STRESS-POINT TRAINING INTRODUCTION

These exercises build attention and memory skills regardless of age, work or level of education. Everyone benefits, even people with learning and reading disabilities, emotional problems or brain injury. With practice and patience, lasting changes take place in the chemistry and physiology of attention. Practice with others or alone, daily or less often. Make this an after school or evening families fun activity. Teachers can teach individual students or groups to attend with more power. Therapists can help patients think more clearly and help them recover lost physical and mental abilities.

FINDING THE RIGHT TASK

Effective training requires that task difficulty matches attention skills. Easy tasks give poor feedback because attention lapses don't cause errors. Easy, boring tasks decrease attentiveness, slow thinking, and shrink attention span. Overly difficult tasks disrupt attention and can cause anxiety, anger, frustration, impulsiveness, avoidance, and thwart the processes we are trying to build. Appropriate tasks, challenging but within your grasp, improve attention, confidence, pleasure and create a desire for more. Search for the challenge that matches your ability, one that takes several tries to get right and work for more than barely succeeding. Don't just squeak by. Ask yourself: can I do it well, for a long time, with distractions and pressure, with creativity. The goal is the art of mastery -- certainty, ease, fluency, and flow. Learning how to find just the right level of difficulty when attempting a new challenge is a key element for success.

TIMING AND RHYTHM

Attention suffers when timing is off. Learning problems, reading blocks, or poor performance in sports or arts are often due to faults in the brain's timing mechanisms. If the mind moves faster than the eyes, for example, reading suffers. Rhythmic learning organizes the brain, quiets negative emotions and coordinates the senses. This simple demonstration is the essence of the attention and memory training approach --

TRY THIS EXERCISE

Clap your hands in a steady rhythm, one or two claps per second. Can you keep the beat? If not, use a metronome or get a helper to clap with you. You can use a trampoline for this exercise. If so clap at the bottom of each bounce. When you can sustain a steady clap rhythm, read these numbers out loud in time with your claps.

7 4 3 9 5 6 2 9 4 7 2 3 8 6 1 4

Some do this easily on their first attempt but others have to work at it. If you can't get fluent success after several attempts, make the task easier. Shorten it by using fewer digits (eight or less) or slow it down by naming the numbers on every other beat. For a harder task: up the speed; read it backwards; lengthen it by going forwards and back three times without stopping. For more complexity try saying only the even numbers while clapping on the odds; adding one to each number; adding the numbers together as you go; or try saying the alphabet or spelling a word, alternating between the next letter between each number.

Finding the weak links in your attention and habitual negative learning patterns provides an opportunity for self-directed change. Do you reverse, skip or call out wrong numbers? Are you continually distracted by thoughts such as: "this is easy," or 'I'll never make it through?' Do you falter at the start or lose focus just before the end? Can you bring your attention back when your mind wonders or do you tighten, get anxious, and stop? Do you repeat the same type of error? Can you catch yourself or must someone point your errors out?

RECOVERY OF ATTENTION

The exercises give immediate feedback when attention wonders. Attention problems stay hidden unless responses are actively expressed. Most education is passive. For example, everyone can tell if your mind wonders when you read out-loud. Read silently to yourself and pages can go by while you daydream. The eyes move but the brain is out to lunch and you can't remember what you've just read. Quick effective recovery of attention is the key to improving learning ability. Catching yourself as you make an error (recovery) is the best way to improve.

POST-FAILURE FAILURE SYNDROME

Making a simple mistake can bring immediate frustration and with it a drop in performance and avoidance. Mistakes happen at the stress-point when challenges exceed ability. Everyone fails but some people can turn up their fire while others have failure phobia or 'post-failure failure syndrome.' Their anxiety about failing shrinks attention causing failure even on tasks they could do easily a moment before. Repeated mistakes are just information, part of the process of learning. It's not such a big deal to make a mistake. Usually the mistake is in picking too hard a task and thinking it will be easy. Learn to think of errors as merely feedback.

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VARIOUS IMAGES TO BROADEN THE PURPOSE OF STRESS-POINT TRAINING

“...during the next 30 years neuroscience and neurotechnology will produce a “neurosociety” in which “you will eventually be able to continuously shape your emotional stability, sharpen your mental clarity, and extend your most desirable sensory states until they become your dominant experience of reality.”

Vision allows us to be active participants in our world, continually moving through it and molding it to our needs and desires.

We are working to change brain function: systems of memory, perceptual categorization, reasoning, planning, evaluation of alternatives, decision-making, voluntary direction of attention, and more generally, rational control of action.

Visual Naming Speed

Fluent reading -- Fluency is not an end in itself but a critical gateway to comprehension. Fluent reading frees resources to process meaning.

For students to develop fluency, they must:
Perform the task or demonstrate the skill accurately, and
Perform the preskills of the task quickly and effortlessly.

Once accurate, fluency develops through plentiful opportunities for practice in which the task can be performed with a high rate of success.

The five questions:
Can I do it?
Can I do it well?
Can I do it well for as long as I like whenever I try?
Can I accept change?
Can I be creative and expressive as I do it? (Flow state: altered sense of time; one-pointedness of mind, action and awareness merge; loss of self-consciousness, irrelevant stimuli disappear from consciousness, worries and concerns are temporarily suspended; a sense of effortless control; experience becomes worth doing for its own sake; transcendence of ego boundaries, a sense of growth and of being part of some greater entity)

From William James Talks to Teachers http://www.des.emory.edu/mfp/james.html

The teacher’s prime concern should be to ingrain into the pupil that assortment of habits that shall be most useful to him throughout life. To break up bad associations or wrong ones, to build others in, to guide the associative tendencies into the most fruitful channels, is the educator’s principal task.

We must make automatic and habitual, as early as possible, as many useful actions as we can, and as carefully guard against the growing into ways that are likely to be disadvantageous. The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work.

A teacher “must start with the native tendencies, and enlarge the pupil’s entire passive and active experience. He must ply him with new objects and stimuli, and make him taste the fruits of his behavior, so that now that whole context of remembered experience is what shall determine his conduct when he gets the stimulus, and not the bare immediate impression.
SELF-EFFICACY BELIEFS (Albert Bandura)

Self-efficacy is the belief (whether or not accurate) that one is capable of performing in a competent manner to attain a particular goal, that one has the capabilities to execute the courses of actions required to succeed. Self-efficacy relates to a person’s perception of their ability to reach a goal, whereas self-esteem relates to a person’s sense of self-worth.

One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. Self-efficacy beliefs are cognitions that determine whether an effort will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. Self-efficacy influences the challenges that people take on and how high they set their goals. People with high self-efficacy -- that is, those who believe they can perform well -- are more likely to view difficult tasks as something to be mastered rather than something to be avoided, whereas a person with low self-efficacy would harbor feelings of hopelessness.

People will be more inclined to take on a task if they believe they can succeed. People generally avoid tasks where their self-efficacy is low, but will engage in tasks where their self-efficacy is high. People with a self-efficacy significantly beyond their actual ability often overestimate their ability to complete tasks, which can lead to difficulties. On the other hand, people with a self-efficacy significantly lower than their ability are unlikely to grow and expand their skills.

People with high self-efficacy in a task are more likely to make more of an effort, and persist longer, than those with low efficacy.[6] The stronger the self-efficacy or mastery expectations, the more active the efforts.

Low self-efficacy can lead people to believe tasks are harder than they actually are.[8] This often results in poor task planning, as well as increased stress. Observational evidence shows that people become erratic and unpredictable when engaging in a task in which they have low self-efficacy. On the other hand, people with high self-efficacy often take a wider overview of a task in order to take the best route of action. People with high self-efficacy are shown to be encouraged by obstacles to make a greater effort.

Self-efficacy also affects how people respond to failure. A person with a high self-efficacy will attribute the failure to external factors, where a person with low self-efficacy will attribute failure to low ability.

"Mastery experience" is the most important factor deciding a person's self-efficacy. Simply put: success raises self-efficacy, failure lowers it.
REFERENCE CARD

**Gross Motor**

**Hand/Arm Work**
- Mirror image circles (up the middle)
- Parallel circles to Right
- Parallel circles to Left
- Lazy Eights
- Arms extend/flex
  - knuckleknuckle/palmpalm
- One arm/hand circles/other twists

**Foot/Leg Work**
- a) Apart/Together (jumpingJack)
- b) Front/Back (walk in place)
- c) Front/Back + center bounce
- d) In/Out + cross feet alternate
- e) Leg twist flex/extend Pigeon/Duck
  - toetoe/heelheel
- 2 bounces Rt -jump over- 2 bounces Lt

**Combined Hand/Arm with Foot/Leg Movements**
Do Foot/Leg moves a) – e) doing each of the Hand/Arm movement
Do opposite twists – arms twist in (knuckle-knuckel) while legs twist out (heel-heel)

**Knee Drop/Seat Drop**

**Timing:** Clap Every, Clap Every Second, Clap Every Third Bounce

**Reading Charts Words Sentences**
Read Forward Right to Left
Read Backward Left to Right
Read Top to Bottom
Read Bottom to Top
First and Last
Substitute:
- silent bounce, clap, number sequence, word (spell or list), or jump-turn
  - On the black, odd even
  - On the vowel
  - On the ducks
  - On the space
  - On whatever you choose
Do Without Looking
BIG
ATE
FUNNY GREAT
JUSTICE JUST ICE
CALIFORNIA MISSISSIPPI
THIS GIRL CAN JUMP WELL
WHEN WILL WE HAVE FUN
WE LOVE TO SAIL ON
A SEA OF BLUE
THE PLAYERS ATE A TASTY
LUNCH IN WASHINGTON
WITH A GOOD OLD FRIEND
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ARROW CHART INSTRUCTIONS

General procedure: Say up (or down, right or left) while moving the arms in the up direction. The word is said and arms move simultaneously, not arms first and then say the direction or say and then move. Both occur simultaneously.

The arms move together with the palms facing in the direction of the named movement. When moving up, the palms face up. Palms face the floor on downward movement. Palms face left on left movements with the left hand positioned above the right. The opposite for movements to the right, palms right, right hand higher. Practice few times to be sure it’s correct. Arms move as if under water, smoothly without jerking.

First, try it slowly. Then work for the best speed – as fast as possible without an error. Find the best speed and try to maintain a consistent or regular tempo. As the tasks are made more complex, the best speed should be slower to prevent error. It’s not a speed contest but an awareness contest. The goal is to develop a sense of what you need to do to feel confidence and flow as you train your attention to learn fluent performance in the face of complexity. Doing this to a metronome beat, bouncing on a gym ball or jumping on a trampoline can aid this process but doing it with a regulated, self-generated tempo is the highest skill.

The arrows are to be read in sequence, one arrow at a time. Start from the upper-left arrow and proceed as in normal reading. Vary the chart by turning it bottom to top or sideways. The arrows can be read from the bottom-right in backwards order or up or down the columns vertically. Simplify the more difficult tasks by reducing the tempo or doing just one line. Work for automatic performance and to succeed three times in a row without error. Add speed as you get better.

TASKS
1) Say the same and move the same. Say and move up for up arrows.
2) Say and move opposite. Say and move down for up arrows.
3) Say the same but move opposite direction. Say up and move arms down
4) Say the opposite but move the same. Say down but move up.
5) Mixed instruction. Alternate by doing 3) on one line and 4) on the next. Alternate every 3) & 4) other or every third arrow.

Notice how attention comes and goes, how it feels when the instruction suddenly falls out of consciousness. It helps to repeat the instruction (say the same, move the opposite) before starting. The rule is to stop and start again at the beginning when an error is committed.
ARROW CHART
CLAP-TURN SEQUENCES

Impulsive people start to act before they are ready and without knowing what to do next. No ready-set-go, just go. No looking left and right before crossing. They lack the self-control to wait for the right time, then try to do everything all at once or just freeze in confusion. Are they anxious because they are impulsive or impulsive because they are anxious? We don’t know, but off-balance, frustrated and vulnerable to negative emotions their performance and ability to learn new things suffers.

The Clap-Turn Sequences train self-direction (the opposite of impulsivity) along with directionality and working memory. Self-direction relates to motor planning, a sequence of ready-to-go, ready-to-flow future acts, performed with a purpose or goal. Anxiety distorts time and forces premature action. Self-direction is a trainable brain function. Directionality (knowing left from right) should be instinctive, an automatic action performed correctly without having to think about it. Working memory is the capacity to have ready access to key information while executing an action plan without losing information necessary for successful outcome. Remembering the rules while playing the game, the grocery list, the chores or the directions while taking a journey. Knowing what to wear, what to bring, when to leave, where you are, where you’ve been, where you’re going, how to change course etc., are fundamental to survival and success.

BASIC EXERCISE
This is best done on a trampoline of any size. It can also be done jumping on the ground, on a thick, bouncy foam or jump roping. The game is played as follows:
After a few warm-up bounces to get ready, the trainer says "left" (or "right") in a loud distinct voice. It must be called out precisely at the bottom of the bounce. The natural thing is to turn right away but don’t turn yet. Instead, bounce one more time facing the original direction. (This is called the “control.”) After the control bounce, turn 90° to face left and bounce in the new direction waiting for the next left or right to start the next sequence. The difficulty is to remember to turn after the control bounce rather than before.

The sequence is very specific:
1st BOUNCE- call out the command “left” precisely on the bounce;
2nd BOUNCE – one bounce without turning –
   Then (between bounces 2 and 3) turn 90° to face to the left;
3rd BOUNCE still facing the new direction and continue bouncing until the next "right" (or another "left") begins the next sequence.

Some individuals need to be shown as well as told what to do. The left and right commands are given in random order. The trainer can make it easier by telling the upcoming direction in advance, reminding about the control bounce and saying, “Ready,” just before giving the command. These supports are gradually withdrawn. The goal is to do ten correctly in a row without turning in the wrong direction or turning before rather than after the control bounce. Some people can’t stop themselves from turning early. They don’t realize that they made an error even when asked. Gradually they start to notice and soon learn to recover after flinching When they can learn to wait they’ve really learned an important skill.
The next step is for the jumper calls “left” or “right” to initiate the sequence. This is much more difficult because must choose which direction to say, decide when to say it, remember to speak clearly exactly on the rebound, and then to carry out the sequence.

The number of times in a row without error can be increased to twenty or more. Or you can make a contest to set new records. Remember to keep it fun and motivating by following stress-point principles.
ADVANCED EXERCISES

TURN THE OPPOSITE – This is the same as above but now saying, “Left,” means turning 90° to the right. This requires more attention by the trainer as well as the jumper.

COUNTING - The game is played as above but the player must count after each turn. As they land after making the first turn they say: “One.” (The silent bounce comes before, not after the turn. The count comes on the rebound immediately following the turn. “Two,” is called on the rebound after the turn for the second sequence and so on up to ten.) For example: jump, jump, jump saying left, control bounce, turn 90° left, say, "One." Jump, jump, jump-say, "Right," control jump, turn right, jump-say, "Two," jump, . . . . . . . .jump, jump-say the nth left or right, control jump, turn for the nth time, jump-say, "n." The player must remember the correct number and say it on the appropriate jump. Remember to demonstrate when necessary.

CLAP-TURN’ are much more difficult. Two new commands: "Clap-left," and “Clap-right," are added to the mix. “Clapleft,” is said quickly as one word timed to the rebound as before. The jumper then takes the control jump, turns 90° left, and makes a single hand clap as they land. On the very next bounce following the clap the count is said. For example, on successive bounces: “Clapright”, control jump, turn right, clap, “one” and continue on. The goal is ten correctly saying all of the possible directives: "Left," "Right," "Clap-left," or “Clap-right" in random order. What makes this difficult is that the jump following the turn sometimes requires a number and other times a clap. This takes self-control and self-awareness.

SPELL YOUR NAME - To make the task even more complex, the jumper spells their name (or another word) on the control bounce. The control bounce has so far been silent so saying a letter radically changes the timing and is really difficult. Remembering two sequences, counting and spelling, is also a big increase in working memory. Added onto the other sequences described so far: turning opposite, counting, clap-turn and spell your name (Raymond for me), would be like this: bounce, bounce, bounce -- “Clapleft,” “R,” 90° right turn, Clap, and “One,” on successive bounces. Then after a few bounces call, “Right,” “a,” 90° left turn, “Two.” and so on until all the letters of Raymond are spelled. Some people can’t learn this unless you force them to stop between each sequence to tell the trainer what their next command, letter, and number will be, and then rehearse it Other words can be also be tried such as sports terms or the names of other players on the team or famous sports figures.

CONTINUING MATH PROBLEM – Can be added at any of the levels described above but only after the jumper masters that level. Adding the continual math problem really strengthens their attention. It works as follows: A function (plus, minus, times, or divide by) followed by a number is called out several times during the game (e.g., “plus 3”). The patient proceeds through the left and right turn sequence as above and calls out the answer at the earliest convenient time. The number 5 is usually the start number so that if “plus 3” is called out, the answer is 8. This is a continuing problem. This means that 8 would now be the starting number for the next problem. Calling: "Minus 6," (from 8) would equal “2” and 2 would now be the starting number for the next problem. Following that: “Divide by 2,” needs “1” as the answer and 1 is the start number for the next, and so on.

TIMING - When to give the problem is important because some points in the sequence are much easier than at other times. It is much harder, for example, when calling the problem just as the player is calling “left” or “right” then just after they’ve made the turn. Don’t always ask the problem at the same point in the process but keep the stress-point principle. Work for ten correct turns in a row.

SELF-DIRECTION - Players can also call out the math problem themselves and then answer it after some delay.

These jump-turn sequences were developed as I worked with very advanced piano students. They are very difficult even for them. I use it for all of my patients and take them to their highest level set it aside and come back to it several sessions later to see how much they’ve retained and how easy it is to get them back to speed and then try to take them to more demanding levels. Any task can be made more and more complex by adding other complications depending upon the jumper’s ability and the trainer’s imagination.
SELF-DIRECTION CHART
Relax. Keep breathing. Don't stare.

This exercise teaches anticipation -- doing one thing while preparing for the next. It is best to start with a helper who names the objects. The goal is to always pause for a second before moving your eyes, to move to the correct target and to not move the eyes while thinking of the next target. A partner can also check for accuracy and timing. The next level of difficulty is self-direction -- the trainee chooses an object, names it, pauses and then moves directly there. The player must learn to tell when a mistake was made and what the mistake was (moved to soon, took eye off, went to wrong place).

1. Look at the star in the center of the page.
2. Without moving your eyes, choose one of the animals (eg., fish). Say it.
3. Pause one second, then move your eyes directly to the fish.
4. Without moving your eyes (keep looking at the fish), name a different animal.
5. Pause before moving your eyes to that animal.
6. Continue. The goal is to get ten in a row without error. If this is too many, aim for two in a row, then five and more. As the pressure mounts, so does the anxiety and the chance of impulsive loss of control -- moving too soon; move before naming; go to the wrong object; move eye while waiting for next instruction.

7. Move to the animal in the opposite direction to the one you name -- go to the fish when you say frog, for example.
8. Try with other charts.

Don't forget to breathe and pause for a second before moving your eyes. Work for ease and total control.

More complex exercises
- Ask questions during the exercise -- “What color is a crow?” or “5 + 2 = ?” What day of the week is today.” The point at which the question can be during the move, in the pause between the naming and the moving, as the object is being named, during the mental choosing process. Repeat several times during the exercise.

- Imagine a new map, e.g., up, down, left and right. Say “up”, for example, pause for a second then move to the up position. You can also use: north, south, east and west; numbers; fruits; vegetables; boy or girl names; . . .

- Move opposite for one set and the not opposite for the other. For instance, say fish and move to frog, but say right and move to right (bear).

- Rotate one set clockwise by a quarter of a turn. This means fish will be where horse was originally. Now move to new positions of the figures. Try this imagining the rotation: imagine the chart rotated half a turn (imagine the fish is now where the frog is and the bear is where the horse is). Move to the imagined location.

- Try several sets at once by imagining two or all three charts superimposed, One move normal, another move opposite, one rotated 90°, etc.

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