Reference: The "Mental 5" Critical Thinking Skills

INTRODUCTION

In the field of human performance, only within the last decade has science supported the notion that psychological skills improve performance. If an individual has a desire to improve at a task, technical competencies for the task are required. Mental and emotional competencies are the next frontier in human performance strategies. For on-demand and in-the-moment recovery techniques or corrective actions, the mind and mental skills are now definable, measurable, and teachable.

In today's competitive marketplace, we no longer live in a physical economy where physical strength dominates. We now live in a mental economy where knowledge and application have become an immediate and sustainable performance advantage. This mental strength is the new definition of strong. Learning to regulate the internal chatter and inner dialogue within self is the key to developing this mental strength.

Mental Chatter

Chatter is defined as random words and mental pictures; any thoughts or thinking by humans. Top performers learn skills to regulate chatter or thinking. When these mental skills are applied, the individual is engaging in self-talk. Self-talk is the application of mental skills and learning to regulate the chatter routinely by practicing strategic thought-processes.



Chatter is defined as random words and mental pictures flashing in the mind throughout the day.

In the field of human performance, chatter-regulation is how an individual learns positive self-talk by using and strengthening mental skills. A *chatter-check* is a new performance tool for self-checking and peer-

to-peer evaluations. When practiced, the individual simply engages in a thought process to take inventory on the current words and mental pictures running through the mind followed by a mental performance-based question: what words and mental pictures do I need for this task in this moment?

In a specific job or technical trade, competency and technical abilities are often assumed. The reference to self and peer checks are now directed to mental and emotional states in the moment for the task—mental competencies.

The development journey in learning an individual's mental skills now become an intentional, self-disciplined approach to regulating the inner chatter that can become a distraction in the moment, hindering personal best.

Top performers journey throughout each day paying closer attention to individual thoughts. As self-awareness improves, mental skills improve. Gradually and with practice, the individual learns to flex mental skills and regulate inner chatter on demand, during routine and complex tasks.

This act of regulating is simply replacing the bad chatter with good chatter. The individual learns to take the bad chatter out and place good chatter in, a true measure of applied mental skills. Although mental skills and exercises are made simple to teach and understand, it is not always easy to apply due to the impact emotions play in human performance.

Thoughts and Emotions

Understanding the connection between thoughts (chatter) and emotions is the key to the human performance development journey. These two aspects of mentality are so subtle it can be easy to miss their impact on performance. Internal dialogue thought-processes directly impact a person's emotional states, emotional states directly impact decision-making, and decision-making is directly driving human performance at its core.

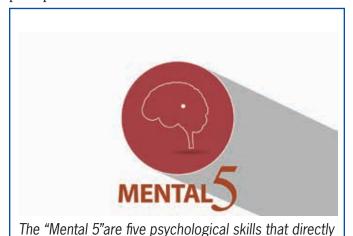
An individual's responsibility to the inner-dialogue increases once the individual realizes that chatter (words and mental pictures) indirectly drives personal performance.

Understand the process. The right emotional state for the task empowers effective decision-making and clarity of thought in the moment. An individual's ability to summon their talents on demand relies on this critical development of a better understanding of how mental skills (chatter) and emotional states drive human performance.



MENTAL 5 SKILLS

The first step of mental skill development is self-awareness to personal thoughts or chatter throughout the day. Disruptive chatter and the emotional state of anxiety are the primary culprits of bad behavior and poor performance.



When practicing these five mental skills daily, the individual improves on the ability to solve problems, adapt to change, and resolve conflicts. Mental skills are the foundation to perform at new levels, regardless of age or gender, and, more importantly, consistently adapt over time to new stressors during routine or complex tasks.

The five mental skills are:

impact personal performance.

- 1. Mental Skill of Communication
- 2. Mental Skill of Concentration
- 3. Mental Skill of Organization
- 4. Mental Skill of Discrimination
- 5. Mental Skill of Innovation

1. Mental Skill of Communication

The mental skill of "communication" involves what goes on inside an individual's head and the act of talking to oneself. As it pertains to learning to regulate chatter, this skill is demonstrated and measured by an individual's ability to select the right words and correct mental pictures for any given task.

A good exercise for top performers will include self-reflection and thinking back to difficult or stressful times when one's performance was better or improved and getting into one's own head by talking to self was required. This reflection process includes benchmarking specific thoughts and feelings that generated positive performance and outcome, and utilizing this critical emotional information for future performance.

Inside vs Outside

Outside communication is any communication with others; what is traditionally associated with the word

communication. A conversation one individual has with a co-worker, spouse, child, friend, or neighbor.

Inside communication is an individual communicating with self; learning to improve personal performance, leadership influence, and relational-unity by developing mental-discipline techniques. Top performers learn to have healthy conversations with self.

The Good Boss: Prefrontal Cortex

Science teaches about a part of the brain called the prefrontal cortex. Scientists are learning more about this area in the brain and the critically important role it plays in thinking and decision-making throughout the day. The prefrontal cortex is located right behind the forehead; it is always on, always thinking, and always flashing words and mental pictures.

Some experts have referred to this area of the brain as "the good boss." This "good boss" title implies two things. First, it is good in the way it helps with decision-making, problem-solving, and overcoming challenges and conflicts. Science shows how human-kind has developed this section of the brain over time as our society has changed, from living in caves to developing computers.

The second benefit of the prefrontal cortex is that it plays a very powerful role in seeking out threats and difficulty. It acts as an alarm system. When the good boss finds a threat from the past, present, or future, it can set off the alarm system in the feeling brain, or the bad boss.

The Bad Boss: Emotional Highjack

This alarm system in the feeling brain is the source for emotional highjacks, also known as the "bad boss." During an emotional highjack, decision-making, learning, and the ability to innovate and adapt to changing environments are hindered. When the bad boss is in charge, the body is flooded with stress hormones that, if not managed properly, will begin to work against human performance objectives and even compromise technical competencies.

Remember, it is an individual's ability to flex the mental skills that empower corrective actions and recovery efforts to get the good boss back in charge. Learning to become more self-aware of chatter and regulate the chatter is the foundation of the first mental skill. The mental skill of communication is the ability to place the right words and mental pictures within an individual's inner dialogue, specific to the task at hand, so that the good boss can be put back in charge.

The key is to remember that chatter is running without self-awareness or regulation. Most of the words and mental pictures that flash randomly tend to be negative distractions or those unrelated to the current task. Unregulated chatter will hinder personal best and personal performance. As experts suggest, the bad boss stays in



charge and the individual's emotional states hinder effective decision-making and clarity of thought.

Remember, individual thoughts have a natural negative bias, which works against personal best and top performance, no matter the task. Personal best begins with learning how to self-talk with the utmost respect—regulating thoughts and developing the right mindset for every role and every task, personal and professional. The best mindset to engage in a thought-process for any task is to always be present in the "now." Top performers learn to be in the mind where they are in the body.

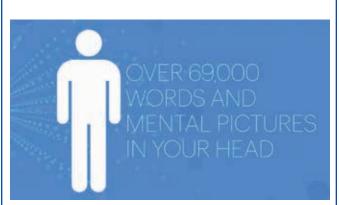
2. Mental Skill of Concentration

The second mental skill is concentration, a mental skill and ability that can be taught, learned, and developed. Recognizing chatter and the first mental skill of communication lays the foundation for the second mental skill of concentration.

The mental skill of concentration is the ability to focus on and repeat specific words and mental pictures for extended periods on demand. A good exercise to strengthen this skill is to reflect back to a time when one's mind was wandering and good performance required a concentrated effort. By reflecting back with intentional efforts to identify thoughts and emotions during the performance, one can use the emotional information to improve future performance.

Wandering Chatter

The human mind's capacity to think will always wander away from the current task.



Mental skills help an individual isolate and regulate all the thoughts and emotions.

Science validates the average person speaks to themselves an average of 300 to 1,000 words a minute. Break this down into seconds, and it is easy to understand how 5 to 15 words or mental pictures a second can be a distraction to human performance.

Self-awareness skills and self-talk techniques improve awareness and directly impact human performance. It is human nature to reflect on life events and seek out the negative is always active, meaning the good boss is doing its job. Naturally, the negative bias randomly places words and mental pictures into an individual's head at an average rate of 5 to 15 times a second. Also doing its job, the bad boss automatically responds with a variety of emotions and stress hormones into the system. Wandering chatter and unregulated thoughts hinder personal performance.

The important lesson is to understand how fast the mind runs rampant. Through the prefrontal cortex and its ability to think is so fast, humans are led to believe it is a constant rattle, a bombarding cascade of too much and too many thoughts at one time. It is this amazing ability of the mind to run so fast that it becomes a help or hindrance for humans to perform at high levels.

The mental skill of concentration is applied by simply being self-aware of and sorting chatter, repeating (concentrating or focusing) on those that enhance the individual's clarity of thought and decision-making for the desired task.

Optimal Performance

Optimal performance can be achieved by aligning the correct chatter or thoughts and concentrating on those thoughts to create the right emotional state for the given task. The mental skill of concentration helps to improve an individual's brain-to-body sync.

Simply put, the brain constantly runs a variety of different bodily functions and systems, including heart rate, breathing patterns, and blood pressure. When the brain gets distracted and starts concentrating on things that are irrelevant for the task or have negative associations, internal conditions become less than optimal and human performance is hindered.

Mental skills can create the proper brain-to-body sync for a task by releasing the correct dose of stress hormones into the body based on mental and emotional states in the brain. The key to understanding optimal performance is recognizing that the current chatter determines the appropriate level of stress hormones for the immediate task.

By practicing self-awareness competencies and regulating the chatter, top performers learn to take inventory on good and bad thoughts and feelings. This good and bad list is defined by how the individual's body responds when supporting a task. These are also known as good and bad stressors, anything that causes a state of strain or tension.

State of Frazzle

If the unregulated negative bias in an individual's chatter continues, fear, doubt, and worry become the dominant emotional response. This, in turn, creates a state of anxiety experts call *frazzle*—a feeling of complete exhaustion. Frazzle or performance



anxiety is most often the cause of poor behavior and sub-standard performance.

An individual's unregulated chatter will constantly set off the emotional alarm releasing too much or too little stress hormones for the task. These stress hormones, which are intended to serve the individual's ability to perform at high levels, become a corrosive and toxic bath from being released too much and too often as a result of the negative chatter. This overload of performance anxiety is known as a *state of frazzle*, ultimately resulting in an emotional highjack.

3. Mental Skill of Organization

Mental skills and abilities can be learned over time with self-discipline. In the same way, a strong work ethic will reap rewards with physical strength training and conditioning, one will develop their mental skills with mental strength and conditioning.

The mental skill of organization is one's ability to inventory specific thoughts and specific emotions—the act of creating a detailed mental menu of words and mental pictures on demand.

The hard work of mental and emotional strength training reaps the reward when an individual must perform at high levels while handling pressure and difficult situations, overcoming conflicts, and solving problems. The rewards actually result in improved decision-making and clarity of thought, reflecting the individual's ability to keep cool and calm while moving toward an objective.

Practicing the mental skill of organization is a critical stepping-stone in an individual's development process. Once one becomes aware of the chatter, self-awareness skills and competencies improve. As self-awareness to chatter improves, self-regulation is the next skill set and competency. In flexing the mental skill of organization, top performers learn to file distracting thoughts (bad chatter) away for inventory later.

Through the conscious act of regulating and taking inventory, some words and mental pictures will be removed from an individual's dialogue completely. An individual learns to judge and evaluate words and mental pictures based on personal and professional core values. The individual learns to organize thoughts and feelings that support a variety of roles and specific tasks throughout the day.

Recovery is Key

The act of taking inventory of positive thoughts and emotions prepares an individual for the natural automated responses from the amygdala, the source of an emotional highjack. Developing mental and emotional skills is not about prevention of distracting thoughts or disruptive emotions that hinder performance, but rather recovery strategies once an individual becomes self-aware of their own mental and emotional states. Engaging new mental and emotional skill sets to

achieve optimal performance in the moment is essential to the recovery process.

Frazzle and an amygdala highjack are a part of human nature and can hinder an individual's performance for the most routine to a complex task. The performance objective is not about controlling or preventing negative thoughts or feelings from hindering personal performance. It is impossible to "control" one's thoughts or emotions; these are two involuntary bodily functions that require new skills and abilities to become aware of and regulate. In the field of human performance and error reduction, both thoughts and emotions will remain a consistent threat.

The performance goal when practicing the mental skill of organization is to proactively develop recovery strategies using the new skills of self-awareness and self-regulation. Developing the mental skill of communication develops the mental skill of concentration, knowing the right words and pictures to repeat when the mind drifts.

This process strengthens an individual's ability to organize complimentary words and store them in the mental menu. A pre-defined list of words and mental pictures helps an individual to identify healthy supportive emotions in stressful times. These five mental skills and abilities will empower an individual to recover quicker from negative chatter and the emotional state of frazzle.

Human Performance Improvement

When considering all the processes and interdisciplinary actions involved with human performance improvement, mental and emotional skill deficiencies contribute specifically to human errors and performance gaps. Identifying and providing appropriate intervention tools to improve mental and emotional skill deficiencies directly improves and sustain personal performance.



Taking time each day routinely and thinking about dominant thoughts and emotions develops the Emotional Intelligence skills for self-awareness, self-regulation, and self-motivation.



As it pertains to people, all improvement in human performance begins with new words and mental pictures of how an individual wants to perform a task. The inner world comes first in human performance improvement strategies. Top performers take time to define new levels of self-awareness and self-regulation competencies through visualization techniques. Whereas reflective thought exercises bridge the gap from past performance, visualization exercises bridge the gap to future performance.

Disciplined Chatter

Mental skill development requires a daily self-disciplined approach in the same way a healthy nutritional diet requires planning, preparation, and daily actions. This self-discipline is necessary to regulate inner chatter, as the five mental skills provide a critical framework for an individual to get started.

Most people are unaware of the impact thoughts and emotions have on personal performance. Rather than developing a healthy diet and health plan, they make decisions that lead to unhealthy activities. Developing these five mental skills into a mental health plan requires much of the same self-disciplines.

Rather than working on the chatter and developing these mental skills, too often people turn on the radio, pull up the new phone app, or switch on the television or computer. Humans naturally seek the path of least resistance, seeking entertainment or anything to keep the mind from hanging out with itself.

Whichever chatter an individual chooses to allow to dominate the mind—true or false, organized or unorganized, healthy or unhealthy—influences the individual's perception to the outside. If the dominant message in the chatter is unrelated to what is required for the unique individual in that moment of time and task, personal performance is hindered.

Top performers learn to turn off the internal distractions and place inventory on personal chatter; in essence, learn to have quality conversations with oneself.

4. Mental Skill of Discrimination

Individuals performing at high levels learn to prioritize chatter. The mental skill of discrimination is the ability to prioritize the words and mental pictures for the task at hand, on demand. For example, if an individual is sitting in a classroom or meeting, the human mind will tend to drift off or begin to wander—chatter not in line with the current situation or circumstance will distract the individual.

The mental skill of discrimination is engaged when the individual realizes the mind has wandered and consciously prioritizes chatter to bring the focal point back to the present situation. A good exercise to develop the mental skill of discrimination is to reflect on a time when there was an overabundance of information coming in, and one had to step back and slow things down and prioritize all the information in order to focus.

To improve personal performance an individual must learn to consciously decide what is most important and prioritize thoughts accordingly; this engages the mental skill of discrimination. For top performers, this practice is a constant and continual mental activity knowing there is continual competition between good chatter and bad chatter. In other words, human nature allows for bad chatter to be a constant threat and good chatter must always be on guard, requiring awareness and regulation strategies. Discriminating between good chatter and bad chatter becomes a daily mental exercise improving critical decision-making and clarity of thought.

"80/20" Rule

The 80/20 Rule is a simple self-checking technique that improves personal performance as an ongoing process for self-guided learning and development. The best way to understand the 80/20 Rule is in the form of a question: what are the few things (20%) that make the biggest difference (80%)?

The 80/20 Rule engages the mental skill of discrimination by focusing the individual's attention on the few words and mental pictures required for the optimal state of performance.

If an individual has the desire to improve personal performance, the 80/20 Rule applies the mental skill of discrimination by searching for the unique set of words and mental pictures for each individual. The few (20%) words and mental pictures that make the biggest difference (80%) in performance is not the same for every human being; everyone is unique, and everyone needs to seek and learn self to better understand the development process for growing this mental skill and applying to personal performance.

The mental skill and ability to discriminate is when an individual prioritizes the words and mental pictures to improve personal performance in the moment. The ability to regulate the self-talk and ask oneself, "what do I need to be thinking right now" and seek out the appropriate response is crucial to mastering this skill set.

5. Mental Skill of Innovation

The fifth and final mental skill is known as innovation. This mental skill enables an individual the ability to be creative and think of new responses based on selecting new chatter on demand. Innovation directly impacts the creative centers of the brain for solving problems, adapting to change, and resolving conflicts.

Remember the illustration of the two brains, the thinking brain and the feeling brain. Once the feeling brain begins to highjack the thinking brain, creativity, and ability to innovate are hindered and limited. For



most people, it is difficult to be creative under pressure. When an individual is in an unregulated emotional state of frazzle, the ability to learn and adapt is hindered. The brain functions an individual needs the most to make creative and adaptive decision-making become the least accessible.

Performance Coordinates

A person's *x* and *y* coordinates are two specific aspects of emotion required for optimal performance levels. "What am I thinking?" is the *x* coordinate and "what am I feeling?" is the *y* coordinate. The answers to these two questions or coordinates directly relate to an individual's clarity of thought and decision-making in the moment, specifically in times of high stress or pressure. Performance coordinates are as unique to each individual as a fingerprint.

In theory, when an individual seeks answers to these two questions the brain is forced to disengage in the current chatter that may be distracting or disruptive. When the individual asks these two questions, blood flow increases back to the thinking brain (good boss). This promotes recovery strategies for clarity of thought and decision-making.

Because thinking is automatic for humans, human error and acting without conscious is inevitable. However, if one is seeking optimal performance, effort is required to find ways to avoid making errors, catch errors that occur, and mitigate consequences of errors. Human effort is now based on these mental and emotional skills and competencies. Error reduction tools such as self-checking and peer evaluations can be greatly enhanced by asking simple questions to identify mental and emotional states during task execution.

Performance Enhancement Questions

Practicing the mental skill of innovation requires reflective thought exercises that engage an individual to visualize poor performance correctly to support the desired outcome or objective in the future. This improvement strategy disciplines an individual's chatter and emphasizes focus on achievement rather than failure. To develop the mental skill of innovation the individual routinely reflects on performance asking two specific questions: what did I do right and what can I do better?

Question #1: What did I do right?

Recognition for positive performance is a basic human desire. Top performing individuals learn to creatively evaluate personal performance and re-affirm the right thoughts, feelings, and actions—giving themselves a pat on the back. One self-checking technique an individual can engage in developing this mental skill of innovation is to simply ask the question of *what did I do right?* Seeking the answers based on a new framework of thoughts and emotions during specific actions from past event.

Imagine the streaming effect of dominos falling into place. A design unfolds when each domino is perfectly aligned, and the first domino is knocked over. The dominos fall one right after the other all synchronized for the task; consider each individual domino a single step or subtask in an individual's own performance. For corrective actions and bridging performance gaps, an individual must see each domino as three parts: a mental state, emotional state, and physical state. All three must be in-sync for the domino to fall in place and connect with the next step or domino.

The mental skill of innovation applied is when an individual intentionally reviews past performance visualizing what was most favorable for each step. The measure is on what thoughts and emotions created the right actions or behavior (performance) each step of the way. This step is critically important for learning and adapting new levels of performance in the future and directly impacts conditioning the habit loop over time.

The habit loop is another contributing factor in human performance and error reduction techniques. Humans have good and bad habits that hinder personal best. The habit loop involves another complex design of the nervous system, consisting of three elements: a cue, a routine, and a reward. Understanding these elements can help an individual learn how to change bad habits or form better ones to improve personal performance. Frequently engaging this question develops the self-awareness to gather new personal information during routine or complex tasks.

The question what did I do wrong is the natural, often dominant and negative thought that appears in the human mind. The natural rattle of an unorganized, unregulated chatter hinders personal performance and an individual's technical competency. An individual learning to practice this reflective technique strengthens the mental skill of innovation while creating favorable emotional states directly related to self-esteem and self-confidence.

Question #2: What can I do better?

Continuous reflection requires proper technique in order to improve personal performance. Through disciplined self-talk and asking short, specific questions revealing the do-better, the brain improves blood flow, which in turn enhances the thinking brain (good boss). This mental state accesses the individual's creative brain centers, allowing for more adaptive, flexible responses under pressure.

An individual routinely regulating chatter for dobetter activities learns to mitigate the brain's natural negative bias. By asking the question what can I do better and intentionally seeking the answers in the form of thoughts, feelings, and actions create the proper learning modes for the brain to remember and recall, specifically under pressure or during complex tasks.

The mental skill of innovation is an attitude of striving to achieve and overcome the highest mountaintop realizing it is not obtainable. An individual practicing the skill of innovation routinely will regulate chatter by evaluating personal performance and asking the simple question, what can I do better? This, in turn, creates healthy continuous dialogue for personal improvement and skill development as illustrated in the emotional intelligence competency map.

CONCLUSION

History teaches a time when thoughts and emotions were not a part of the workday; the dominate message from management was that workers should not think or express feelings, but simply do the work. Often referred to as a "command and control" environment, this business model was at one time the best way to organize several different people all working together for a common cause and objective.

Today, thoughts and emotions are at the root cause for best in class, top achievers, and those that lead others in exceptional times. Based on advances in modern technology, we are now able to identify, measure, and develop new mental and emotional skill sets. These critical skills enable an individual to perform their job tasks and responsibilities; when further developed these same mental and emotional skill sets improve personal performance and leadership influence.

Additionally, how people interact at home and at work has become a big part of human performance. An individual learns that self and all that goes on inside is the one critical agenda when it comes to personal performance, but also mitigating all the different thoughts and emotions that come from our personal and professional interactions.

