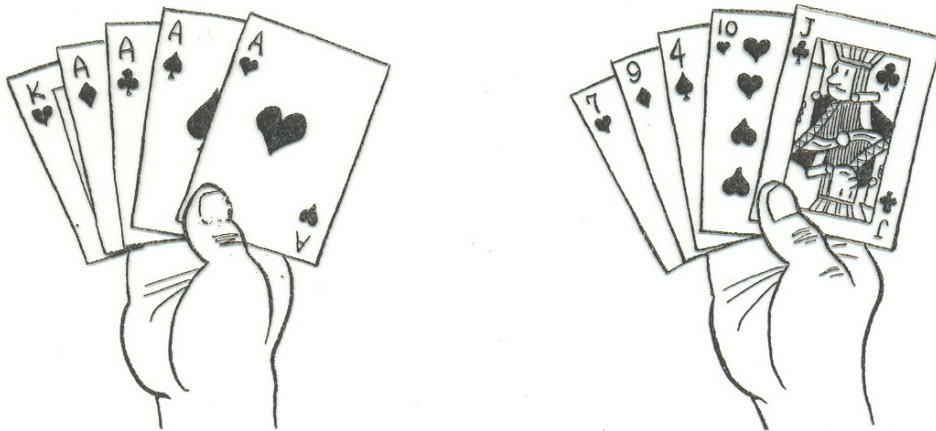


## Memory and Behavior

What are persistent gamblers more likely to remember?

- (a) Instances in which they win.
- (b) Instances in which they lose.
- (c) Neither, they remember each one about the same.
- (d) I am not sure.



“When I win it is skill, when I lose it is bad luck”

---

## Psychology is sometimes not intuitively obvious

It may seem intuitive that persistent gamblers would remember the instances in which they win than the instances in which they lose. However, the opposite tends to occur. Persistent gamblers tend to remember instances in which they lose more than their wins. It is how they remember their losses that make the difference. They create a new category of losses called an “almost win” and allows them to maintain their belief by distorting their experience.

Gambling Outcome	What <i>Non-persistent gamblers</i> remember	What <i>Persistent gamblers</i> remember
<ul style="list-style-type: none"> <li>• 33 instances of wins</li> <li>• 66 instances of losses</li> </ul>	<ul style="list-style-type: none"> <li>• 4 wins</li> <li>• 4 losses</li> </ul>	<ul style="list-style-type: none"> <li>• 4 wins</li> <li>• 4 “<i>almost wins</i>”</li> <li>• 4 losses</li> </ul>

This example illustrates several things about human thinking and memory:

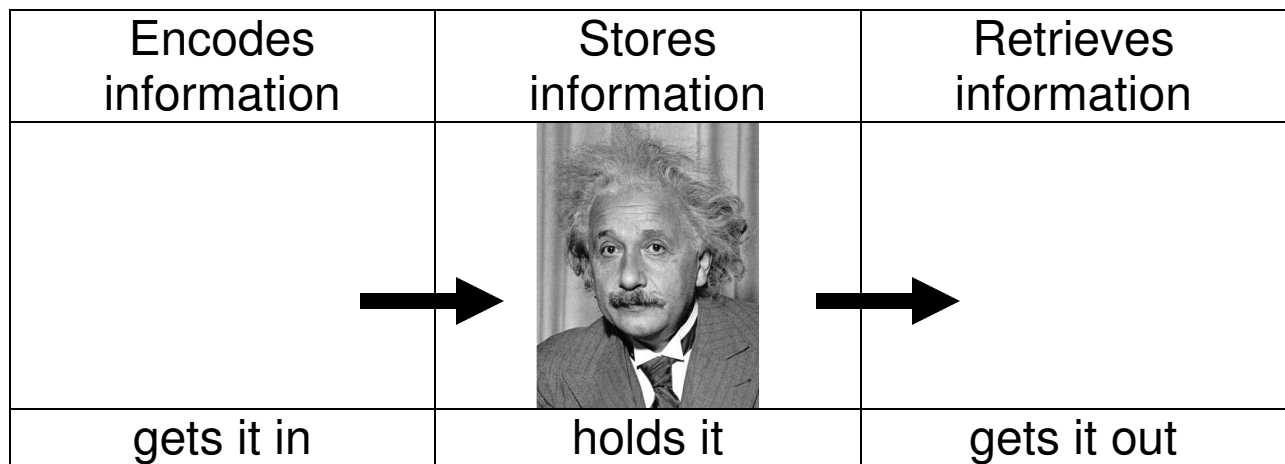
- The thinking processes involved are not obvious and can be counterintuitive.
- How you organize information in memory can affect your thinking and your behavior. This tends to be an unconscious and automatic process.
- Persistent gambling requires knowledge of the psychology of learning (schedules of reinforcements) and memory (and perhaps even more).
- You can apply your knowledge in one area of psychology (memory) to another (social psychology).

Misunderstandings of behavior, such as persistent gambling, can make difficult to address the problem or make intervention strategies not very effective.

## Memory as Information Processing

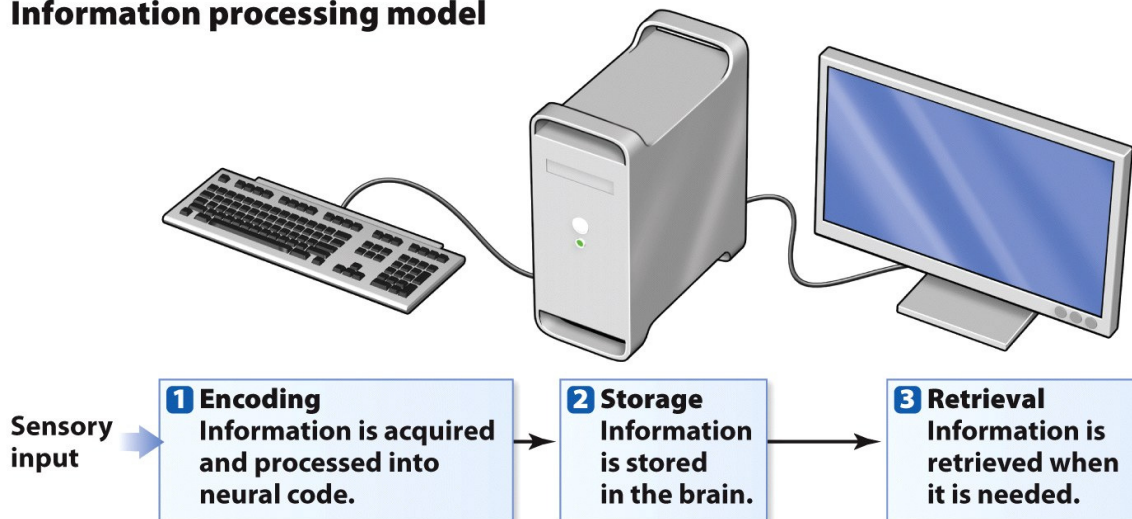
Psychologists use the *metaphor* that the brain is an information processor that

- encodes,
- stores and
- retrieves information.



A *rough* analogy is that the brain is like computer processes.

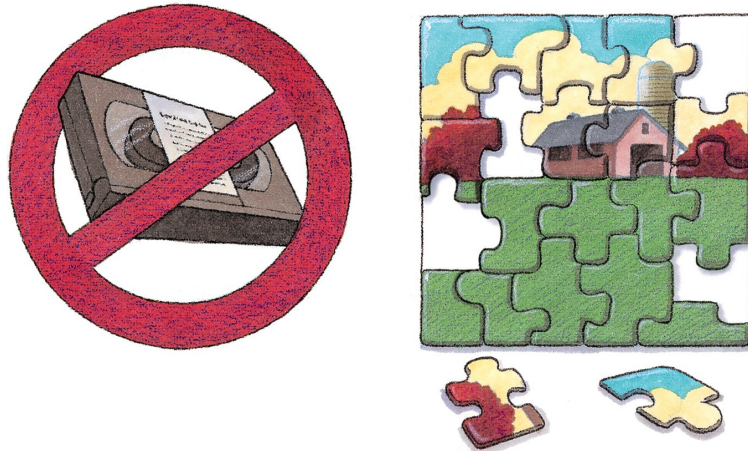
### Information processing model



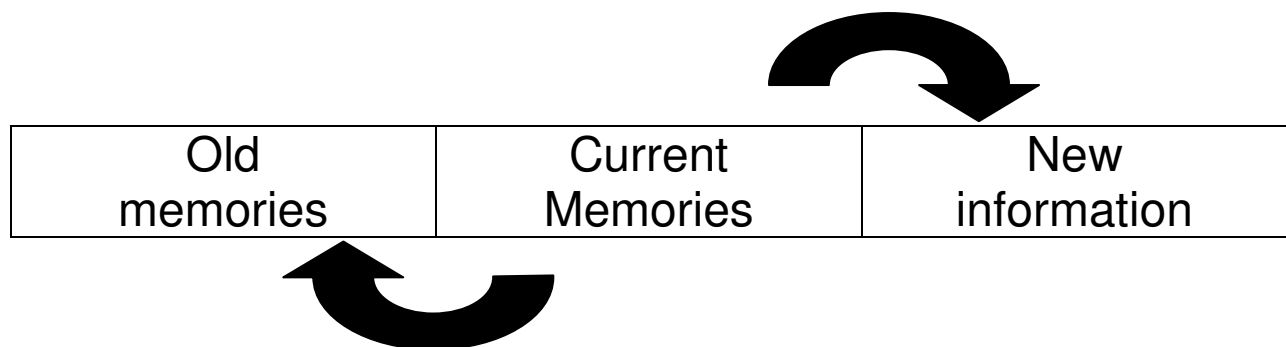
## Memory as Information Processing

The computer analogy doesn't capture other features of memory such as that people forget and distort information and sometimes remember events in a way that is different than how the event actually occurred.

Memory is not like a video tape or movie. We cannot scroll to a particular event and retrieve it as it happened. It is like a jigsaw puzzle where we remember bits and pieces and fill in the blanks with what is reasonable and familiar.



Memories are made by combining information we already have in our brains with new information that come in (                       )



## Attachment Styles and Memory

In this experiment involving a puppet show, whether you had a secure attachment or insecure-avoidant attachment, the infants saw the same puppet show.

However, what you remember about the experiences is affected by attachment style. Attachment style affects what you remember. Secure attachments tend to remember positive events, whereas the insecure avoidant attachments tend to remember negative events.

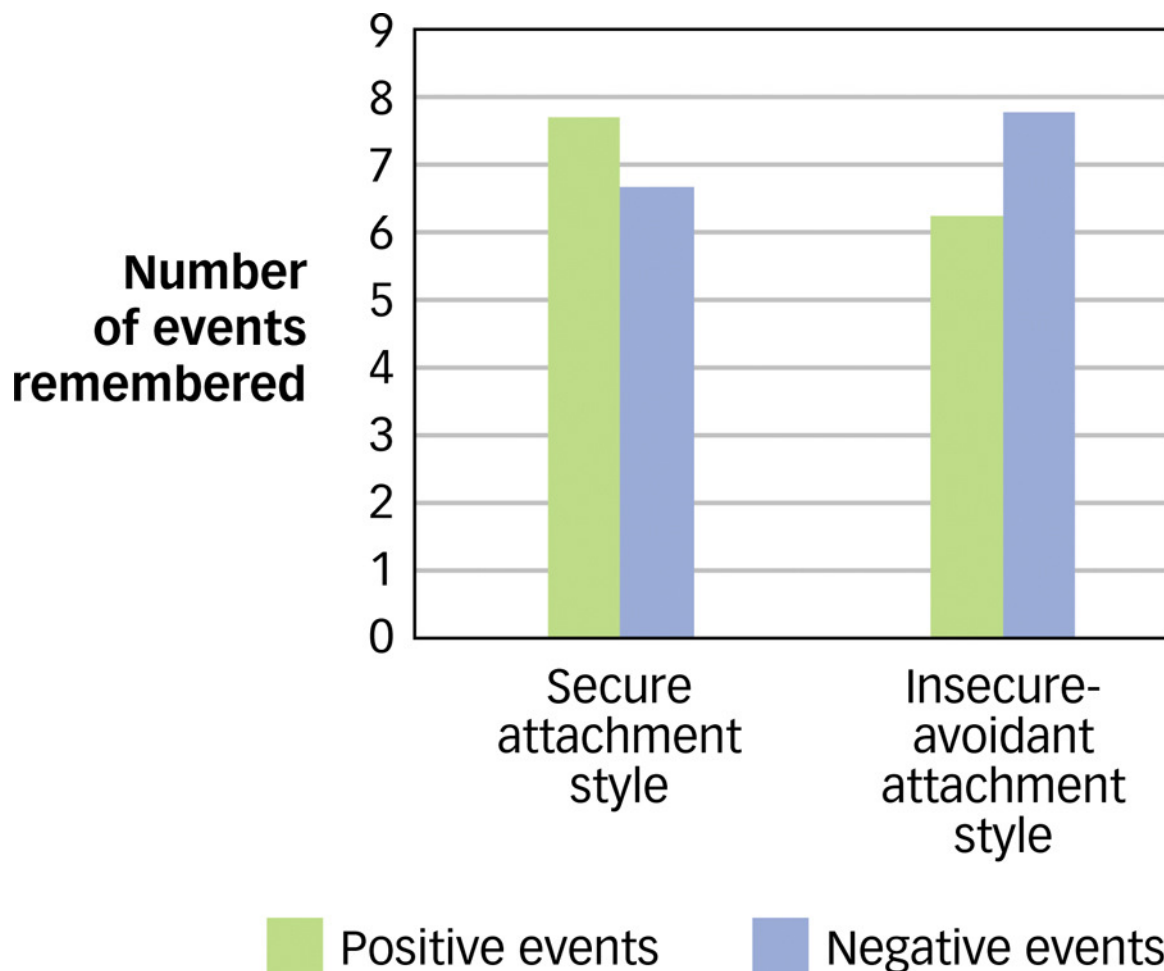
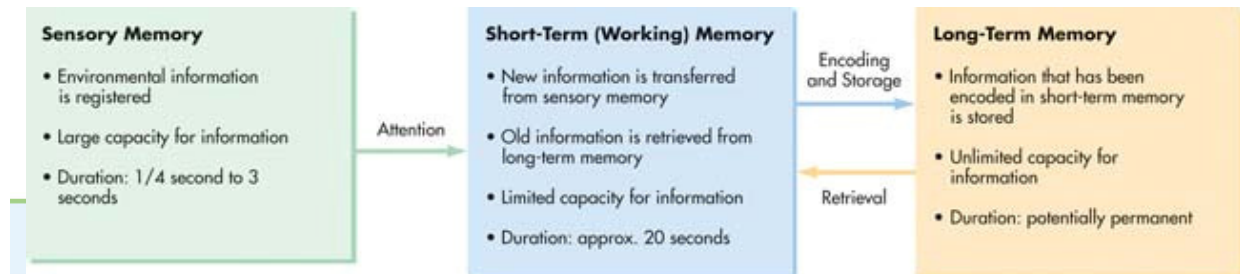
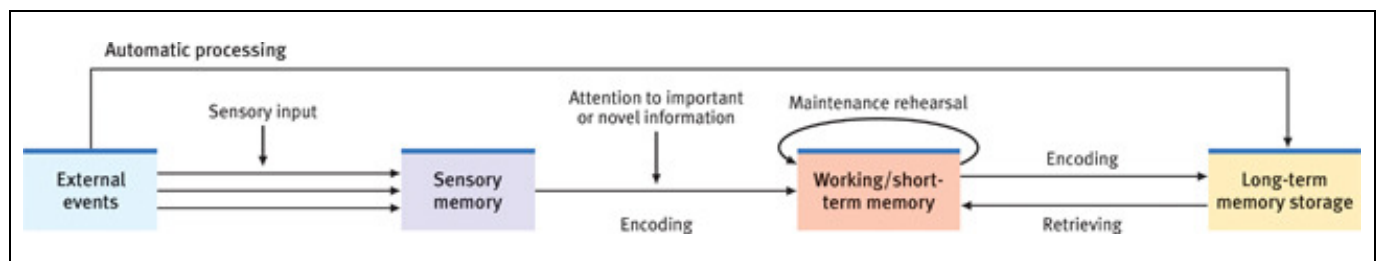


Image source: Schacter, Gilbert and Wegner, 2011, [Psychology](#)

# The Model of Memory



Sensory memory registers incoming information, allowing your brain to capture for a fleeting moment a sea of faces.



We pay attention to and encode important or novel stimuli—in this case an angry face in the crowd.



If we stare at the face long enough (rehearsal), or if we're sufficiently disturbed by it (it's deemed "important"), we will encode it for long-term storage, and we may, an hour later, be able to call up an image of the face.