

Features of good essays

1. Clear definition of “rational”
2. Thesis statement
3. Sources of evidence (2+)
4. Concluding statement

GOOD

Example A. The answer to this question depends entirely on the applied definition of “rational.” If by rational we mean “governed by formal logic,” then people are certainly not rational. The belief-bias effect shows that people’s analysis of logical argument is affected by what believe is true. People’s poor performance on modus ponens tests, particularly tests which postulate very abstract rules, shows that their abstract reasoning skills are far from perfect. The mental model theory is supported by some experimental evidence, which seems to show that, rather than using pure logic, people attempt to construct these models—almost like “what if” scenarios—and compare them to determine logical validity. So by the strictest criteria of pure logic, people are less than rational.

However, if we use a more practical definition of rational, such as “using information to determine the most appropriate course of action,” then people are rational. In this case, the mental models theory supports rationality because people consider relevant situations in the world to determine whether an argument is valid. Similarly, people can perform quite well on modus ponens problems when they are couched in terms of concrete, “real-world” items or common schemas of permission and obligation. What can be classified as irrational behavior may provide significant survival benefits over pure logic, so when practical decision making is the crux of the definition of rationality, people’s behavior does look very rational.

Example B. In the course textbook the authors “define irrational by the law of contradiction: Reasoning processes based on the same evidence that reach contradictory conclusions are irrational.” (Medin et al., 2005, pg. 452). Based on this definition people’s behavior on deductive reasoning tasks suggest that they are not rational because they are not consistent across tasks. This contradictory performance can be seen in various versions of the Wason selection task. When the problem tests people using abstract features (letters and numbers) people tend to make systematic errors. However, when people are given more concrete materials (envelopes and stamps) or if the problem is framed in terms they are familiar with (pragmatic rule schemas) they perform much better on this task. In terms of deductive reasoning, all versions of this problem are formally or structurally the same. According to our definition of rationality we would expect people to reach consistent conclusions on all of these versions in order for them to be rational. Because the context seems to play an important role in how people perform on deductive reasoning tasks, these contradictory conclusions suggest that people are not rational.

Example C. People’s behavior on deductive reasoning tasks does suggest that they are rational when we consider rationality according to the definition “having or exercising reason, sound judgment, or good sense” (dictionary.com), particularly in the daily situations people are expected to use these faculties. When people are asked to verify the modus ponens rule framed in familiar terms they such as permission (drinking age) or obligation (making promises) they are typically able to make the logical choices. Even though people make more errors when making decisions about abstract rules (Wason card selection task with letters and numbers), this performance does not suggest unsound judgment or poor sense because the decisions have no consequence. People often confuse truth and validity. They are not good at judging the validity of an argument when the premises are false but perform better with true premises. Considering false situations, such as barking cats, does not make for a good measure of how someone reasons in their daily life.

Some tests show that people have difficulty with deductive reasoning but when these same tests use relevant contexts people perform well. It is the situations relevant to people’s lives that we should use to judge whether their judgment is sound and they are exercising reason.

NOT GOOD

Example D. People's performance on deductive reasoning tasks shows they are not rational because in many cases the validity of an argument contradicts what we know in real-life is true. Deductive reasoning, to be valid, applies to all possible situations that can be encountered. Thus, the conclusions should be true if any example is plugged in.

A logical perspective would suggest that context is interfering with rational reasoning. People frequently make mistakes on these problems. Considering all mental models taxes processing capabilities but is the only way to reach a valid conclusion. Finally, people are not rational because generalizing our assessment of logical reasoning is difficult due to individual variability.

Example E. People's behavior on deductive reasoning suggests they are rational because of the ability to assess both truthful and valid statements in reasoning. Being rational means being governed by formal logic so that people can make correct conclusions based on true or false premises. Modus ponens inferences are one example in which people determine if the conclusion is true. "If $P \rightarrow Q$, and P then Q is true" is an example of modus ponens in which the conclusion follows from logical reasoning and people can say that Q is true. People often confuse truth and validity. They are not good at judging the validity of an argument when the premises are false but perform better with true premises. Also, when people are given concrete materials or if the problem is framed with pragmatic rules they can do this task. The idea that people can easily deduce the correct conclusion of modus ponens inferences using logic demonstrates their rationality.