

## 1 SOURCE LAW

### LOGICAL REASONING – FALLACIES

#### Fallacy Defined.

The Logical Reasoning section of the LSAT will test your awareness of and ability to detect logical fallacies, especially in questions that prompt you to “identify the flaw in the argument.” This primer will familiarize you with the different types of logical fallacies you may encounter during your exam.

*What is a fallacy?* A logical fallacy is a set of premises and conclusions (or an argument<sup>1</sup>) that depends upon erroneous reasoning with the appearance of soundness. Each fallacy attempts to conceal the defects in its logic by disguising the disconnect between its premises and conclusion. The most common types of logical fallacies are exemplified below.

#### Types of Fallacies.

##### 1. Ad hominem

The “ad hominem fallacy” is an attack on a person’s character, credibility, or personal attributes rather than their premises and conclusions. Mary argues X. Todd argues that Mary is unreliable and unintelligent and erroneously concludes that X is wrong.

See if you can spot the fallacy in the Entrepreneur’s argument:

Entrepreneur: The Politician proposes an increased tax on local businesses to subsidize public education. But the Politician is greedy, having spent more than a million dollars on his recent campaign. His policy proposal is nothing more than a ploy for more money.

How would the LSAC describe ad hominem fallacies (i.e., what might answer choices look like if asked to identify the flaw in the reasoning)?

“The argument undermines the credibility of the proponent of the argument rather than the argument itself.”

“It draws conclusions about the merits of a position from evidence about the position’s source.”

##### 2. Ambiguity (Equivocation)

The “ambiguity fallacy” (or equivocation) involves the use of ambiguous language or terms that have multiple meanings, leading to a misleading or false conclusion. For instance, in a debate about gun control, Person A argues that “guns should be banned” referring to handguns used in criminal activities, while Person B interprets it as a complete prohibition of all firearms, including those used for self-defense.

See if you can spot the fallacy in Person B’s argument:

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<sup>1</sup>Refer to the 1SL Logical Reasoning Fundamentals resource.

Person A: I believe in the right to bear arms for self-defense.

Person B: So, you're saying everyone should carry military-grade weaponry?

How would the LSAC describe Ambiguity or Equivocation fallacies?

“It manipulates a term’s multiple meanings to draw a false conclusion.”

“The argument depends on unclear language to misconstrue the original point.”

### 3. Anecdotal

The “anecdotal fallacy” relies on individual stories or personal experiences as evidence for a broader claim or generalization. For example, Person A claims that a particular supplement cured their illness and concludes that it must work for everyone, disregarding scientific evidence and the possibility of a placebo effect.

See if you can spot the fallacy in Person B’s argument:

Person A: Exercise is an essential component of maintaining good health.

Person B: I know someone who never exercises and yet they are very healthy.

How would the LSAC describe Anecdotal fallacies?

“It uses personal experience or an isolated example instead of sound reasoning or compelling evidence.”

“It focuses on individual incidents while overlooking wider statistical evidence.”

### 4. Appeal to Authority

The “appeal to authority fallacy” relies on the testimony or opinion of an authority figure as the primary basis for accepting a claim, without considering the validity of the underlying evidence or reasoning. In a discussion about climate change, Person A argues that we should believe in the existence of climate change because a famous celebrity endorsed it, without engaging with scientific data or expert analysis.

See if you can spot the fallacy in Person B’s argument:

Person A: We need to be cautious about artificial intelligence. It can have potential risks.

Person B: But Elon Musk said that AI is the future and will bring enormous benefits.

How would the LSAC describe Appeal to Authority fallacies?

“The argument substitutes an authority figure’s opinion for reasoned evidence.”

“It depends on the weight of an authority figure’s opinion, sidelining sound reasoning or concrete evidence.”

5. Appeal to Emotion

The “appeal to emotion fallacy” attempts to manipulate the audience’s emotions, rather than providing logical evidence or reasoning, to support a claim or argument. For instance, a political candidate delivers a speech filled with heart-wrenching stories of struggling families, aiming to evoke sympathy and convince the audience to support the proposed policies, regardless of their effectiveness.

See if you can spot the fallacy in Person B’s argument:

Person A: We need to revise our budget and cut some expenses.

Person B: But if we do that, our employees will feel demotivated and sad!

How would the LSAC describe Appeal to Emotion fallacies?

“It attempts to manipulate an emotional response in place of a valid or compelling argument.”

“It uses emotional appeal instead of logical reasoning to persuade.”

6. Appeal to Nature

The “appeal to nature fallacy” asserts that because something is natural, it is inherently good or superior, without providing sufficient evidence or logical reasoning. In a debate about healthcare, Person A argues that natural remedies are always better than modern medicine, disregarding scientific advancements and the potential risks associated with relying solely on natural alternatives.

See if you can spot the fallacy in Person B’s argument:

Person A: Genetically modified crops can help solve the global hunger problem.

Person B: But they’re unnatural. We should only grow and eat what nature provides.

How would the LSAC describe Appeal to Nature fallacies?

“It argues that because something is ‘natural’ it is therefore valid, justified, inevitable, good, or ideal.”

“It uncritically assumes that natural entities or processes are better or superior.”

7. Bandwagon

The “bandwagon fallacy” argues that because a large number of people believe or do something, it must be true or the right course of action, without considering the validity of the underlying evidence or reasoning. For example, Person A claims that a particular diet is effective solely because it is currently popular, without evaluating the scientific evidence or individual variations in dietary needs.

See if you can spot the fallacy in Person B’s argument:

Person A: We should reduce our use of fossil fuels to combat climate change.

Person B: But almost every industry is reliant on fossil fuels. We can't all be wrong.

How would the LSAC describe Bandwagon fallacies?

“It claims a position is correct because it is the majority or popular opinion.”

“It appeals to popularity or the fact that many people do something as an attempted form of validation.”

#### 8. Burden of Proof

The “Burden of Proof Fallacy” occurs when an individual making an assertion unfairly shifts the responsibility of providing evidence onto the opponent, rather than supplying adequate proof for their own statement. For instance, in a discussion about extraterrestrial life, Person A states that aliens exist and tasks Person B with disproving this claim, rather than furnishing their own credible evidence to substantiate their assertion.

See if you can spot the fallacy in Person B’s argument:

Person A: There’s no strong evidence that supports the existence of extraterrestrial life.

Person B: But can you provide proof that extraterrestrial life doesn’t exist?

How would the LSAC describe Burden of Proof fallacies?

“It contends that it’s someone else’s responsibility, not the person making the claim, to disprove the assertion.”

“It implies that a claim holds true until it has been conclusively disproved.”

#### 9. Circular Reasoning

The “circular reasoning fallacy” (or petition principii) assumes the validity of an argument’s conclusion in the presentation of its premises. For instance, in a discussion about the existence of ghosts, Person A maintains that ghosts are real because they’ve felt one nearby, thereby utilizing their belief as evidence of ghost existence.

See if you can spot the fallacy in the Agent’s argument:

Agent: Brad, my most average-booking client, cannot book high-quality projects. This is evidenced by the fact that the few times he has booked outstanding jobs must have been because of nepotism since he is unable, on his own merits, to book any above-average quality work.

How would the LSAC describe circular reasoning fallacies (i.e., what might answer choices look like if asked to identify the flaw in the reasoning)?

“It presupposes the validity of what it seeks to prove.”  
“It takes for granted what it intends to establish.”  
“It mistakes its conclusion for supportive evidence.”

#### 10. Composition Division (Part-to-Whole)

The “Composition Division Fallacy” commits the error of assuming that what is true for a collective must also apply to its individual components, or vice-versa, without valid proof or logic. In a conversation about a sports team, Person A asserts that, as the team is successful, every player within it must be outstanding, neglecting potential variations in skill level and contribution.

See if you can spot the fallacy in Person B’s argument:

Person A: We need to devise methods to enhance public education.  
Person B: But my child’s school is exceptional. I don’t see where the problem lies.

How would the LSAC describe Composition Division fallacies?

“It implies that the characteristics of a part can be generalized to the whole.”  
“It erroneously extends the attributes of the whole to its individual components.”

#### 11. Fallacy Fallacy

The “Fallacy Fallacy” transpires when an individual dismisses an argument outright because it contains a logical fallacy. Although identifying and addressing fallacies is crucial, the presence of a fallacy does not necessarily negate the validity of the entire argument and the truth of its conclusion. In a discussion about taxation, if Person A provides flawed reasoning to support their stance, and Person B rejects the entire argument based purely on this fallacy, without addressing the core points being made, Person B commits a fallacy fallacy.

See if you can spot the fallacy in Person B’s argument:

Person A: Traditional medicine can’t be trusted. It’s all just myth and mysticism..  
Person B: You committed a hasty generalization fallacy. Therefore, traditional medicine works.

How would the LSAC describe The Fallacy Fallacy?

“It falsely assumes that a claim is incorrect simply because it is argued poorly or commits a fallacy.”  
“It rejects a claim solely on the basis of its fallacious presentation.”

#### 12. False Cause (Correlation / Causation)

The “False Cause Fallacy” misguidedly assumes a causal link between two events or factors solely based on their correlation. As an example, Person A claims that wearing a lucky charm

leads to their victories in sports competitions, mistakenly inferring that the charm causes their success, while disregarding other possible factors like skills or training.

See if you can spot the fallacy in Person B’s argument:

Person A: It’s a myth that pregame rituals improve sports team performance.

Person B: Every week that I make my special Boston Celtics cookies, they win their games. Therefore, my cookies win the Celtics games.

The LSAC might describe The False Cause Fallacy?

“It falsely assumes a causal relationship based on mere correlation.”

“It erroneously infers causation from correlation.”

### 13. False Dichotomy (False Binary/Dilemma)

The “False Dichotomy Fallacy” presents an issue as having only two possible outcomes when, in reality, there could be several other viable alternatives or gradients between the two extremes. In a debate about environmental policies, Person A proposes that we must choose between total halt of industrial development or unrestricted pollution, neglecting the possibility of sustainable practices and balanced regulations.

See if you can spot the fallacy in Person B’s argument:

Person A: We need to take steps to reform our healthcare system.

Person B: So, you’re saying we should give free healthcare to everyone?

How would the LSAC describe False Binary/Dilemma fallacies?

“It simplifies a complex issue into a false either/or scenario.”

“It disregards other potential options, presenting a situation as having only two alternatives.”

### 14. Gambler’s Fallacy

The “Gambler’s Fallacy” erroneously assumes that previous outcomes can impact the likelihood of future independent events. For example, in a game of roulette, Person A believes that after a series of red outcomes, black is “due” next, wrongly assuming that previous results affect the current spin’s outcome.

See if you can spot the fallacy in Person B’s argument:

Person A: You’ve consistently lost money at the casino every time you’ve been there.

Person B: That is precisely why I’m due for a big win now.

How would the LSAC describe The Gambler’s Fallacy?

“It incorrectly believes that previous outcomes will influence the future in a random sequence.”

“It misconstrues the idea of ‘streaks’ or ‘runs’ in statistically independent events.”

#### 15. Genetic

The “genetic fallacy” refers to the incorrect assessment of an argument’s value or validity, which is predicated on its origins or background rather than the substance of the argument itself. For instance, if Person A disregards a scientific theory solely because it was conceived by a scientist who holds controversial views, Person A is committing a genetic fallacy by not objectively considering the theory’s empirical evidence and logical coherence.

See if you can spot the fallacy in Person B’s argument:

Person A: We ought to deliberate over this new tax policy.

Person B: An anarchist proposed that idea. It is, therefore, untrustworthy.

How would the LSAC describe Genetic fallacies?

“It evaluates a concept or argument based on its origin rather than its present context or intrinsic merits.”

“It suggests that the provenance of a claim determines its truthfulness or validity.”

#### 16. Middle Ground

The “middle ground fallacy” falsely concludes that the most rational stance must be an intermediate position between two extreme viewpoints, without contemplating the potential of alternative perspectives or the weight of the evidence. In a debate regarding educational reform, if Person A argues for a total revamp of the system, while Person B argues for retaining the current system and Person C proposes that the ideal solution lies in a compromise between their views without examining other potential innovative solutions, Person C is committing the middle ground fallacy.

See if you can spot the fallacy in Person B’s argument:

Person A: Stricter gun control laws are required.

Person B: Some people desire no gun control, while others demand complete prohibition. The truth, undoubtedly, is nestled somewhere in between.

How would the LSAC describe Middle Ground fallacies?

“An erroneous reasoning that the truth inevitably resides in the compromise between two polarized viewpoints.”

“A fallacious presumption that the middle ground between two stances is invariably the correct one.”

17. No True Scotsman

The “no true Scotsman fallacy” arises when an individual reshapes the definition of a term or category to exclude specific exceptions or counterexamples that undermine their argument or position. Suppose Person A argues that all vegans are environmentally conscious. In that case, when Person B identifies a vegan who indulges in wasteful habits, Person A retorts, “A true vegan would never engage in such behavior,” committing the ‘no true Scotsman’ fallacy.

See if you can spot the fallacy in Person B’s argument:

Person A: I know a vegan who occasionally consumes fish.

Person B: They can’t be a real vegan then because no vegan consumes fish.

How would the LSAC describe No True Scotsman fallacies?

“It modifies the subject of an assertion to exclude a counterexample.”

“It validates a sweeping statement by modifying the definition to exclude any contradictory examples.”

18. Slippery Slope

The “slippery slope fallacy” states that a minor or seemingly inconsequential event or decision will precipitate increasingly catastrophic or extreme outcomes, without supplying adequate evidence or logical justification for such a leap. For example, if Person A alleges that sanctioning same-sex marriage will ultimately result in the total disintegration of traditional familial structures and societal norms, without considering the lack of substantiating evidence for this extreme conjecture, they are committing a slippery slope fallacy.

See if you can spot the fallacy in Person B’s argument:

Person A: We should legalize marijuana for medicinal use.

Person B: Next thing you know, we’ll be legalizing harder drugs like heroin.

How would the LSAC describe The Slippery Slope fallacies?

“It asserts a domino effect of drastic outcomes would result from a minor action, without sufficient substantiating evidence.”

“It predicts a cascade of extreme events without adequate proof or rational basis.”

19. Straw Man

The “straw man fallacy” involves refuting or impeaching an argument by first mischaracterizing its qualities. For example, Jeremiah argues X; Samira argues that Y (a similar but crucially different proposition) is wrong and erroneously concludes that the argument against Y sufficiently refutes X. Straw man arguments may distort a counterargument by making it appear more extreme than it is.



See if you can spot the fallacy in Person B's argument:

Person A: We should restrict gun access for people with prior criminal convictions.

Person B: A society without guns cannot protect itself from true criminals. Therefore, restricting gun access will cause more harm than good.

How would the LSAC describe straw man fallacies?

“It conflates a relevant argument for an irrelevant one and assumes undermining one undermines the other.”

“It oversimplifies a counterargument or fails to properly address the counterarguments mounted against it.”

20. Tu quoque (Hypocrisy)

The “tu quoque fallacy” (or hypocrisy fallacy) dismisses a criticism or argument by pointing out the hypocrisy or inconsistency of the opposing party, rather than addressing the actual merits of the argument. For example, if Person A criticizes Person B for smoking while being a health advocate, Person B responds, “Well, you have bad habits, too,” without addressing the health risks associated with smoking.

See if you can spot the fallacy in Person B's argument:

Person A: We should strive to recycle more and conserve the environment.

Person B: But you drive a gas-guzzling car.

How would the LSAC describe Tu quoque fallacies?

“It avoids having to engage with criticism by turning it back on the accuser.”

“It responds to an argument or attack by accusing the other person of similar faults.”

**Practice.**

For each of the following prompts, try to identify the flaw in the argument. As always, consult your tutor if you have questions or concerns.

1.

The concept of ancient aliens helping to build architectural marvels like the pyramids in Egypt has captivated the minds of many, from amateur historians to esteemed scholars. Their theories often hinge on the argument that some of the ancient structures demonstrate a level of sophistication and complexity that seems unlikely to have been achievable with the technology of the time. Thus, the notion of extraterrestrial involvement becomes tantalizing. Considering that so many intelligent and well-informed people have put their weight behind this theory, it's hard not to conclude that there must be some merit to it. After all, it's hard to believe that all these knowledgeable people could be wrong.

2.

The renowned actor Liam Neeson, famous for his portrayal of a former government operative in the “Taken” series, expressed his views on gun control in a recent interview. He opined that there's an urgent need for more stringent laws regulating guns in the country. His roles have often required him to portray the use of firearms, and hence, his opinion on this matter carries significant weight. Given his cinematic experience dealing with action-packed scenes involving guns, his viewpoints must be considered valid and worth implementing.

3.

During a meeting on environmental sustainability, Jane argued fervently that reducing greenhouse gas emissions was imperative to combat climate change. She presented various studies and reports indicating the adverse impacts of these emissions on our planet's climate. However, her peers quickly dismissed her argument. They pointed out Jane's frequent air travel for business trips, stating, “Jane, you are one of the biggest contributors to the problem with all your flying. How can we take your argument seriously when you're a part of the issue?”

4.

Organic foods have been steadily gaining popularity due to a growing interest in health and wellness. Advocates of organic foods argue that they are always a healthier option. After all, they are grown naturally, free from artificial chemicals or preservatives typically found in most processed foods. Thus, they argue that organic food, being free from artificial substances, is inherently superior and a more wholesome choice for consumers.

5.

In recent times, a new diet trend has been sweeping the nation—the “Caveman Diet.” It encourages people to eat as our ancestors did during the Paleolithic era, a diet primarily consisting of meat, fish, vegetables, and fruit, while avoiding dairy, grains, and processed food. The diet has become a sensation, and people everywhere are trying it out, eager to share their success stories. It must be an effective strategy for losing weight and promoting health since so many people are following it and reporting positive results.

6.

The debate about the health risks associated with smoking has been long-standing and well-publicized. Health organizations and news outlets frequently warn about the link between smoking and lung cancer. Despite this, some individuals remain skeptical. One might say, “I know the news says that smoking can cause lung cancer. But my uncle smoked for thirty years and never got sick. His experience makes me question the proclaimed correlation between smoking and cancer.”

7.

Recently, there has been a debate in the community about the impact of domestic cats on local wildlife, particularly birds. Some people argue that cats, as natural hunters, pose a threat to birds and other small wildlife. They substantiate their argument with citizen statements such as, “My neighbor's cat killed a bird just yesterday. We need to take immediate action. I propose a local ordinance that bans all cats from going outside to protect our birds.”

8.

Investing in stocks can be a complex and daunting task. When novice investors seek advice, they often rely on anecdotal evidence from the experiences of people around them. Someone might argue, “You should invest in this company’s stocks. My friend did just last year, and they made a lot of money. They have no special knowledge about stocks, yet they profited. So, I think it’s a safe bet for anyone.”

9.

Consider the realm of music: Every accomplished musician I know practices for at least five hours a day. This rigorous training allows them to master their craft, understand the nuances of their instrument, and continuously improve their skills. Therefore, it’s only logical to conclude that to become an accomplished musician, one must commit to a practice routine of a minimum of five hours daily.

10.

Belief systems can often indicate a person’s reasoning abilities. Pseudoscientific practices like astrology are fundamentally irrational and lack empirical support. Therefore, anyone who believes in such practices likely lacks critical thinking skills and can be considered to be illogical and irrational in other aspects of their life as well.

11.

Climate change has become a significant topic of discussion and controversy in recent years. However, this year, we experienced one of the coldest winters in decades in many regions, contradicting the widespread claims of global warming. These low temperatures, as some argue, provide sufficient evidence to suggest that climate change might be a myth.

12.

The realm of mythical creatures is vast and fascinating. Unicorns, in particular, have been the subject of numerous folktales and legends. There is no tangible evidence to disprove the existence of unicorns, nor any law of nature that suggests a creature like a unicorn could not exist. Therefore, unicorns probably existed.

13.

Sports superstitions are common among fans and athletes alike. Personally, I've noticed an intriguing pattern related to my favorite football team's performance. Every time I wore my lucky jersey on a game day, the team won their match. I initially dismissed this as a coincidence, but the pattern has been consistent. It seems clear to me that my lucky jersey brings good fortune to the team and significantly influences their performance, helping them win.

14.

Every day on the news, we hear about various violent acts occurring around the world. The common factor in all these incidents seems to be the use of technology. People are using various platforms on the internet to spread hate, and modern weapons are used in most violent incidents. Therefore, technology appears to be the root cause of most violence we see today.

15.

You know my friend Alice, the schoolteacher? Well, she doesn't believe in vaccinating her kids. Alice is a teacher, so she must know what she's talking about. Therefore, I also decided not to vaccinate my kids.

16.

There are only two paths for our economy. We either choose to embrace capitalism entirely, encouraging competition and free trade, or we slide down the slippery slope to socialism and potentially, totalitarian rule.

17.

At an international animal rights conference, Speaker A proclaimed to a packed audience that all animal rights activists are vegetarians, attributing this lifestyle choice as a logical consequence of their advocacy. When Audience Member B, herself a known animal rights activist, objected and revealed that she was not a vegetarian, Speaker A dismissed her, arguing, "Any true animal rights activist would naturally adopt vegetarianism. If you're not a vegetarian, then you're not a true animal rights activist."

18.

In a company-wide meeting at Software Solutions Inc., head of HR, Samantha, proposed a change in the company's strict dress code policy. She suggested the idea of "Casual Fridays," allowing employees to dress down once a week to boost morale. However, the company CEO, Mr. Richards, was adamantly against this, arguing that such a relaxation in the dress code would be the beginning of the end

for company culture. He asserted that today it's jeans and t-shirts, tomorrow it'll be pajamas and slippers, and soon after that, productivity will plunge, and the company will lose its professional image.

19.

At a local community meeting about climate change, Mrs. Green, a self-proclaimed environmental enthusiast, criticized Mr. Brown, a local business owner, for not doing enough to combat climate change, pointing out the high energy consumption of his company's operations. Instead of addressing these concerns, Mr. Brown shot back, highlighting the fact that Mrs. Green had recently purchased a brand new SUV instead of a more environmentally friendly used or electric vehicle, thereby implying that Mrs. Green was herself contributing to climate change.

20.

During a town hall meeting about the allocation of funds for public school education, there was a heated argument. The first faction, led by Principal Adams, argued for a dramatic increase in funding for the arts, saying that fostering creativity and innovation among students would lead to a more holistic education. On the other hand, Coach Bradley's faction argued for significantly more funding for sports programs, citing physical fitness, team spirit, and the cultivation of athletic talents as equally important. Caught between these two passionate arguments, Mayor Wilson argued an equal increase in funding for both arts and sports. In his opinion, the best solutions always lie somewhere in the middle of two proposed plans.