

# LEARNING AGILITY FROM THE INSIDE OUT

## NEUROSCIENCE-BASED INSIGHTS FOR DEVELOPING YOUR AGILE LEARNING SKILLS

Thought Leadership

Agile learners are hungry for more.

More knowledge. More experiences. More skills.

These learners find lessons in everything they do. They are endlessly curious—relentless in their pursuit of new facts and information. They take risks, both big and small, exploring new and novel situations. They look back on those experiences, with mindfulness and intention, applying what they've learned to future events.

Curiosity, risk-taking, and reflection are central to Learning Agility. People who are highly learning agile have a sense of wonder, a readiness to seek out the unfamiliar, and an ability to unpack this new knowledge in actionable ways. And in today's hyperchanging, hyperdemanding business landscape, these qualities are in great demand, seen increasingly as critical to a company's success.

Yet, although Learning Agility as a construct is nothing new, learning agile leaders are still in low supply. This is because agility is still one of the less developed characteristics among talent, despite operating in a world that requires more adaptability, tolerance of ambiguity, and capacity to transform at all levels of an organization.

It's clear, more now than ever before, that Learning Agility is no longer a nice-to-have—it's a business imperative. But in order to develop Learning Agility, we must first rethink what we know about it.

More often than not, Learning Agility is viewed from the outside in: leaders are considered agile learners based on their actions and behaviors, which are then treated as insights into their

## About the 'Learning Agility' series

*In 2000, Learning Agility was introduced to the field of leadership and talent management. Ten years later, colleagues from Korn Ferry declared once again that the time for Learning Agility had come. Now, fast forward another 10 years, as organizations operate in an age of unrest and uncertainty, Learning Agility has become more relevant to leadership than ever before.*

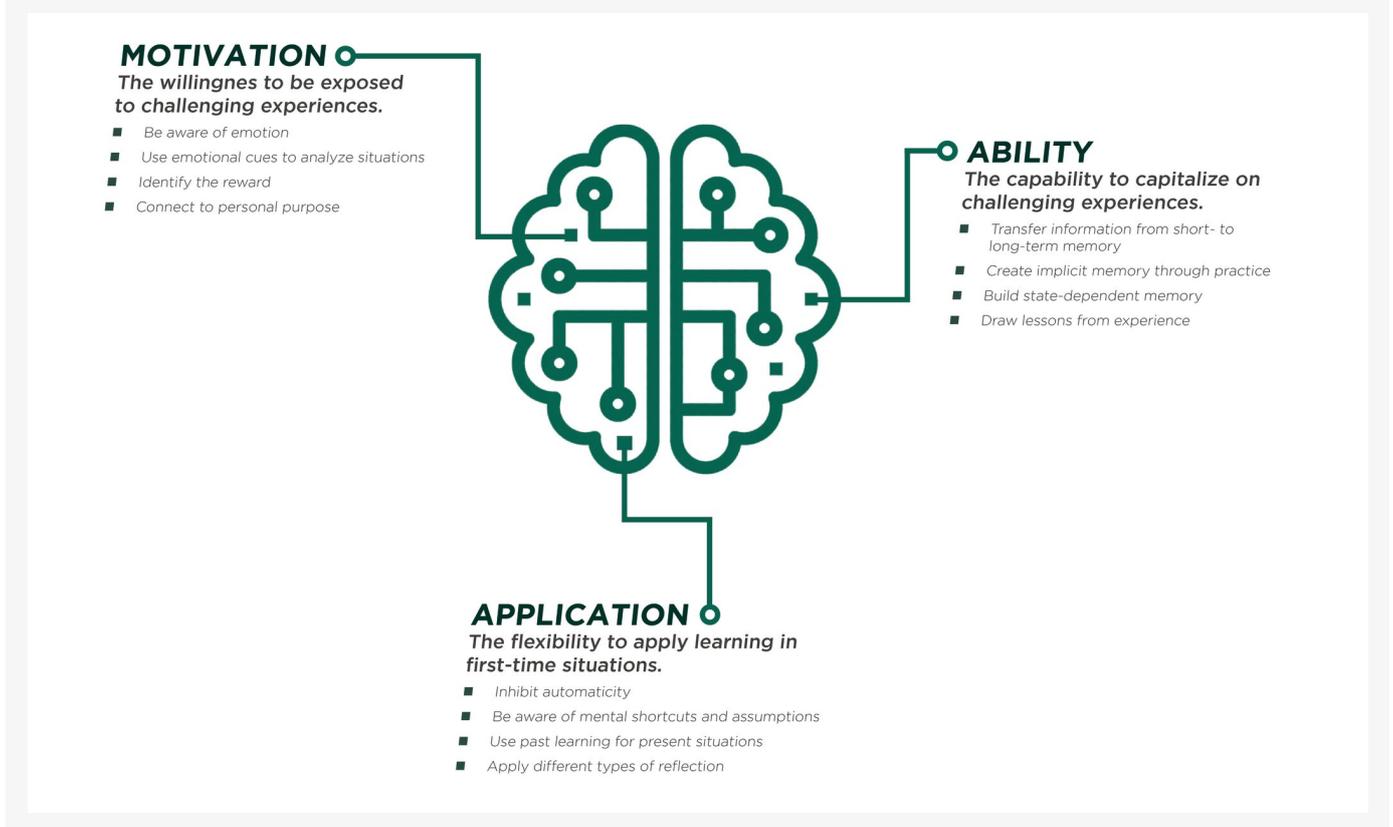
personality and capabilities. But today's increasingly complex and uncertain world requires a new approach—one that gets to the core of the construct in order to develop Learning Agility more successfully at scale.

## The roots of Learning Agility

As we know, Learning Agility is the willingness and ability to learn from experience and apply those lessons to new, first time situations. It comprises five factors: Mental Agility, People Agility, Change Agility, Results Agility, and Self-Awareness. But what is really at the core of the construct are three key pillars:

**Figure 1**

The three components of Learning Agility.



1. **Motivation:** the willingness to be exposed to challenging experiences.
2. **Ability:** the capability to capitalize on challenging experiences.
3. **Application:** the flexibility to apply what is learned, to future situations.

Together, these components paint the picture of an agile learner: bold enough to risk failure, aware enough to reflect on outcomes, and flexible enough to use this new knowledge and skills in novel circumstances. Often, agile learners are also self-disruptive leaders, constantly challenging their own beliefs and assumptions in order to drive themselves and their organizations to adapt, collaborate, and thrive in disruptive times. And in today's economy, self-disruptive leaders are critical to moving organizations ahead of the competition. After all, when you can respond, pivot, and adapt quickly to the unexpected, all while drawing lessons from every experience, you put yourself and your company in a position to meet any challenge that comes your way.

In this paper, Korn Ferry explores Learning Agility from the inside out. We dive into the core neurological and biological processes that allow actions and behaviors to manifest with agility, as well as offer concrete practices to include in your routine to become more effective and agile. The paper also addresses some common misconceptions—like the distinction between agility and speed—that can, in fact, prevent us from being more agile.

## Developing Learning Agility from the inside out

Each of the following themes draws on one or more of Learning Agility's core components: motivation can involve a mix of purpose and external pressures, ability can serve as both a function of working memory and of self-care, and application can mean slowing down, identifying patterns, and learning from past experiences to solve future problems. We explore these relationships at several levels, first with the level of learning mechanics and habit formation and ending with actionable tips to increase agility—all in ways that recognize and respect the neurological processes that underpin it.

**Inhibit automaticity.** At the core of Learning Agility is a person's ability to remain adaptable in the face of uncertainty. Learning, after all, happens when a person notices and pays attention to new information. But, as neuroscience shows, our brains are prediction machines that prefer certainty over ambiguity. The brain conserves energy, resources, and time by operating on habit-forming mental shortcuts and assumptions—known as heuristics. As a result, we become entrenched in automatic and habitual patterns of behavior and cognition. Habit is inflexible, rigid, and unyielding; Learning Agility inherently requires that we become disentangled from automaticity. When you raise awareness of your heuristics, you can better enable self-regulation.

*Flex those agility muscles.*

■ **There's a time and place for everything.**

Science shows that our behavior is inextricably linked to immediate environment. This led psychologist, Peter Gollwitzer, to develop "implementation intentions," a self-regulatory strategy to help reassociate old cues with new, specific behaviors. To establish positive routines, get precise with your actions—for example, if you want to learn more about neuroscience, commit to reading a set number of pages on the topic at the same time each evening.

- **Be fully present in the present.** Science has shown that active, open attention to the present—or, what we call mindfulness—can reduce automaticity and biases. In fact, one study found that meditation, a practice of mindfulness, can help people better control their impulses or habitual behaviors. What's more, according to research, experienced meditators show stronger connectivity between networks of the brain. This allows them to not only switch flexibly between networks, but also selectively focus their attention more effectively and with less conscious effort. To increase mindfulness, practice frequent self-reflection. Question your assumptions, generalizations, and decisions to uncover unconscious beliefs that influence your thoughts and behaviors. The more you reflect, the more you're aware of your heuristics, and the more you can apply your learning to better manage them.

**Engage with novelty.** According to research, the greatest predictor of our behavior is our context. When the context is the same every day—the

## Did you know... the brain has its own strategies.

One of the most intricate and energy-consuming organs in our bodies, the brain has developed several features that help it maximize efficiency and reduce cognitive load in the face of volatile, uncertain, complex, and ambiguous environments. These features—automaticity, heuristics, and suppositions—help the brain make sense of the world by habitually and automatically sorting items and experiences into categories. These categories are based on associations established through the array of our learned and lived experiences. This process of mental shortcutting saves the brain time, thereby conserving energy—critical in our hunter-gatherer days, when resources were scarce and threats were imminent. However, these shortcuts result in biases, habits, and other forms of automatic cognition and behaviors. The brain has its own strategies for learning; sometimes they help us, sometimes they don't.

same colleagues we see, the same office we sit in, the same meals we eat, the same newspapers we read—it signals the brain to go into automatic mode, letting the behavior unfold as it normally would. It's a perpetual habit loop: cue leads to behavior, leads to reward—and back around again. To interrupt habitual and automatic cognition and behavior, we can engage with novelty. Exercise your curiosity, seek out the new and different, and make new connections. New contexts will trigger new associations, cognitions, behaviors, and new learning that you can apply to future situations and challenges.

*Flex those agility muscles.*

- **Change your surroundings, change your behavior.** To disrupt habits, rearrange your environment. A new environment will trigger new connections, cognitions, and behaviors, which in turn, supports new learning. Think about changing the layout of your office space, the color of your office walls, the room where you work, the people you interact with, or even your daily routine. These simple shifts in environment can lead to significant gains in knowledge.

- **Change people and context.** New people bring new ideas and new perspectives, which is why collaboration and social support are so critical to learning agility and resilience. In fact, collaboration activates the medial orbitofrontal cortex and the frontoparietal network, the parts of the brain responsible for developing executive function—like memory, flexible thinking, and self-control. What’s more, one study found that people who made significant contributions to society had one major thing in common: they had someone to reach out to during challenging times. Work with other people and make learning social—think video conference study groups, virtual pair discussions, or peer accountability.
- **Make learning multi-sensory.** When you integrate the different parts of your brain into the learning process, you not only optimize its neural pathways, but you also enhance learning itself. Multimodal learning helps you get around roadblocks because you learn that there are alternate routes, thus promoting agile problem solving. Have a new challenge to conquer?

## Did you know... the brain is the ultimate collaborator.

Learning is a high-level function. The cerebrum is the large, outer part of your brain that is made up of many smaller parts. Together, they are involved in reading, learning, memory, thinking, emotions, and planned muscle movements. The cerebrum also controls vision, hearing, and other senses. Many parts of the cerebrum work together to learn. Even when we work on simple math problems, up to five different areas of the brain are involved, two of which are visual pathways. The interactions between the parts of our brain and the functions they serve are all important for information integration and learning. Learning exists in multiple parts of the brain, and communication between different areas of the brain enhances learning and performance. Learning is all about connections—and the brain is highly connected. Neurons in the brain learn, understand, and remember, but they do not do so in isolation.

Come up with several new ways to answer the same problem. Draw pictures, make up songs, tell stories—anything that gets you to use more of your senses while following your curiosity and creating new connections.

**Learning Agility is about the self as a work-in-progress.** Learning, by all means, is a lifelong process—and thus, learning agility is unrelated to age. In fact, multiple studies have found that the brain is highly flexible and adaptable. Our brains change throughout adulthood by way of neurogenesis and neuroplasticity, the processes by which new neurons are formed and the brain develops and reorganizes synaptic connections, respectively. Learning stems from neuroplasticity in three forms: connections are formed between previously unconnected neurons, alternative pathways are formed between neurons, and existing pathways between neurons are strengthened. Yet, one possible cause of low agility is the belief that capability is hardwired. But as neuroscience shows, there is no age at which humans are at “peak cognitive ability.” Indeed, the more you engage in learning, the more agile you will become. Agility, after all, comes from recognizing our lifelong capacity for growth—and engaging with activities that empower us to grow.

*Flex those agility muscles.*

- **Keep it moving.** Research shows that movement promotes neurogenesis—that is, the birth of new neurons. Neurogenesis is primarily concentrated in the cerebellum, a major part of the brain responsible for voluntary muscle movements, balance, coordination, and posture. Underscoring how crucial movement is to brain health and growth, some doctors will prescribe physical activity as part of the recovery regimen after brain surgery. Want to move more? Create a dynamic workspace, take walks around the neighborhood, exercise at least three times a week, swap out your sitting desk for a standing one, or set hourly reminders to get up and stretch.
- **Just five more minutes.** Sleep is the key. After all, study after study has shown that getting a good night’s rest can boost energy, improve memory, and support learning. And it’s no wonder: when you’re sleep-deprived, you can’t focus your attention well. This makes it harder for your brain to learn, retain, and recall information. That’s because sleep plays an important role in memory consolidation, the process by which short-term memories are

## Did you know... the brain takes four steps to learn.

Learning is a multi-step process. The first step is the initial encoding of the memory: we receive information from our surroundings, which is at first processed in short-term memory. The second is consolidation: we reorganize and stabilize the memory, giving it meaning and connecting it to other knowledge already stored in long-term memory. We check the information we take in against other stored data that we are constantly gathering from conscious/unconscious and implicit/explicit life experiences. We test this new information against the old, to see if it is consistent or contradictory. Retrieval, the third step, is how we update and apply that information. When we revisit an idea or practice a skill, we strengthen that signal pathway. Learning, the storage of information in long-term memory, relates to the strength of the pathway between two brain cells. Reconsolidation helps update memories with new information and connect them to more recent learning. The process of encoding, consolidation, retrieval, and ultimate reconsolidation is how learning occurs.

converted to long-term ones. Some ways you can get a more restful sleep: limit caffeine intake at night, turn off screens an hour before bedtime, dim the lights in your bedroom, and keep the room at a cool temperature.

- **Do the Sunday crossword.** Learning sticks best when you're an active participant. That's where crossword comes in. When you're directly involved in what and how you learn—like, figuring out the four-letter word for 8-across—you're not only increasing your vocabulary, but also actively improving your critical thinking, mental ability, and problem-solving skills. What's more, crosswords can help strengthen your memory because they require you to recall information through the use of novel clues. And cognitive scientists have found that retrieval practice—the act of recalling data without having the material in front of you—creates stronger memory traces and boosts the chances that information will

stick in your long-term memory. That's because memory retrieval produces myelin, increasing the insulating layer of the nervous system that allows the fast transfer of information. Whether it's in a newspaper or an activity book from a local shop, set aside 15 to 20 minutes each day to start or complete a word search puzzle.

**Stress: Learning Agility's hidden enemy.** Senior executives rarely talk about stress and how to cope with it. Yet, stress is a very clear obstacle to Learning Agility: studies show that when we are stressed, we are more likely to react impulsively and fall into patterns of habitual behavior and automaticity. Neuroscience research shows that when our sympathetic nervous system is activated as a result of a physical or social threat, our capacity to engage our prefrontal cortex is reduced; we turn, instead, to our limbic system, which is responsible for behavioral and emotional responses. Our limbic system is not a bad system, and there is an argument to be made for emotion having an important place at work. But our prefrontal cortex is more planful, rational, organized, and logical than our limbic system. Agility demands that ability to make and apply conscious choices to go against the grain, think differently, and do the unexpected. When we align our learning to our purpose, we can better minimize stress because we are connecting with our values and mission. And when we're better able to combat stress, we not only become more resilient, but we also become more agile.

*Flex those agility muscles.*

- **Take a deep breath and count to 10.** Stress affects everything—sleep, mood, diet, relationships, and even learning. Research shows that moderate levels of stress can enable learning by prompting neural plasticity, and thus, causing your brain to grow itself. But too much stress could trigger a threat response, making it harder to both retrieve a memory and update that memory with new information. Mental agility can shift to rigid, habit-like behavior when stress becomes too overwhelming. Breathe deeply, slowly count to 10, and even go for a short walk when you need to decompress after a particularly stressful moment. To reduce stress over the long-term, make relaxation techniques part of your daily ritual (think morning meditation, journal writing, yoga, visualization, and breathwork). Applying what you've learned through your relaxation and mindfulness practices will also help you boost your resilience and maintain your reserves.

## Did you know... the brain always remembers.

Much like your car, your body is subject to increasing wear and tear as it's exposed to repeated or chronic stress, whether physical or social—a concept known as allostatic load. Over time, this allostatic load will cause a person's homeostatic setpoint for stress to elevate. As a result, their body's stress baseline will increase—and not return to its original level automatically. Studies have linked increased allostatic load to coronary heart disease, autonomic nervous system function, and perhaps even age-related COVID-19 mortality. What makes the neurological parallels between social threats and physical threats so pernicious is that the experience of social pain comes back when remembered later, while the experience of physical pain does not, so social threats can continue to increase allostatic load long after they've happened.

- **Apply the pause principle.** Reflection, not speed, is the true booster of agility. After all, when you pause and reflect, you are more mindful in the moment. And when you're more mindful in the moment, you're more intentional about your learning, behaviors, and actions. This is at the core of the “pause principle,” a mindful practice for leadership developed by Kevin Cashman, Korn Ferry Global Leader for CEO & Executive Development. Of course, it's hard to pause when you have an overwhelming and relentless torrent of information coming your way. But pausing is critical to moving forward: taking a conscious step back gives you time to shed old ideas, gain new perspectives, and create needed clarity—thus, improving mental agility. So, the next time you want to push full steam ahead, pump hard on the breaks.
- **Keep your worries in check.** Research shows that people spend an average of 1.5 hours a day (that's almost 5 years of our lives) worrying about something—maintaining relationships, meeting work goals, paying down debt, having job security. Not all fretting is negative, though: some concerns—say, protecting your health—can motivate you to

take preventive measures, like wearing sunscreen. But most times, being a worrywart can cause problems in other areas of your life (think sleep or memory). Working memory, which is the amount of information that our brain can reliably hold and track at once, is a limited resource; when we worry, our working memory becomes crowded by distractors, impeding our learning. Play catch-and-release with your worries: every time a stressor pops up, identify it, label it, categorize it, and put it in a mental box. This process can free up space in your working memory to deal with other, perhaps more important and relevant things.

### **Failing intelligently—and with intention.**

Learning is a cycle, and failure is a part of that cycle. After all, the road to success and development, even at the neurological level, is paved as much with getting it wrong as it is with getting it right. Highly learning agile people are not only motivated by challenging experiences, but are able to use and apply what they've learned to new and novel situations. That's because they know going boldly and thinking differently means accepting that mistakes are critical to the learning process—they are willing to put everything on the line in service of their purpose. Highly learning agile people expose themselves to more experiences and are willing to be in situations that have a high risk of failure. And they see this failure as feedback that provides invaluable insight into how to reach success. In fact, neuroscience research shows us that failure, errors, and mistakes are a critical part of the learning process: our brains are far more active when we make a mistake than when we do something correctly. Failing intelligently is about reflecting on mistakes, reviewing your responses, refining what you've learned, and applying that learning to future challenges. But learning—and by extension, innovation—do not happen within the confines of the status quo. In order to fail successfully, you first need a culture on trust, one that welcomes failure as the price of admission for innovation.

*Flex those agility muscles.*

- **Apply different types of reflection.**

Retrospectives can be a useful tool to help you reflect, digest, and apply learning from past events. When you engage in a retrospective, you are being intentional about identifying and learning from past mistakes. Reflect on past events and evaluate how you've handled the situations—what worked well and what did not. This, of course, requires recall, and recall is one

of the best ways to strengthen pathways in the brain. It requires reconsolidation of memories and gives our brains the opportunity to update old memories with new information. Then, think about future actions and come up with concrete ways to apply what you've learned with the intention of improving or changing a practice.

■ **Seek out feedback and apply it forward.**

Feedback gives us a chance to look at ourselves, our beliefs, and our behaviors through a new lens. Engage your curiosity and ask peers, managers, or direct reports for their insights into projects you've managed, actions you've taken, or ways you've approached a situation. Like collaboration, seeking out feedback increases the social element of the learning process and helps stimulate the parts of the brain responsible for developing executive function. Hearing this feedback could be difficult, but it's nonetheless valuable to developing your agility.

■ **Don't take it personally.** Beliefs. Ideas.

Opinions. Work. Feelings. When we treat these things as ours, we become more attached to them, valuing them more highly than if we keep them separate from ourselves—a phenomenon known as the endowment effect.

## Did you know... the brain doesn't like to be wrong.

Biases are particularly challenging to accept and overcome because, if we admit that we have biases and act on them, we then admit that we are occasionally illogical or outright wrong. And this does not sit well with our brains: research shows that when we acknowledge our mistakes or lack of rationale, we trigger the same neural circuitry in our brain that's involved in processing physical pain. Being considered right, on the other hand, activates the brain's reward circuitry, located in its limbic system. Our brain processes being right the same way as it does winning a prize or receiving money: when we feel gratified or rewarded, we trigger this circuitry, which connects different neural structures that control and regulate our pleasure center. This, in turn, motivates us to repeat those same rewarding behaviors.

Neuroimaging studies have found that labeling objects as "mine" activates the medial prefrontal cortex, the part of the brain involved in empathy, emotion regulation, and self-regulatory emotions. When you don't take things personally, though, you could look at situations more objectively, critically, and honestly. Remaining detached or neutral allows you to manage conflict more effectively, because you're able to see issues from all sides.

## Conclusion

For decades, we have tried to develop a more agile workforce, focusing on the five Learning Agility factors. Of course, this development takes time; often, talent will flex and strengthen their agility muscles through stretch assignments and high-stakes turnarounds. But the recent crises have created a new dilemma: agile leaders are needed more today than ever before, yet in a world that's much more digital and insulated, the traditional ways of developing agility may no longer be within close grasp.

Today's challenges, in many ways, underscore the need to look at Learning Agility from the inside out. Instead of waiting for external opportunities, we can develop our own agility by making a habit out of learning. We can approach our work with a learning mindset: with purpose and intention, we draw lessons from every experience, then dissect and apply those lessons to novel situations. By taking an inside-out perspective, we may not only enhance our agility, but also our capacity to create the environments where others can learn and expand their own Learning Agility. And, in today's increasingly complex, uncertain world, incorporating these new habits can become the key to enhancing impact and effectiveness.

## Contributors

### Guangrong Dai

Senior Director, Research, Korn Ferry Institute

### Amelia Haynes

Associate Research, Korn Ferry Institute

### Barbara Ramos

Senior Client Partner, Head of Assessment & Succession EMEA, Korn Ferry

### Annamarya Scaccia

Writer and Editor, Korn Ferry Institute

“Any man could, if he were so inclined, **be the sculptor of his own brain.**”

—Santiago Ramon y Cajal,  
‘Advice for a Young Investigator’

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#### About Korn Ferry

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