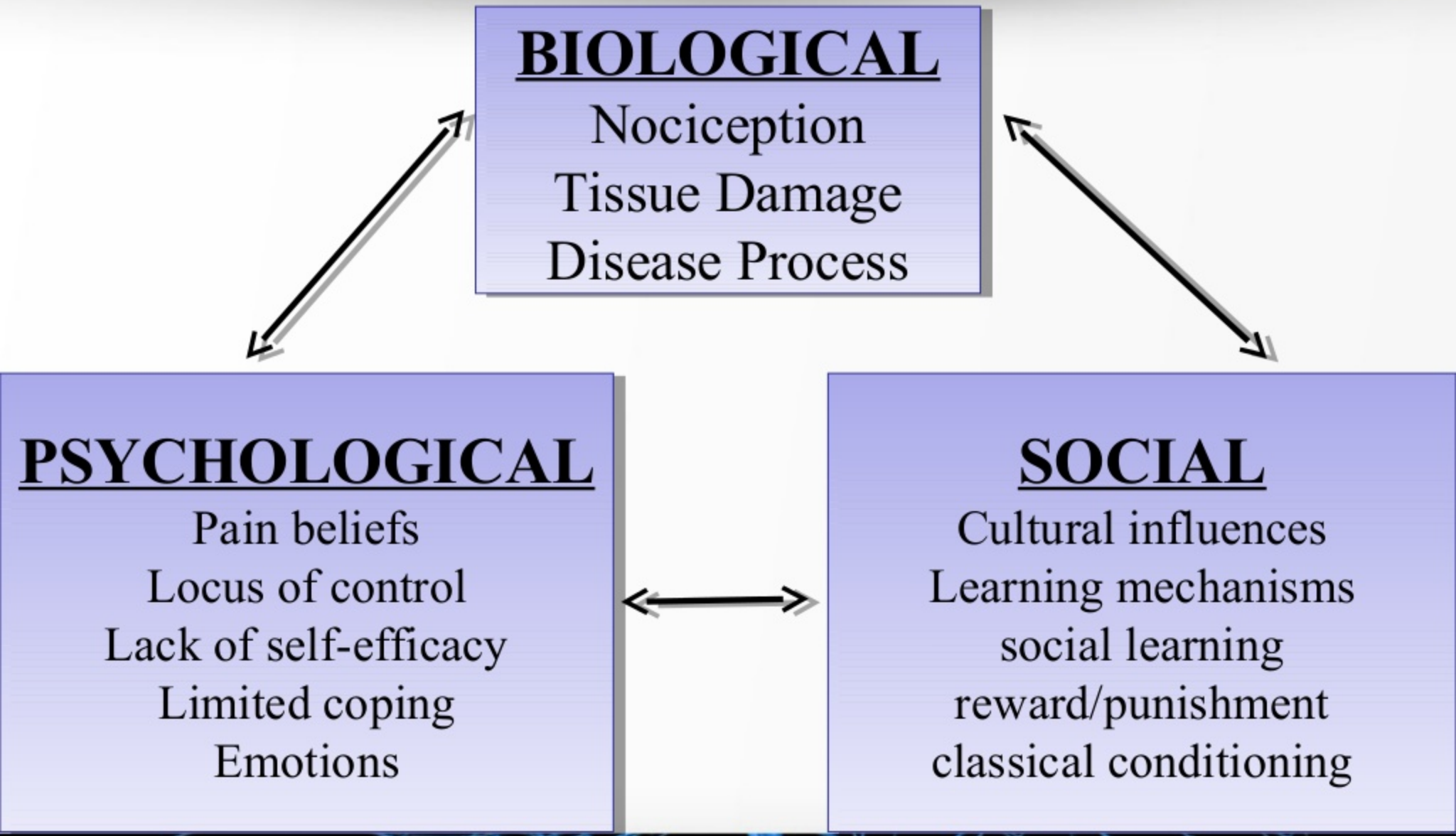
Pain sensed



Pain not sensed

FACTORS AFFECTING PAIN AND IT'S PERCEPTION

Biopsychosocial Model

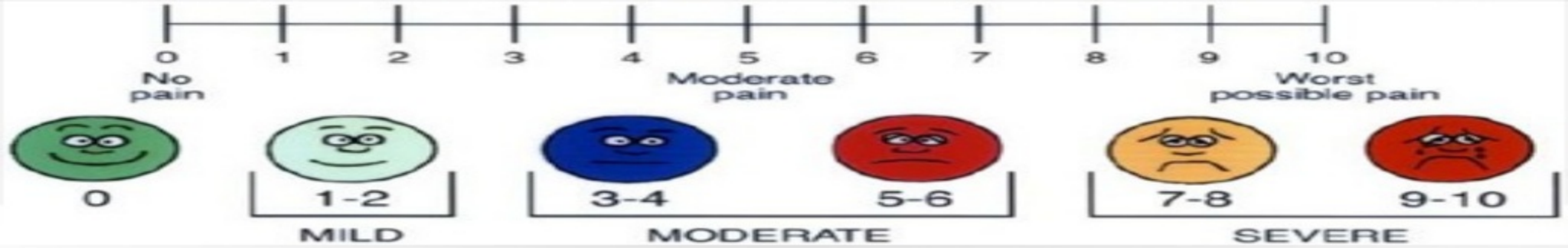


PSYCHOLOGICAL FACTORS

1. LOCUS OF CONTROL:

- Rotter (1996) stated that there were “internal” and “external” Locus of control.
- The “internals” (believe that their own actions significantly influence their health)
- The “externals”(believe that they don't have much control over their health)
- People with a strong internal LOC believed to have good control over their pain and are able to adapt by effective coping strategies and manage pain better than those with an external LOC.
- Persons who believe that the prognosis for their pain is influenced mainly by luck or fate (external) are engage in maladaptive coping strategies such as wishful thinking or catastrophizing.

(Worsham, 2006)

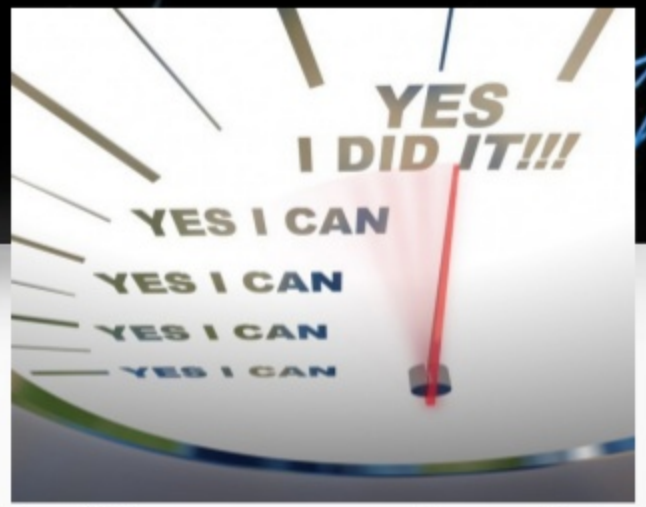


2. CATASTROPHIZING COGNITIONS:

- Pain catastrophizing is characterized by the tendency to magnify the threat value of pain stimulus and to feel helpless in the context of pain, and by a relative inability to inhibit pain-related thoughts in anticipation of, during or following a painful encounter.
- A "**Neurophysiological Model**" of catastrophizing proposes that:
- Catastrophizing cognitions are associated with higher levels of brain activity in the areas of anticipation and attention to pain, emotional aspects of pain and motor control and are linked to higher levels of pain intensity, greater disability, poorer psychosocial adjustment.

Cont…

- In a research study pain catastrophizing was assessed pre-surgery.
- The results showed significant variance in postsurgical pain ratings, narcotic usage, depression, pain-related activity interference and disability levels.
- Another study by Edwards, suggested that pain catastrophizing was related to increased suicidal ideation in a large sample of chronic pain patients.



3. SELF-EFFICACY AND EFFECTIVE COPING:

- In a Research study low levels of self-efficacy was found to be associated with a lower levels of pain tolerance and higher levels of pain intensity in samples of people with chronic pain.
- People who believe that they can alleviate pain are likely to mobilize whatever skills they have learned to preserve themselves.
- The higher the perceived self-efficacy the longer pain can be tolerated and less medications are required.