

Insight Research Summary

Perhaps you have worked on a tough problem at work and felt stuck or unable to progress. Suddenly, in the middle of the night, a solution comes to you. This experience of unexpectedly solving a complex problem is known as having an “insight.” Research shows that insights actually create deeper connections in the brain. This kind of learning can create lasting change in behavior.



WHAT IS AN INSIGHT?

From experience, we all know insights to be those “aha” moments, when suddenly a great idea comes to mind. *For example: Now you know who to put on a team for an important project, or where you can get the funds to bring your initiative to life.*

The brain is always non-consciously detecting new patterns. It tries to link new concepts with previously established information. Insights bubble up to the surface when new information is put together in particularly novel ways. However, insights are relatively weak signals in our conscious awareness compared to traditional, linear forms of problem solving.

INSIGHTS HAVE LEGS

Insights help us **Learn, Engage, Generalize**, and form **Systemic changes** in the brain. In short, they matter, because they give ideas **LEGS** to help them really go places. Insights turn out to be highly valuable when you want someone to not only accept an idea but also run with it, integrate it, and make it their own (Davis, Chesebrough, Rock, & Cox, 2014). *For example: You want your sales team to support each other, not just begrudgingly share leads. You want them to feel good about it. And if you give them the chance to have their own insights about how to help each other, they are more likely to proactively offer their help.*

LEARN You know that emotional charge that comes with an insight – that good feeling? That turns out to be more than a good feeling, and plays an important role in memory. When that happens, there is a signal from an emotional brain center to the hippocampus, a region critical for long-term memory, which helps flag the idea as something to be remembered (Ludmer, Dudai, & Rubin, 2011).

ENGAGE When you come to an insight, several reward mechanisms are triggered in your brain. Reward mechanisms let you know something has worked and encourages you to do it again. Reward leads to engagement. So, when you have had an insight, there is a good chance you will find it engaging to make use of that insight.

GENERALIZE When you solve a problem with insight, it starts a process where you are more likely to see the pattern in other contexts and apply the solution elsewhere (Knoblich, Ohlsson, Haider, & Rhenius, 1999). In other words you tend to generalize the solution better than you would have if you were simply told the answer. When we come to a solution on our own, it makes us faster and more adept at solving new problems over time.

SYSTEMIC CHANGES It is very difficult to unlearn something you have come to learn through insight. It’s true that people are sometimes capable of forgetting a great many facts and changing very little over time. However, following an insight, the new connections in the brain formed are such that you are less likely to either forget or revert to your old way of thinking.

Insight Research Summary continued

FOUR STEPS THAT SHOULD INCREASE THE CHANCES OF INSIGHT

Researchers have traced a reliable series of events that lead up to an insight to illustrate that insights are not just sudden and random good luck but follow a process (Jung-Beeman, Collier, & Kounios, 2008).



1 PROVIDE QUIET MOMENTS

Quiet moments help reduce external perceptual competition for our conscious attention or awareness, allowing the brain to detect weaker signals more readily.



2 LET THEM / YOURSELF LOOK INWARD

Looking inward shifts the focus of awareness away from older, more established solutions, and away from external input. It also can shift your focus to your thought process itself, as opposed to just the content of your thinking.



3 LIMIT THREAT / CREATE POSITIVE EMOTION

In research, people are found to solve more problems with insight when in a positive mood than in a negative mood.



4 REDUCE CONSCIOUS ATTEMPTS TO SOLVE PROBLEMS

When you “walk away from the problem,” this frees up the conscious mind from focusing on very strong and well-rehearsed signals.

These four steps prime the brain for weak, novel connections of insights to jump to the forefront of consciousness.

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