Brain Dent Alert: Downshifting; Stress—Good, Bad, and Hidden

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Chapters 8 & 9

Point to Ponder

The concept of downshifting appears to fit with both what is now known about the triune nature of the human brain, and what can continually be seen happening in instructional settings and in daily living. Learning failure results when threat shuts down the brain. The neocortex functions fully only when one feels secure.

— Leslie A. Hart in Human Brain and Human Learning

Point to Ponder

Please! That is not your mind speaking, it’s the foam of churned feelings and has no meaning.

— Nero Wolfe, speaking to his daughter in Fer-de-Lance, by Rex Stout

Remember when?
Automatic Transmission

Metaphorically, the three brain layers—action, emotional, thinking—can be compared to gears in a vehicle with an automatic transmission.

When you're engaged in activities that honor your brain bent, think of yourself as cruising along in third gear.

But if you encounter something fearful, uncomfortable, traumatic, stressful, or anxiety producing, your brain's tendency will be to downshift. Automatically.

An Example

You and a friend are having a deep conversation in the car. Suddenly, in your rearview mirror, you notice a patrol car, lights flashing. Your brain downshifts instantly.

An Example

Your friend, continuing the conversation, says, "So, what do you think about that idea?"

Your brain having downshifted, you have no idea about that idea or even what you were just talking about!

An Example

When you pull off the road and the officer shows up at your car door, you'll be lucky to remember your name!

Downshifting

That's downshifting. An unexpected jerk, a sudden process of slowing down or halting cognitive abilities.

A focusing of attention and energy toward one of the two lower layers as the brain perceives a lack of safety. You may even feel a sense of helplessness or fatigue.

When survival matters, downshifting is both helpful—and unhelpful.
Researchers

Downshifting is a mixed metaphor that addresses a natural brain phenomenon. Some researchers actually use that word (e.g., Leslie Hart, Marie Barron, and Joseph Chilton Pearce). Robert Sylwester prefers to use reflective versus reflexive. I like the word "downshifting." It is an easy way to wrap one's hands around the concept.

Action-Brain Layer

Action-brain layer or 1st gear (reptilian brain) – houses automatic/instinctual behaviors, protective reflexes, survival mechanisms, and automatic responses to stressors.

Action-Brain Layer 1st gear

Action-Brain Layer

Brain Stem and the Cerebellum
- Processes present tense only
- Perceives positives (subconscious)
- Tends to dominate when threat is perceived
- Houses stress responses (fight-flight, tend-befriend, conserve-withdraw)
- Provides an awareness of the outer sensory world

Action-Brain Layer 1st gear

Emotional-Brain Layer

Emotional-brain layer or 2nd gear (mammalian brain) – includes the pain/pleasure center, generates emotional impulses, and contains selected memory functions.

Emotional-Brain Layer 2nd gear
Emotional-Brain Layer

- Limbic System Structures
  - Perceives present and past tenses
  - Perceives positives (subconscious thoughts)
  - Processes the sense of smell directly
  - Directs immune system function
  - Processes information 80,000 times faster than the thinking brain layer

Emotional-Brain Layer 2nd gear

Thinking-Brain Layer

- Thinking-brain layer or 3rd gear (neocortex and prefrontal cortex) - orchestrates conscious rational/logical thought, provides for a variety of executive functions, and is associated with the processing/expressing of emotions

Thinking-Brain Layer 3rd gear

Thinking-Brain Layer

- Pre-frontal cortex contributes executive aspects (e.g., abstract thought, metaphor, planning, goal-setting, paying attention, conscience, willpower, morality)
- Limitless potential for processing concepts
- Uses all forms of language with complex analysis
- Can process 125 bits of information and 40 bits of human speech per second

Thinking-Brain Layer 3rd gear

Consequences of Downshifting

Even a good thing taken to the extreme can lose some of its helpfulness. When downshifting is activated frequently or sustained for a prolonged period, learning and development can be impaired in children; and thinking, learning, and decision-making can become faulty in adults. Communication can be hindered if the sender, the receiver, or both are in a downshifted state.
### Consequences of Downshifting

When the brain is downshifted, especially if it has been in that state for any length of time, the individual may:

- Fail to recall what was heard (e.g., may recall less than 15% of what was told during a crisis)
- Be prevented from learning
- React more automatically (reflexively, instinctually) and be resistant to change
- Relapse into old learned beliefs and patterns of behaviors regardless of available information
- Experience a reduced ability to take environmental and internal cues into consideration
- Be less able to engage in complex intellectual tasks
- Fail to see interconnectedness or interrelations
- Find it difficult to be creative, brainstorm options, or generate solutions for new problems
- Become phobic (e.g., specific stimuli trigger inappropriate or exaggerated responses)
- Accelerate the process of aging
- Experience altered immune system function and brain chemistry

### Strategies for Dealing with Personal Downshifting

1. **Identify symptoms you tend to exhibit when you are downshifted:**
   - sighing, defending, stonewalling, arguing, crying, yelling, avoiding, pouting, whining, fighting, bullying, jumping to conclusions, taking things personally, overreacting, isolating, overcomplying, overconforming
   
   **Note:** Sadness may be an appropriate response to a situation of loss and therefore may not necessarily indicate downshifting

2. **Identify factors that have triggered your downshifting in the past** -- so you can be better prepared in the future:
   - Trauma or crisis...
   - Illness, fatigue, over-work...
   - Perceived negative experiences ...
   - What others have said to / about you...

3. **Identify patterns of behavior you tend to exhibit related to your downshifting:**
   - Offender, victim, or other?
   - When and where?
   - Appropriate or not?
   - Length of time downshifted?

4. **Upshift using a pre-planned strategy:**
   - Think of something funny and choose to laugh
   - Engage in positive self-talk
   - Sing, meditate, pray, recite a mantra
   - Exercise (especially cross-lateral)
   - Access your support system
Strategies for Dealing with Personal Downshifting

Upshift using a pre-planned strategy cont.

- Picture yourself in a safe place
- Contract with yourself to "deal with it later in the day"
- Engage in a task over which you can have some control
- Identify something to appreciate (it is physiologically impossible to be fearful and appreciative at the same time)

Strategies for Dealing with Downshifting in Others

- If communication isn't going well, think downshifting
- Your behavior may trigger another brain to downshift
- The degree of downshifting reflects the degree of threat perceived by that other brain

Strategies for Dealing with Downshifting in Others

You cannot upshift another brain—you may be able to do something to help the other brain feel safer, which might allow it to upshift on its own.

Ask yourself: "What can I do to help enhance that brain's sense of safety?"

Here are a few suggestions:

- Speak Affirmingly:
  - Use short, positive, present tense words and statements so all brain layers can perceive the information
  - Say what you want to have happen as if it's already occurring; avoid saying what you do not want to have happen

- Exhibit Congruence:
  - Avoid sending mixed messages
  - The message content of the communication is conveyed by:
    - Words - 7% to 10%
    - Tonality / inflection - 15% to 38%
    - Body language - 55% to 75%

- Avoid Asking "Why?":
  - In the English language the word why can be perceived as stressful or threatening. It can trigger thoughts of Uh-oh, I did it wrong or I'm afraid he/she will be mad at me because I did such and such or because I did not do such and such or I don't recall that answer or I wonder if I'm in trouble!
  - That can cause sufficient anxiety and fear in the brain to trigger downshifting.
Strategies for Dealing with Downshifting in Others

Try phrases such as:

- What did you expect to happen?
- When you made this choice, what did you think might happen?
- Did you think about what you wanted to have happen?
- Do you think a different choice could have resulted in different outcomes?
- What could you do differently next time, or in the future?

Strategies for Dealing with Downshifting in Others

Avoid Arguing:

Each brain is unique and will never perceive anything exactly the same as your brain does.

If the other brain is anxious due to the arguing, it may downshift even further or stay downshifted longer.

Strategies for Dealing with Downshifting in Others

Implement Any or All of the Following:

- If the other individual is sitting down, sit down when conversing in order to be at his/her eye level.
- Solicit the other person's input.
- Communicate in a reflexive style (e.g., mirror the other person's words and communication style, whether Auditory, Visual, or Kinesthetic).
- Encourage the other person to participate in making decisions.
- Allow the other person to choose between two or more options.

Strategies for Dealing with Downshifting in Others

Provide Options:

The brain tends to feel safer when it can:

- Make a choice, however simple.
- Exercise some control over something.

Consciously set up the environment to provide as many options as possible.

Strategies for Dealing with Downshifting in Others

Use Humor:

- Mirthful laughter helps promote comfort, relaxation, and a sense of safety.
- Laugh at yourself and at the vagaries of life.
- Avoid laughing at others.
- It is difficult to remain upset when brains are laughing together.

Downshifting

Remember: downshifting is a natural and valuable brain phenomenon. But when used frequently and/or inappropriately it can have undesirable consequences. Used appropriately it can help you be “safer” in everyday living.

Since your brain is your bottom line, use it by design for success.
Stress

You can think of inappropriate downshifting as a type of stress, another potential dent.

The way I see it, I can choose to let stress control my life or allow life to control my stress.

— Sandy Setterberg
Flight attendant U.S. Airways

Stress: The Good, The Bad — and the Good?

Stress is part of living. In fact, the absence of stress is death! When your brain and body can no longer respond to demands for change, you are history. Until then, there is a great deal you can do in relation to the stressors in your life.

More than half a century ago, Dr. Hans Selye, of Montreal’s McGill University borrowed the word stress from the fields of physics and engineering and applied them to human beings.

Three categories of stress:
- Eustress
- Misstress
- Distress

How you handle this trio in your everyday living can make all the difference in the world to your brain.
Eustress — A Beneficial BENT

The word eustress comes from the Greek root eu, meaning good. Eustress can be thought of as desirable stress — stimuli that helps you:

- concentrate
- focus
- perform
- work at peak efficiency.

It can help you:

- feel more mentally alert and focused
- be more creative
- successfully master your challenges
- motivate you to discover new options

Eustress can take the form of:

- delight
- excitement
- challenge
- innovative creativity

Examples:

- marriage
- childbirth
- a promotion
- vacation
- continued education
- exercise

People sometimes forget that, although they may consciously choose an activity or a course of action, to the degree that this requires the body to adjust to a change, they will experience some stress.

Distress — A Negative DENT

The word distress comes from the Latin root dis, meaning not desirable. Distress can be defined as:

- unpleasant
- negative
- damaging stress — stimuli that, over time, can interfere with your ability to concentrate, focus, perform, and work at peak efficiency

Distress is a relative concept. Impact can vary according to:

- gender
- cultural conditioning
- sensory-system preference
- extroversion/introversion ratio
- innate brain lead

to name just a few.

One person’s pleasure may be another’s poison.
Distress ― A Negative DENT

Unmanaged distress can kill—brain cells. In a state of distress, there is no true relaxation between one stressful episode and the next. The systems that stimulate the production of adrenalin, noradrenalin, and cortisone are stuck in the on position, a scenario often linked with mental, emotional, and physical ailments.

Examples:
- bankruptcy
- accidents
- divorce
- miscarriage
- burglary to home or office
- layoffs
- fires
- bereavement
- recession
- terrorism

Misstress ― Beware This Hidden DENT

We define the word misstress as hidden or unrecognized stress—stimuli and factors that most people tend to mislabel if they identify them at all. The prefix “mis” is an abbreviation of the Latin root minus meaning less.

The greatest toll may result from misstress, those minor annoyances that seem to happen rather frequently. Examples:
- Getting stuck in traffic (not again) or long commutes
- Having a flat tire (is AAA paid up?)
- Trying to lose those few extra pounds over and over again (big sigh here)
- Misplacing the car keys (where DID I leave them this time?)

Think of misstress as a whole host of hassles often considered relatively unimportant. More examples:
- Lack of sufficient sleep
- Not enough physical exercise
- Negative mindset and/or negative self-talk styles
- Lack of nutritional food or poor eating habits
- Dehydration due to insufficient water intake
- Lack of exercise
- Spending long periods of time sitting in front of a computer without regular breaks.

The word stressed is desserts spelled backwards. More often than not, one leads to the other!
Stress: The Good, The Bad — and the Good?

All stressors interact with the brain, the nucleus of your being. Messages move out from the brain through the endocrine system to the immune system and back to the brain. Stress affects your brain! Studies have shown that chronic stress can destroy brain cells.

Stress and Memory

Successful experiences may take the form of highly emotional events or, when overwhelming, overtly traumatizing experiences. The degree of stress will have a direct effect on memory: Small amounts have a neutral effect on memory; moderate amounts facilitate memory; and large amounts impair memory.

—Daniel Siegel, The Developing Mind

Break the Stress Cycle

Use a combination of activities to interrupt the stress cycle. These can include exercise, meditation, massage, a change of activities, or even humor. Following are three examples:

The Quieting Reflex:
1. Smile to counter facial tension and alter the brain’s neurochemistry
2. Tell your brain and body to be alert but calm and even amused
3. Breath deeply and easily to increase the level of oxygen at the cellular level
4. Exhale and allow your body muscles to go limp as you feel warmth flowing through your body to your toes
5. Resume your normal activity

Implement The QR — Charles F. Strobel, MD, author of QR, The Quieting Reflex, designed this strategy to break the stress cycle. As soon as you recognize any tension, respond using the QR.

Live the 20:80 Rule — It has been said that stressors generally interact with the brain in a predictable ratio sometimes referred to as another application of the 20:80 Rule.
The 20:80 Rule

The impetus for the 20:80 Rule has been attributed to Epictetus, a Greek Stoic Philosopher born c. 55AD. He believed it is not what happens to you, but how you react to it that matters.

The modern version of the 20:80 Rule briefly stated says:

- 20% of the negative effect to your brain and body is due to the stressor
- 80% of the adverse effect is due to what you think about the stressor and the credibility you give to it

Therefore, while you may be unable to control the 20%, you can have control over the 80% because you create the spin you put on the event.

Break the Stress Cycle

Develop a Positive Mindset — A positive mindset involves giving yourself permission to succeed, regularly rehearsing positive behaviors and creating specific action plans for stress management.

Learn to speak to yourself in short, positive, present-tense phrases:

Way to go! Nice job! I'm doing it successfully. I thought I could! Watch this! Followed by laughter!

Many people sabotage themselves and contribute to their own problems because of the way they think. If you have an enemy outpost of negativity inside your mind, get rid of it.

Never allow yourself to talk in a hopeless, discouraged way. If you do, you will lose much. By looking at appearances, and complaining when difficulties and pressure come, you give evidence of a sickly, enfeebled faith. Talk and act as if your faith was invincible. The Lord is rich in resources; He owns the world. Look heavenward in faith. Look to Him who has light and power and efficiency.

—Christ's Object Lessons page 147
Break the Stress Cycle

Does that mean you can choose never to have a negative thought again? Not likely. You can choose to recognize negative thoughts quickly, however, and change them immediately.

Break the Stress Cycle

Practice mindful thanksgiving. Affirm what is positive in your life. As the old proverb states, a grateful heart nourishes the bones.

Fool — Hardy or Stress — Hardy?

Some people seem to be less affected by stressful situations and seem more resilient in adjusting to change. This quality has been dubbed stress — hardiness.

Fool — Hardy or Stress — Hardy?

Several characteristics have been identified in those who have been judged to be stress—hardy. When you become one of the so-called hardy people, you can cope quite successfully with even high-stress situations because you have modified your attitude and are living The Three Cs.

The Three C’s

Control
You perceive you have a measure of power over your life and are realistic in your perception of what can be controlled. You know you cannot control every detail in life (e.g., every customer’s personality, etc.), but you do know where you do have control and are less likely to become ill under stress.

The Three C’s

Challenge
You tend to perceive change as a challenge rather than a threat and enjoy the challenge. Change is inevitable. You are alert for opportunities created by sudden changes. When change is viewed as a threat, stress levels rise. By viewing change as a challenge, you may be able to minimize some of the negative side-effects often associated with stress.
The Three C’s

Commitment

A strong sense of commitment allows you to see problems through without being too disrupted by stress. You reduce your risk of suffering from stress by doing what you really want to do at least some of the time. You make time to engage in activities that promote creativity and reflect your own uniqueness.

Point To Ponder

Every good mood you experience is your decision, and so is every bad mood. Everything you do in anger is your decision, and so is everything you do with love and compassion.

― Ralph Marston

Point To Ponder

A cheerful look brings joy to the heart, and good news gives health to the bones.

― Proverbs 15:30 NIV