

This article is part of a series “Psychology in Climbing” about psychological effects and phenomena in the world of climbing, how they arise and their consequences.

Would have, could have, should have – Counterfactual thought in competition climbing

Bouldering nationals this year didn't even go really bad in terms of the result, but I felt I made quite a few avoidable mistakes in semis. I ultimately ended up in eighth place, two attempts out of finals and everyone who has been in a similar situation can probably imagine what went through my head during the long train journey back home: “If only I had been a little more patient, I could have done that Boulder first try.” “If only I had positioned my feet a little more carefully, maybe I wouldn't have fallen off.” “If only I had thought of that beta a little bit earlier” Would have, could have, should have...

Counterfactual thinking and its directions

These kinds of thoughts have been termed counterfactuals and as the name implies, they are about things that could have happened but didn't. Psychologists distinguish two types of these: In upward counterfactual thinking, a situation is imagined that is better than what happened in actuality. My thoughts after nationals are perfect examples of this category. In contrast to that, downward counterfactuals involve a scenario that are worse than reality, e.g. “At least I did the slab on my third try and didn't slip again”

Counterfactual thoughts are very common after competitions which is due to the characteristic circumstances of sporting competitions. Psychological research has identified many factors that influence whether and how much counterfactual thinking occurs, what its direction is (upward or downward) and what its specific content is likely to be. Therefore, the following list will only contain those which are most relevant to the competition setting and are able to explain why many athletes spend so much time on – mainly upward – counterfactual thinking after competitions.

Triggering factors

Need for correction

Counterfactual thought is especially prevalent in situations that demand corrective action such as a negative event, a failure, or a missed goal, all of which are integral parts of competitive sports, since high expectations and the continual search for possibilities to improve are in its very nature.

Closeness

Counterfactuals are also more likely to occur, if – in hindsight – it seems as something else “almost” happened meaning another outcome was “closely” missed. This is especially often the case in high-level bouldering competitions with a very dense field, as the smallest differences in movement or beta can have a very large effect on the final ranking.

Exceptionality

Furthermore, counterfactual thoughts are more probable following unusual or exceptional occurrences. Due to the high volume of training, competitive athletes usually know themselves and their strengths and weaknesses very well, which is why they tend to be very accurate at assessing whether or not their performance was “normal”

Controllability

Counterfactuals tend to focus on aspects of the situation that are perceived as controllable. As most (successful) athletes possess an internal locus of control, meaning they interpret events – positive

and negative – as consequences of their own behaviour as much as possible, they usually perceive their performance and result as highly controllable.

Obviousness

The more obvious an alternative event is, the more likely it is going to be subject of a counterfactual. In competitions these possible alternatives are made very salient by the explicit comparison between one's own performance and those of others.

Repeatability

If an event or something similar is likely to repeat, upward counterfactuals tend to predominate. As most comp climbers probably plan on participating in competitions in the future, this is the scenario they find themselves in. If, on the other hand, the occurrence is seen as a one-time happening, the following counterfactuals will likely be mostly downward.

Looking at these factors it becomes very apparent why I spent so much time wrapped up in counterfactual thought after nationals. First of all, there was obviously a need for correction because as I said, I was quite dissatisfied with my performance. Furthermore, I intend to continue competing, therefore there will likely be similar occurrences in the future for which I would like to be better prepared. Moreover, a better performance and specifically making it into finals was incredibly close as I fell while matching the top hold on the last problem in semis. Moreover, there weren't any interfering factors, therefore it is clear to me, that the only person responsible for that result is myself. And on top of all that I was watching the finals livestream on my train ride back home, which was a continual reminder of what could have been. Really the only factor that wasn't involved was Exceptionality.

Functionality of Counterfactual thinking

Counterfactual thoughts, however, are not just simply there, they can influence future performance. To utilize them, athletes can be instructed or self-instruct to generate certain counterfactuals, but in order for these to be functional – that is to contribute to improvements – the following three criteria need to be met.

Identification of the correct cause

In order for performance improvements to take place, accurate knowledge about the reasons of previous ones – both good and bad – is needed. Counterfactuals are in essence a type of causal reasoning and as such can provide this knowledge and therefore indications which measurements can and should be taken. However, if the counterfactual is based on a causal assumption that is simply wrong or of little importance, any measures derived from that will have little or no effect on future improvements. Another problem is that the analysis of a problem is often terminated prematurely and something that is actually only symptom of a deeper problem is misidentified as the cause. The identification of the correct cause is made even more difficult by the fact that some of the factors that influence counterfactual thinking described above do not necessarily correlate with actual relevance, meaning one tends to focus on aspects that are not really significant. This is often further aggravated by the fact that there are no quick-fixes for the main success factors. Therefore, counterfactual thinking absolutely requires critical self-reflection and awareness of one's biases.

For example, often times situational circumstances such as the weather or the time of the day are made responsible for an unsatisfactory performance. But since all athletes are faces with the same conditions that cannot be the actual cause. If anything, the persons inability to cope with these

circumstances is. More often however, these kinds of explanations are simply excuses for not having to deal with the real causes.

Check controllability

If the counterfactual accurately identifies an antecedent cause but this cause is simply not under control of the individual that information is of no value. Functional counterfactuals on the other hand focus on what one personally could have done to improve the performance.

A classic example of this is the discussion about height. It may very well be true, that on a specific problem or in a certain competition height was the decisive factor, but one simply cannot change one's own height.

In that, however, it is also important to question whether factors one considers to be outside of one's personal control really are or whether there might not be something one could do.

E.g., many athletes rarely work on their mental game, partly due to ignorance but often because they consider their own thoughts to be uncontrollable. This, however, is not the case and even if one doesn't initially know what to do about it there is always the possibility to get help and thereby gain control.

Transferability

If the causal relationship identified by the counterfactual is not applicable to any future situation or the athlete does not recognize the appropriate circumstances when they arise, counterfactual thinking will not be of any use, as even though counterfactuals are concerned with events in the past, in the end they can only influence future performances.

A personal example for this is my (unfortunate) tendency to forget whether or where a hold is located on a volume that you cannot see once you're on the wall. This has costed me more than one top already in competitions and I've spent a lot of time dwelling on these, yet it happened to me again and again because in the moment I do not realize that now would be the time to apply this hard-won knowledge and memorize where exactly that hold is.

Affective and motivational consequences

Aside from the purely cognitive effects discussed so far, counterfactual thinking also has affective and motivational consequences. In most cases, downward counterfactuals will make one feel better while upward counterfactuals will make one feel worse. Especially the feeling of regret is associated with upward counterfactuals. This negative affect can be quite motivating under certain circumstances and has often contributed to improvement in performance in lab studies. However, as the effectiveness of this strategy depends on several constraints and as excessive upward counterfactual thinking and regret are associated with depression, I think using counterfactual thinking as a long-term motivational strategy is rather risky. Furthermore, most competitive athletes do not have a lack of motivation which would make its use necessary anyway. Downward counterfactuals on the other hand, while making one feel better, also suggest that there is no need for action and thus facilitate complacency which is not a basis for performance enhancement either.

Conclusion

As a result of that, it makes more sense to use counterfactual thinking as a short-term and primarily cognitive strategy in order to identify causes and draw conclusions from the events. To ensure, that the thinking stays functional and doesn't drift off into pointless wishful thinking it is important to take a very intentional approach. To guarantee that this will happen, the following strategies are helpful.

1. Critical self-reflection and honesty: Both are absolutely necessary to check whether an assumed cause is actually correct.
2. Talking to another person: Four eyes see more than two. Furthermore, it is often difficult to admit to one's own weaknesses and confront uncomfortable truths, which is why it can be very useful to go through that process with someone else. However, this person has to be able – at least in this situation – to be brutally honest, because if instead of speaking the truth this person tries to avoid hurting any feelings, its whole point is missed.
3. Backtracing chains of causation: To ensure, that the identified cause isn't just a symptom of an underlying problem, causal chains should be backtraced as far as possible or reasonable. At the same time, this can be used to check, whether something one believes to be uncontrollable, actually is or whether there might not be some place or possibility to intervene.
4. Focusing on one's own possibilities for action: In order to make sure that any factors under consideration are indeed inside of one's control, ultimately it is only helpful to focus on one's own possibilities and actions. However, as described above, counterfactuals tend to focus on these aspects anyway, nevertheless it is important to keep this in the back of your head.
5. Establishing habits: The biggest threat in regard to the applicability of the new-won knowledge is usually, that situations in which it would be relevant are not recognized. To prevent this, it is necessary to establish habits that guarantee the necessary action will be performed at the appropriate point in time either by automating it or using reminders.

This list is obviously by no means exhaustive, but these are the strategies, that seem the most useful and have helped me the most. However, in the end it is only important, that all necessary information is extracted out of what happened, learn from it and after that forget about it and focus on the future. And yes, it often is difficult to stop having these thoughts, but (especially with a lot of practice) it is possible.