

# Logical And Critical Thinking's Impact on Decision Making

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## Abstract:

Two important cognitive skills that help people make smart choices based on evidence in school and work settings are logical and critical thinking. The purpose of this paper is to talk about the basic ideas behind logical and critical thinking, such as how to reason and structure arguments, as well as how to tell the difference between facts and opinions. The paper will examine deductive and inductive reasoning, concentrating on argument structures and their application in assessing arguments regarding their validity, soundness, strength, and weaknesses. The paper will also talk about the rules and standards for critical thinking, focusing on what makes a critical thinker different from someone who doesn't think critically. Finally, logical fallacies will be discussed as a way of evaluating flawed reasoning and how to avoid these fallacies. The paper will highlight the importance of logical and critical thinking skills in problem-solving in both academic and professional situations. The findings will show that logical and critical thinking skills are vital in helping individuals analyze complex situations and make informed decisions while avoiding errors in their judgments. The paper will therefore conclude that logical and critical thinking skills are important for both academic and professional purposes.

## Keywords:

Logical And Critical Thinking , Decision Making , Deductive And Inductive Reasoning , Argument Evaluation, Logical Fallacies , Academic and Professional Skills

## Introduction:

In today's world things are getting really complicated. There is a lot of information. It is very important for a person to be able to think and make good choices. To make choices at school and at work you need to be able to think in a logical way and think carefully about things. Thinking logically and carefully helps a person look at information think about it carefully. Come to sensible conclusions. Thinking clearly is very important, for making choices and thinking logically is a big part of thinking clearly.

Logical thinking skills are about looking at things in a step by step way. One use this to figure out what is true based on the facts one have. It is also about seeing how different ideas are connected and using rules to decide if an argument is good or not. Critical thinking skills are even more important because they make you ask questions, about the information you get. One have to look closely at the information and decide if it is believable. Logical thinking skills and critical thinking skills work together to help a person make decisions.

Logical and critical thinking skills help an individual in academic situations in interpreting information, solving problems, and differentiating between facts and opinions. In professional situations, decision-making is always accompanied by uncertainty and risk. Logical thinking helps in structuring problems, while critical thinking skills help in making rational decisions based on credible information and moral considerations.

Logical and critical thinking skills help in making informed, rational, and effective decisions in both academic and professional situations.

### **Concept of Critical Thinking:**

Critical thinking is the ability to analyze, evaluate, and interpret information in a rational and objective manner. It is different from reasoning in the sense that it focuses more on the process of thinking. The standards of critical thinking include the following: clarity, accuracy, relevance, consistency, and logical correctness. The standards enable the individual to evaluate the quality of their reasoning. It ensures that the reasoning is well-founded.

The principles of critical thinking include questioning assumptions, evaluating evidence, and considering alternative perspectives. A critical thinker does not simply accept information at face value. They need to know the underlying reason or evidence.

There are particular characteristics which distinguish critical thinkers from uncritical thinkers. Critical thinkers are open-minded, analytical, and reflective. They are willing to change their beliefs based on new information and are aware of their own biases. On the other hand, uncritical thinkers are those who are prone to accepting information at face value without questioning, are based on assumptions, and may be swayed by emotions or biases as well.

In academic life, critical thinking skills are important for analyzing complex problems, evaluating sources of information, and developing arguments. In professional life, critical thinking skills are important for informed decision-making, problem-solving, and adapting to new situations. Critical thinking skills can be developed in a person. This involves active engagement with information, questioning assumptions, and logical reasoning. This will help a person make sound decisions.

### **Fallacies and their impact on the world:**

A fallacy is a flaw in reasoning that makes the argument invalid. Fallacies can be both formal and informal. A formal fallacy occurs when there is a flaw in the structure of the argument, while an informal fallacy occurs when there is a flaw in the reasoning based on the content or context.

The common fallacies in arguments are hasty generalization, false cause, ad hominem attacks, and appeals to emotions. These fallacies result in false conclusions and lead to poor decisions. For instance, a hasty generalization occurs when a conclusion is based on insufficient evidence, while an ad hominem fallacy occurs when the argument attacks the person.

One of the key elements of critical thinking is the identification of fallacies. This involves critical analysis of arguments and identifying the patterns of fallacies. This skill is useful in academic and professional life because individuals need to evaluate information and make decisions accordingly. Strategies to avoid fallacious thinking: One must verify the evidence provided and must be critical about the assumption. One must be aware of the cognitive biases.

When it comes to professional decision-making, fallacies have significant implications. For instance, fallacies in reasoning can cause loss of funds, poor strategic planning, and even ethical problems. Therefore, it is crucial to apply logical and critical thinking skills in order to avoid fallacies.

### **Application in Decision making in professional world:**

Logical and critical thinking skills play an essential role in academic as well as professional decision-making processes. In academic environments, students apply logical and critical thinking skills to process information, solve problems, and develop arguments. These skills are vital for academic activities such as research, writing, and examination.

In professional environments, decision-making processes often involve complicated situations with various variables. Logical thinking helps to develop problem structures and identify possible solutions, whereas critical thinking ensures sound evidence for decision-making.

A practical application is found in the assessment of technical documents. One needs to be able to assess the validity of the argument, assumptions, and the reliability of information. This involves the use of both logic and critical thinking.

Ethical considerations are an important part of decision-making. Logical and critical thinking enable an individual to make responsible decisions based on their actions. This is especially important where the outcome of the decision is critical. Using logical and critical thinking enables an individual to make responsible decisions and avoid making errors.

### Conclusion:

Logical and critical thinking are important skills required for effective decision-making in both academic and professional life. This paper has discussed the important concepts of reasoning, arguments, and fallacies. Moreover, the role of these concepts in effective logical and critical thinking has been discussed in detail.

Logical thinking is important for effective reasoning, while critical thinking plays a vital role in effective logical reasoning. These two skills are important for effective analysis and decision-making.

This study has focused on the importance of understanding different types of arguments, such as deductive and inductive reasoning. Moreover, effective argument evaluation based on validity, soundness, and strength has been discussed. The importance of critical thinking standards and traits has also been discussed.

This is because fallacies pose one of the greatest challenges in the process of decision-making. The use of fallacies may cause one to make wrong decisions. Therefore, by avoiding fallacies, one can improve their critical thinking. In conclusion, the use of logical and critical thinking skills is crucial in achieving success in both academic and professional life.

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