

# Informative essay on cognitive psychology

[Science](#)



**ASSIGN  
BUSTER**

Cognitive psychology is a psychological branch that studies mental processes including how people think, see, memorize and learn. As part of the field of cognitive science that is larger, this psychological branch is related to other disciplines including neuroscience, philosophy, and linguistics. The main focus of cognitive psychology is about how people acquire, process and store information. There are many practical applications for cognitive research, such as memory improvement, better decision making and curriculum structuring to increase learning. Meanwhile, there are different cognitive learning styles that are different for each person.

Everyone has their own learning style and their own way of thinking. We also have different learning methods and information processing that we share with other people. These cognitive styles distinguish us from people who grow up in different linguistic environments and cultures. Although we accept that students will be interacting with and handling learning experiences in their own way, our curriculum development often focuses on comprehension being shared with learning process elements. My studying process and strategies

Basically, I will concentrate during classes and jot down some notes. Besides, I will list out anything that I could not understand during lecture and search more about it on the Internet. Sometimes, it would be difficult for me to digest everything during classes, and as a distance learner, it is very important for me to understand the subject during classes. I will normally seek for a lecturer to get more information and examples on subjects that I don't understand much. Besides that, I am learning from experiences and case studies too. Normally, case studies are very useful for elaboration on certain theories.

<https://assignbuster.com/informative-essay-on-cognitive-psychology/>

During exam, I will read the notes all over again for almost one week. Summaries the notes are the hardest things to do as I need to decide what are the most important things in each chapter. However, in process of summarizing the notes, I actually can learn and understand more on the subject. First domain: Perception Those studying perception seek to understand how we construct subjective interpretations of proximal information from the environment. Perceptual systems are composed of separate senses and processing modules and sub-modules that represent different aspects of the stimulus information.

Current research also focuses on how these separate representations and modules interact and are integrated into coherent percepts. Cognitive psychologists have studied these properties empirically with psychophysical methods and brain imaging. Computational models, based on physiological principles, have been developed for many perceptual systems. Second domain: Attention Attention is a concept studied in cognitive psychology that refers to how we active process certain information that attended in our environment.

In cognitive learning, individual learn by listening, watch, touch, read, or experience and then process and remember information. Cognitive learning may be seemed to have been passive learning, because has no movement motor. Nevertheless, student is fairly active, with cognitive way, in processing and remembers information. Cognitive learning enable us to create and sendculturethat is complex which includes symbol, value, belief and norm. Because cognitive activity, which involved in many aspects

human behavior, it may seem that cognitive learning only occurred in human.

Attention resolve information burden problem in cognitive processing system by choosing pieces of information for further processing, or by manage source used for simultaneously a few information source. Empirical investigation attention focused to how and why attention improve performance, or how lack of attention prevent performance. Theoretical analysis attention has taken a few main approaches to identify mechanism attention, signal detection approach and choice equation approach. Brain imaging studies have documented effects of attention on activation in early visual cortices, and have investigated the networks for attention control.

The amount of information that can be processed is limited. For example, musicdistracts me, while I'm trying to study, my attention will be divided over both the book and the music. However, when I study without having the music on, I would have more attention on my study. Cognitive processes determine which of the available information will be used and which will be ignored. Third domain: Learning Learning improves the response of the organism to the environment. Cognitive psychologists study which new information is acquired and the conditions under which it is acquired.

The study of learning begins with an analysis of learning phenomena in animals and extends to learning of cognitive or conceptual information by humans. Cognitive study implied learningstressinfluence that is mostly automatic first experience on performance, and nature knowledge procedural. Study on learning process conceptual stress nature information processing enters, role explanation, and nature representation encoded.

<https://assignbuster.com/informative-essay-on-cognitive-psychology/>

They use approach calculation was investigated nature concept that can more have been learnt easily, and rule and algorithm for learning system.

Not all cases can easily capture learning by classical conditioning and operant conditioning. Studies are very inefficient if we have to rely heavily on training for all our studies. Human beings can learn efficiently by observation, take command, and imitate the behavior of others. Cognitive learning is a powerful mechanism that provides a way of knowledge, and goes a long way behind the other simple imitation. Reconciliation cannot explain what you learned from reading our website. This study will reveal the importance of cognitive learning.

Cognitive learning is defined as the acquisition of knowledge and skills by cognitive or mental process; procedures we have for manipulating information 'in our heads'. Cognitive processes including the creation of a mental representation of physical objects and events, and other forms of information processing. In cognitive learning, the individual learns by listening, watching, touching, reading, or experiencing and then processing and remembering the information. Cognitive learning might seem to be passive learning, because there is no motor movement.

However, the learner is quite active, in a cognitive way, in processing and remembering newly incoming information. Cognitive learning enables us to create and transmit a complex culture that includes symbols, values, beliefs and norms. Because cognitive activity is involved in many aspects of human behavior, it might seem that cognitive learning only takes place in human beings. However, many different species of animals are capable of

observational learning. For example, a monkey in the zoo, sometimes imitates human visitors or other monkeys.

Nevertheless, most information about cognitive learning is obtained from studies on human beings. Fourth domain: Memory The study of the capacity and fragility of human memory is one of the most developed aspects of cognitive psychology. Memory study focuses on how memories are acquired, stored, and retrieved. Memory domains have been functionally divided into memory for facts, for procedures or skills, and working and short-term memory capacity. The experimental approaches have identified dissociable memory types or capacity limited processing systems such as short-term or working memory.

Computational approaches describe memory as propositional networks, or as holographic or composite representations and retrieval processes. Brain imaging and lesion studies identify separable brain regions active during storage or retrieval from distinct processing systems. Memory Systems In the outside world there are many memory systems, such as an appointment calendar, videotapes, compact discs and a piece of computer. Artificial memory systems has become a source of ideas about human memory system might function. Computers, for example, have served as a model for members of the psychology of human cognitive processes and memory.

Three memory systems are visual and auditory sensory memory, working or short-term memory, and long-term memory. First, data from the eyes and ears of the temporarily stored in the memory of visual and auditory senses, and then they step into the short-term working memory. Working memory is a limited capacity processor includes separate storage devices for visual and

<https://assignbuster.com/informative-essay-on-cognitive-psychology/>

auditory information. For learning to occur, new sensory information from the visual and auditory systems must be integrated in working memory to form a coherent idea.

Then these ideas must be rehearsed in working memory in a way that integrates new ideas into existing memories in long-term memory. The integration of new data into existing schemas is called encoding. Long-term memory has a large storage capacity. However, coding into long-term memory is not sufficient. All processing takes place in working memory; the new knowledge and skills encoded into long-term memory must be saved into working memory when needed to perform a skill or task. This final stage is the cognitive basis for transfer of learning. Learning through listening and reading in the classes does help me in my study.

I also experiencing during assignment research. Therefore, cognitive learning does implemented in my learning process and strategy. Fifth domain: Problem Solving The cognitive psychology of problem solving is the study of how humans pursue goal directed behavior. Solving a problem is conceived as finding operations to move from the initial state to a goal state in a problem space using either algorithmic or heuristic solutions. The problem representation is critical in finding solutions. Expertise in knowledge rich domains also depends on complex pattern recognition.

Problem solving may engage perception, memory, attention, and executive function, and so many brain areas may be engaged in problem solving tasks, with an emphasis on pre-frontal executive functions. Problem solving is a mental process that involves discovering, analyzing and solving problems. The ultimate goal of problem solving is to overcome obstacles and find a <https://assignbuster.com/informative-essay-on-cognitive-psychology/>

solution that best resolves the issue. Best strategy to solve problems depends on situation that is unique. In several cases, persons that better learn all what they can on the issue and then use knowledge fact to participate with solution.

In other circumstances, creativity and insight are the best choice. The Steps in Problem-Solving In order to correctly solve a problem, it is important to follow a series of steps. Many researchers refer to this as the problem-solving cycle, which includes developing strategies and organizing knowledge. While this cycle is portrayed sequentially, people rarely follow a rigid series of steps to find a solution. Instead, we often skip steps or even go back through steps multiple times until the desired solution is reached. 1. Identifying the Problem: Identifying the problem is not always as simple as it sounds.

Somehow, as for me, sometime I would mistakenly identify the wrong source of a problem, which will make attempts to solve it inefficient or even useless. 2. Defining the Problem: After the problem has been identified, it is important to completely define the problem so that it can be solved. 3. Forming a Strategy: The next step is to develop a strategy to solve the problem. The approach used will vary depending upon the situation and the individual's unique preferences. 4. Organizing Information: Before coming up with a solution, we need to first organize the available information.

What do we know about the problem? What do we not know? The more information that is available, the better prepared we will be to come up with an accurate solution. 5. Allocating Resources: Before one begins to solve a problem, you need to determine how high priority it is. If it is an important



problem, it is probably worth allocating more resources to solving it. If, however, it is a fairly unimportant problem, then you do not want to spend too much of your available resources into coming up with a solution. 6.

#### Monitoring Progress:

Effective problem-solvers tend to monitor their progress as they work towards a solution. If they are not making good progress toward reaching their goal, they will reevaluate their approach or look for new strategies. 7.

**Evaluating the Results:** After a solution has been reached, it is important to evaluate the results to determine if it is the best possible solution to the problem. This evaluation might be immediate, such as checking the results of a math problem to ensure the answer is correct, or it can be delayed, such as evaluating the success of a therapy program after several months of treatment.

For more understanding, I would try to understand and summaries the results. **Conclusion** Cognitive development is a complex process comprising three principal concepts affecting the development process: assimilation, accommodation and equilibration. All three are associated with the formation of schemata and their modification in order to attain a balanced sense of understanding of the external world. Meanwhile, most students quickly find that reading and studying are more demanding than they have previously experienced.

Unlike behaviorism, which focuses only on observable behaviors, cognitive psychology is concerned with internal mental and it uses scientific research methods to study mental processes. Each person has different cognitive learning styles, which allow us to gather and share information based on our

<https://assignbuster.com/informative-essay-on-cognitive-psychology/>

processing habits. Unlike individual differences in a person's abilities, cognition describes a person's typical mode of thinking, perceiving, remembering or problem solving. Cognitive style is usually described as a personality dimension, which influences attitudes, values, and social interaction.