

In a 2019 study, over 400 participants were enlisted to learn a mysterious, invented language. Individuals were asked about three pairs of runes— for example, which of these two characters represents an animal? Then, after a brief break, they were asked about the same rune pairs with questions flipped, as in, which of these two runes represents a non-living object? But this game had a secret— The subjects' answers in round one determined the runes' meanings in round two. In the first round, participants either had all their answers marked as correct no matter what, or they were forced to fail every question. This meant that at the break, every participant had the same amount of information, and in round two they were playing for real. But despite this even playing field, the successful participants from round one rose to the top of the ranks, while those cast as failures kept, well, failing.

People often describe failure as a teachable moment— a necessary stumble on our way to improvement. But learning from our mistakes isn't always easy, especially when those failures are demoralizing, overwhelming, or just downright confusing. So what exactly prevents us from turning our mistakes into mastery?

Perhaps the most obvious hurdle to learning from failure is how painful it can be. People generally want to think of themselves as capable and competent, and experiencing failure threatens that self-image. In a survey following a replication of the rune study, participants in the failure group indicated much lower levels of self-confidence after participating. It's tempting to dismiss this pain as a temporary setback. But some studies have found that when people feel demoralized or incompetent, their brains often stop processing new information. This suggests that if a threat to your self-esteem is large enough, it can undermine your ability to learn.

However, your tolerance for failure also depends on your relationship with the task at hand. In a study from 2011, researchers surveyed a group of American students enrolled in introductory and advanced French courses. These students completed a questionnaire asking what kind of teacher they preferred— one who emphasized their strengths and successes, or one who highlighted their mistakes and corrected their weaknesses. In general, responses showed that while beginner students sought positive reinforcement, advanced students were more eager for critical feedback. Researchers have theorized a handful of explanations for these results. Having just started out, beginners are still determining if they enjoy learning French and if they want to continue studying, so they might crave praise as a way to stay motivated. On the other hand, the advanced students are already invested, so they may want to improve their skills as efficiently as possible. The process of gaining expertise also comes with its fair share of failure, so the advanced students may have built a higher tolerance for making mistakes.

But whether you're an expert or a novice, it's usually much more straightforward to learn from your successes than your failures. For example, imagine getting your grade back on an exam. If you aced it, you could reasonably assume you made good choices around when, what, and how much to study, and you can replicate those decisions for the next test. But if you failed, it could be for any number of reasons. Maybe you didn't study enough, maybe you studied the wrong information, or maybe you did everything right and the test covered things you shouldn't have been expected to know. In cases like this, it's unclear exactly what went wrong, making it difficult to learn how to improve.

Wanting to learn from our failures is completely natural, and there's a lot to gain by being resilient and cultivating a growth mindset. But fixating on your failures can make it easy to forget all your successes. And building on what you're doing right can be more effective than focusing on what you did wrong.

hurdle (n) /'hɜːdl/ (B1)

a difficulty that slows or blocks progress

Low confidence can be a hurdle to learning.

demoralizing (adj) /dɪ'mɒrəlaɪzɪŋ/ (B2)

making someone feel less confident or hopeful

Repeated failure can be demoralizing.

setback (n) /'setbæk/ (B1)

a temporary problem that delays progress

The exam result was a setback.

tolerance (for sth) (n) /'tɒlərəns/ (B2)

the ability to accept or deal with something difficult

She has a high tolerance for mistakes.

resilient (adj) /rɪ'zɪliənt/ (B2)

able to recover quickly from difficulties

Resilient learners don't give up.

rune (n) /ruːn/ (C1)

a letter or symbol from an ancient writing system, often associated with old Germanic languages

The participants learned the meanings of different runes.

replicate (v) /'replɪkeɪt/ (B2)

to do something again in the same way in order to get the same result

Students can replicate successful study strategies.

ace (v) /eɪs/ (B2) (informal)

to do something very well or get a very high score

She aced the exam.

undermine (v) /ˌʌndə'maɪn/ (B2)

to weaken something gradually

Fear can undermine learning.

fixate (on sth) (v) /fɪk'seɪt/ (C1)

to focus too much on one thing

Don't fixate on failure.

cultivate (v) /'kʌltɪveɪt/ (B2)

to develop or improve something over time through effort and care

Learners can cultivate a growth mindset through practice.