

Overthinking: Information for students and everyone else

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People often overlook the obvious. --- Doctor Who

The following is Bing's reply to me when I did a search on the string 'overthinking a test question':

Hello, this is Bing. Overthinking a test question means spending too much time or energy on a single question, which can affect your performance and confidence[1]. It can be caused by test anxiety, perfectionism, or negative thoughts[2,3]. Do you want some tips on how to stop overthinking during exams? – 3/11/2023

When I first heard the term 'Overthinking' it sounded like psychobabble to me. I've been thinking about this term now for over three decades, and it's high time I try to make some sense out of it. So, here goes.

Somewhere about 1995 I had a conversation with an expert on the statistical analysis of university tests. I'll refer to her as Geraldine. I told her of an experience I had had in taking one of my own tests, and that I took exception to the so-called right answer to one test question. I can't remember the specific question at this point, but after I explained it to her, she completely contradicted my viewpoint and told me, in what I thought was a condescending tone, that I had "overthought" the question. The best I can do at this point is to pose to the reader a familiar scenario.

Geraldine went on to tell me that she had always been very good at taking formal tests in high school and college. I was left with the feeling that being good at taking standardized tests is one of two things: 1) It's either a knack one is either born with or not, or 2) there is some set of known heuristics to taking tests that she was not willing to tell me. Of course, we know that educators do have a general methodology for making up test questions. Something for true and false questions; something else for multiple-choice questions.

Since Geraldine didn't tell me what "overthinking" means -- in the sense of taking test -- I would, on occasion, think back on that claim of hers all these years to try to understand her enigmatic claim. And at this point, I feel ready to report the results of my investigation on the mystery of what is meant by Overthinking.

In those days, when I took tests, I usually finished well before time was called to hand in the test, so my getting the annoying question 'wrong' was not because I was pressed for time or that I didn't know the material. I was convinced that I was right and the teacher was wrong. My guess, at this point in time, is that some choice of a multiple-choice question included a rare case that I felt had to be considered but the teacher didn't think so. So, when Geraldine told me that I had overthought the question, I figure

what she meant was that I was analyzing the question too deeply. She seemed to think that that was obvious.

So, what did I do? Did I answer according to my ethics of what I thought constituted the right answer? Or, did I analyze more deeply than was warranted on the test? In answer to the latter point, there are times when if you don't include consideration of even rare events that you can also get the 'wrong' answer. So, how is one to know when to do a deep dive into the question or when to keep things more superficial? Ideally, that should be made manifest on the instructions of how to take the test overall or at least specific instructions on particular problems for clarity. It's not enough to say, "Keep the big things big; and the small things small," if you don't know how to draw the line between them. And merely telling people that they overthought the question isn't very helpful.

When a student is told that he or she got the wrong answer that it's because he or she analyzed the problem too deeply, that's like saying that the student needs to learn the art of analyzing more superficially. In other words, the 'right' answer is left to the opinion of the educator.

When I did my deep dive into the dark alleys of the facts of the test question, I was not lost in a maze of distracting data. On the contrary, I knew immediately why I believed my answer was the right one. What I mean to say is that my version of overthinking that problem was not that I got 'lost' in the details and wasted time. That was not the problem at all. It was not a case of analysis paralysis!

Coming up: Two different people who claim to know the material, but can't seem to get the questions right. Then they claim that they were guilty of 'overthinking' or 'overanalyzing' the questions. This is a very important issue for students. How should we figure out what's really going on? I don't know what to say, except that I also have had the experience of knowing the material yet not getting the 'correct' answer. Maybe, either the question should be rephrased or some hint should be given as to how to avoid misinterpreting the question should be added to it. For example, if an educator is looking for an answer that implicitly ignores a rare event or condition, simply because it is rare, the educator should not fault the student for considering it in his or her reply if this warning is not included on the test.

Posted by
u/LPK_MD
4 years ago

How do I stop overthinking questions

I have a terrible habit of "over-compensating" questions (for lack of better words). Especially in subjects like physiology I can identify the underlying problem but keep going in on what the body is doing to compensate and then get confused on which lab values are present in the patient. How do I know if the body has compensated yet or not, by either vasoconstriction/dilation and hormonal release. This has dramatically been killing my scores even when I know the material, as half of the questions require you to think deep and the other half are straight forward.

[https://www.reddit.com/r/step1/comments/cdn7ad/how_do_i_stop_overthinking_questions/]

Hey everyone! I need some help please! I am in my freshmen year of nursing school and every test I have taken so far I seem to over analyze the question and miss them however when I go back to review my test, I realize I know the answer and I feel dumb for getting it wrong. I guess you could say I read too much into the question and don't know how to stop. My teachers and everyone have told me that I do this. I don't want to get in a habit of doing this. Is there anyone who can relate or give advice? I would appreciate it! :)

[<https://allnurses.com/overthinking-tests-help-t501453/>]

The problem with generic advice that one should 'stop overthinking or overanalyzing' the problems is that it doesn't come with specific examples of how the student has been doing it, and how to avoid doing it in the future. I'm going to assume that the student's teacher and fellow students did not give this guy or gal anything even resembling useful and clear advice.

In my opinion, if a good student who knows the material is frequently getting the 'wrong' answer because of a 'technicality', then the questions should be rephrased or the student needs to learn how the teacher thinks magically about the 'correct' answer: That is, how to Keep the big things big, and the small things, small.

Beyond test taking

The subject of "overthinking" is much broader in scope than just related to taking tests. The term is now related to describing all sorts of negative mental fixations. I'll try to define what is meant by overthinking, but before I do, I want to distinguish it from mere mental concentration. Obviously, playing speed chess, writing a symphony, and doing a math test require deep concentration, and that is not what we mean by overthinking.

Generally speaking, overthinking is a state of mental fixation that causes emotional distress, distraction, or work inefficiency by repeating similar thoughts for no good purpose, for allowing 'random' intrusive thoughts to take one's mind off of more useful thoughts (distraction); the inability to make a decision and live with its consequences without repeatedly worrying about the outcome. Fear of making a decision. Analysis paralysis.

Sustained worry (dwelling) is a form of overthinking about the future. Overthinking on one's regrets can be another form of mental dysfunctionality. One could say that overthinking is any form of repeated thoughts that are stressful, unproductive, or self-defeating.

Overthinking is sometimes a pathological tendency to think obsessively on negative past or future events. They are thoughts that tend to take one's mind 'out of the now', resulting in less productivity and more emotional stress.

Let's look more closely at analysis paralysis. If you find yourself faced with making a decision based on too many choices to analyze properly, you need a way to eliminate a lot of choices right away to leave you time enough to make the best decision out of the remaining choices. However, another problem could arise: If you aren't efficient at weighing the cost-benefit of each choice (fear of missing out on the best facets of all options) then you might not be able to choose.

Some people regard analysis paralysis as little more than a fancy form of procrastination. Wikipedia defines procrastination this way:

Procrastination is the action of unnecessarily and voluntarily delaying or postponing something despite knowing that there will be negative consequences for doing so.

The term 'procrastination' is usually associated with laziness or cowardliness. Yet, one could procrastinate making a decision to get more information or a more favorable circumstance, and it not be based on laziness or cowardliness. For example, during WWII, when General Eisenhower procrastinated D-Day from the June 5th to June 6th, he was just being smart.

It seems to me that overthinking is related to 'obsessive thinking'. However, this isn't my field of study, so I'll say no more about it.

Overthinking is also a failure to have one's analysis converge to the correct answer in a reasonable amount of time. Analysis paralysis – the use of more thought, analysis, or time to arrive at a decision than is true for the average person.

My final comment: I suppose that, technically speaking, overthinking is always the condition of applying more thought to a given problem than is 'required'. But when one wants to apply this rule to specific situations, it gets complicated and subtle fast. Please be considerate when accusing someone of overthinking a problem, because he or she will likely interpret it as condescending, not to mention as completely uninformative.