

CRITICAL REASONING AND THE LIFE OF A GMAT STUDENT

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To succeed in critical reasoning, you shouldn't just solve CR questions from different sources, but rather develop your ability to read or reason critically all the time. The purpose of CR questions in GMAT is not that whether you can solve these questions successfully but whether you a critical thinker in everyday life because critical thinking is going to be a major determinant in your success during your MBA and later. Critical thinking is nothing but an ability to reason logically, the most fundamental use of human brain. Clearly, having a better brain means having a better ability to logically argue or reason.

Thus, make critical reasoning a part of your daily life. So, the next time your son argues that he should be allowed to play video games since all his friends are, you can understand that he "assumes" that he is same in all respects (relevant to video games) to his friends. This understanding will help you to break down his conclusion by challenging his assumption by saying that he scores less marks than all of them or that he is allowed to do other things which not all of his friends are allowed.

Similarly, if and when your wife concludes that you don't love her as much as you used to because you don't say "I love you" as many times as before, you can understand that she is "assuming" that your average intensity of love behind a single utterance of "I love you" hasn't gone up.

Life is full of arguments, and thus, assumptions. Almost every argument has one or more assumptions built in. Understanding an argument thoroughly is very closely related to identifying the assumptions in built in the argument. Therefore, whenever you come across an argument (which you'll hundreds of times a day), try to figure out the assumptions whenever you have time and whenever it is safe to do so (well, figuring out assumptions in a wife's argument may not always be good for your health!).

Once you understand the assumptions in an argument, it's quite easier to strengthen (or defend) or weaken (or counter) the argument by strengthening or weakening the assumption. In this article, I have tried to apply critical reasoning to a couple of arguments concerning our life (my favourite topic!). Later, I give brief examples of arguments and assumptions about different situations a GMAT aspirant may face.

It would help you if you try to think of the assumptions yourself before reading the assumptions I identified. Besides, you can think of more situations and corresponding arguments in your life, and try to find out different assumptions you or others make. This way, critical reasoning will not remain just another subject to be learnt, but a part of life and rather, a fun part of life.

Argument 1:

On an average, richer people seem to be happier. So, if I get richer, I'll likely be happier.

Question: What are the assumptions in the above argument?

1. **Assumption:** Happier people are not more likely to become richer.

Simple causality problem. You see that X (richer) and Y (happier) have happened, and you thought that X led to Y or in other words, Richness makes people happier. On the basis of this thought, you concluded that you'll be happier if you become rich.

Now, the causality could be just the reverse than you thought. It could be that happiness increases the chances of becoming richer. In such a case, getting richer may not make anyone happier. In this case, your conclusion breaks down! Boom!

Therefore, one of the assumptions in the argument was that happiness does not increase the chances of becoming richer. In more formal terms, happier people are not more likely to become richer.

Got it!

Now, give it a thought: in real life, many researches actually say that happier people are more likely to succeed. What happens to the above conclusion then?

2. **Assumption:** Richer people are not more likely to hide their unhappiness.

Well, you see that richer people are "seemingly" happier. They seem to be happier. Isn't it? But what if they are actually unhappy and just trying to sound happy? Just because they don't want to tell the world that their wealth did not reduce any miseries in their lives, they may be wearing the façade of happiness. In case of less rich people, they may have lesser pressure to look happy, and thus may be more open to sharing their unhappiness.

In such a case, richer people may "seem" happier but may not be "actually" happier than less rich people. In this case, the conclusion breaks down. Even though it may happen that when you get richer, you may start looking happier to others. However, we cannot say that you'll likely be any happier then. Sorry!

Therefore, for the conclusion to be believable, we need an assumption that richer people are not more likely to hide their unhappiness.

By the way, isn't it true in real life that we try to sound happier so that people don't feel pity on us. We dread this remark, "This unfortunate guy has all the wealth in the world but still no happiness!"

Again, it can also be seen as a causality problem. You thought richer people seem happier because richness makes people happy. In your conclusion, you are disregarding the possible causality that richer people seem happier because they are better at hiding their unhappiness.

3. **Assumption:** The society's general belief that wealth increases happiness does not cause people to selectively focus more on the happier aspects of the lives of the richer people. Well, it could be richer or less rich people have equal problems in life, and thus have equal happiness. However, since you have been brought up believing that wealth increases happiness, when you look at richer people, you try to notice all the nice things in their lives while ignoring their problems. In such a case, richer people "seem" happier to you and the society, even though they may not be. Isn't it?

In such a case, your conclusion breaks down. Again, in this case also, richer people "seem" happier but are actually not. So, even if you get richer, you may not become happier. Thus, we cannot believe in the conclusion.

Therefore, for the conclusion to be believable, we need to assume that the general belief prevalent in the society does not distort your perception by making you focus more on the happier aspects of the lives of the richer people.

Well, in reality, we always suffer from confirmation bias: we view the world not objectively but selectively in order to confirm our existing biases or beliefs.

Argument 2:

Money has a positive utility (impact on happiness). Therefore, since my goal is to maximise my utility, I should get a job that pays more money.

Question: What are the assumptions in the above argument?

One of the assumptions is: The decline in the utility in switching to a more paying job is not more than the utility from the increase in the pay.

Let's suppose the following numbers:

Utility from the current job – X units (not considering the pay)

Utility from existing pay – P1 units

Utility in the new job – Y units (not considering the pay)

Utility from new pay – P2 units

So, total current utility = $X + P1$ units

Total new utility = $Y + P2$ units

Now, you should switch to a new job only if $Y + P2 > X + P1$.

Right?

Or if $X - Y < P2 - P1$

$P2 - P1$ is the increase in utility from increased pay.

And $X - Y$ is the decline in utility from changing jobs.

So, to change the job, we need that the new job is not so much worse than the existing job that even with increased pay package, we are worse off. Right?

This is what the assumption is.

Now, even though this assumption is specific to changing jobs, it can apply to all life situations. We all run around chasing things, which have a positive utility if we acquire them without losing anything. However, during the chase, a lot of times, we end up losing much more happiness than we acquire from them. Does it ring a bell or two?!

Let's take one example related to the GMAT studies:

Argument 3:

Ram scored more than Shyam in the GMAT. Since GMAT is a test of aptitude, Ram is more intelligent than Shyam.

One of the assumptions is: Aptitude is the only dimension of intelligence.

There is a clear jump in the logic in the argument. The argument says that GMAT is a test of aptitude, and then concludes Ram is more "intelligent" than Shyam. Therefore, the assumption made in the argument is that performances in intelligence and aptitude can be equated.

In reality, however, there are other forms of intelligence such as emotional intelligence, which is considered even more important these days for the leaders.

Similarly, you can apply critical reasoning to many other situations, and the more you think critically, the better you become at it. Let's take a few more situations as examples.

1. We conclude that we "must" score well on GMAT to do well in our careers based on the premise that getting into a good MBA college increases the chances of a good placement. Clearly, the argument is flawed because while GMAT can be one of the ways to do well in your career, it is not the "only" way. Therefore, while scoring well on GMAT may help, it is not a "must" for you. Besides, even if scoring well helps an average guy to better his career prospects, the assumption that you are an average guy may not be true. You could be a special one! Other much better opportunities may arise in your career even if you don't score well on GMAT.

So, don't burden yourself with flawed arguments. Prepare for GMAT, but don't worry too much about the results! As Aamir Khan says in the movie 3 idiots, "Aal is well!"

2. We conclude that we are not as intelligent as other people because we take more time to understand things or because we are currently not able to solve many questions. As we saw in one of the arguments above, aptitude is just one of the dimensions of intelligence.

You could be way better than other people in other dimensions of intelligence. So, you don't need to judge yourself negatively for your current capability.

Besides, it is amply clear from the research on human brain that our intellect is highly plastic i.e. it is not fixed but rather flexible. So, the ability of a person can be understood as accumulated hard work of that person. So, if another person is doing well, it means that his brain has done hard work on these kind of problems in the past. It also means that you can also develop similar ability by working hard. It may take less or more time, but it is always possible. Human potential is infinite, they say. They are not wrong, I believe.

So, rather than concluding that you are not as intelligent as others, I would rather want you to conclude that you haven't worked as hard or in the right manner as other people. If you work hard and in the right manner, you would be as intelligent as any other person on this planet.

3. All of us find this about most of our beliefs that they are true. Isn't it? Our fundamental beliefs don't change much over time. One of the reasons scientists have figured out for this phenomenon is that we all suffer from confirmation bias i.e. we selectively focus on events that confirm our existing beliefs, and we discount or consider as exceptions other events which challenge our beliefs. Clearly, if we suffer from confirmation bias, our beliefs won't change much over time. But it doesn't seem as serious a case as it seems if we look it from the spiritual perspective. Many spiritual systems including Hinduism, Buddhism, and Sikhism say that our beliefs create our reality i.e. whatever we believe comes becomes true for us. Henry Ford said, "Whether you think you can, or you think you can't--you're right."

Now, if our beliefs create our reality, then we better choose our beliefs carefully. That is why it is said that the first thing you need to succeed is a belief in your capability to succeed. Probably, it is the only thing. So, never underestimate your ability to succeed in GMAT or otherwise, and always trust in the infinite human potential.

Now, let's look at three of the arguments/reasoning we use while choosing a test prep company for our preparation.

1. We see that a test prep company has more success rate than other companies, and we conclude that we should join this company in order to maximize our chances of succeeding at GMAT. The assumption we make is that the profile of an average student at this company is not much different from ours. For example: if we are struggling in CR, and the average student at the company is good at CR at the time of joining the company, then the company may not have the right kind of CR material for students like us. Right? Ultimately, the test company needs to satisfy our requirements, and if it doesn't, its success rate is useless for us.
2. We see that a test prep company generates 99%ile+ students, and we reason that since a lot of toppers go to this company, the company must be good. We assume that either these toppers become toppers because of the company or they must be wise in their

decision making (in choosing this company over others). Either ways, it is better for us to join this company, we conclude. However, again we are using flawed logic since the requirements of a topper or a person already doing well in GMAT may be very different from our requirements. So, even if these people made the wise decision for themselves in choosing this company, it may not be wise decision for us to join the company. Again, we need to match our requirements with the offerings of the company, because only if our requirements are met can we be sure of our progress.

3. We see that a company has instructors all from the top percentile while no other company has and we conclude that it must have the best teachers in the industry. Our assumption that score at GMAT is directly related to the teaching ability of a teacher may not be correct. Besides, a teacher may be an excellent Verbal teacher even though his overall GMAT score may be lower because of dismal quant score.

Similarly, in all our decisions, we make several assumptions, some of which may be quite wrong. Even if one of the assumptions is wrong, we know that the conclusion falls down. Isn't it? So, given that all the assumptions need to be true for a conclusion to hold true, we can understand that the proportion of the most optimal decisions or conclusions we may be making out of the total number of decisions would be much smaller than 1. To increase this proportion, it would help us if we become more and more conscious of our underlying assumptions.

Therefore, the next time you are thinking of a decision, try to see the exact structure of the argument and then identify the assumptions underlying the argument. If the assumptions are sound, you can go ahead with the conclusion. If any assumption doesn't seem credible, you can change the conclusion to avoid making the assumption.

In any case, the more you use CR in your daily life, the more logical your thinking will become. And yes, then the more you will score in the GMAT CR. But the score will just be one of the benefits, not the only benefit.