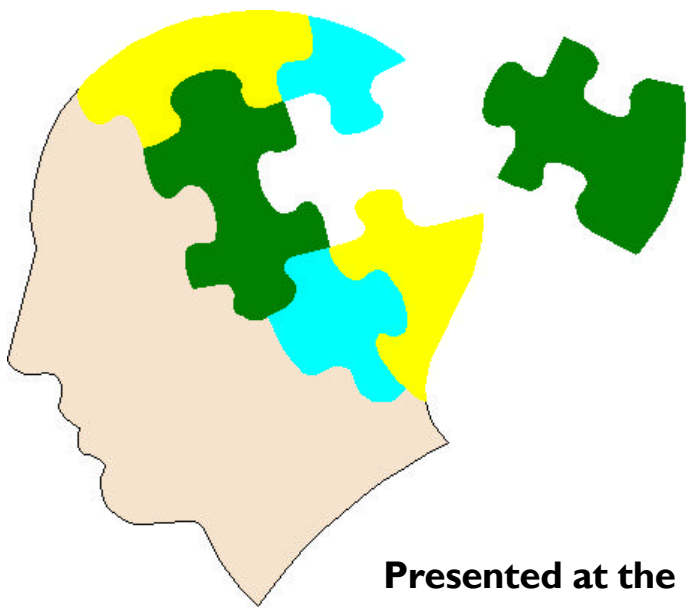


Neuropsychotherapy After Neurologic Impairment: ReBuilding the Shattered Self



HANDOUT

For Accompanying Slides

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Holistic Habit Retraining Model: Promoting Rehabilitation Through Progressive Goal Achievement

By Mike Martelli, Ph.D.

Although the brain cells present when original learning takes place, and the stored knowledge that sustains important learned habits, can be erased by injury or illness, the ability to re-learn is seldom destroyed. Importantly, human beings are the greatest learning organisms ever to roam the earth. While animals are controlled by instincts, human behavior is driven by complex learning and the establishing of very complex habits. From the time of birth, almost everything that humans do is learned. Everyday functioning becomes increasingly sophisticated through the construction of a complex sequence of complex habits which are built on top of more basic habits. The complex behaviors that make up the average humans everyday behaviors are performed efficiently and automatically because of a hierarchy of habits.

Through converting repeated behaviors into habits, complex behaviors are performed automatically, freeing up concentration, energy and effort for other tasks. However, some of even the most basic habits are weakened or erased, everyday abilities and routines can be seriously disrupted and efficiency lost. What was once automatic and effortless can require the same effort it took before efficient ways of performing any of the components of daily activities were learned. Fortunately, even if very basic and important learned habits are erased, newly learned habits can be developed as replacements.

Importantly, we know what is required for both learning and relearning. Further, we are discovering that the most important variables relating to how much can be relearned, and how many habits can be replaced, are, in fact, our attitudes and expectancies. These attitudes can promote and guide re-establishment of new habits or thwart them.

If we think we can't learn, if we think only the old learning/ way of knowing how to do things are sufficient, or if we think that only children can or should learn, then we will undermine relearning. Many attitudes can undermine relearning and these represent rehabilitation poisons.

The essential ingredients for learning / relearning can be summarized as the **3 P's**: (1) **P**lan; (2) **P**ractice; (3) **P**romoting attitude.

- The (1) **P**lan is a strategy or design for stepwise progress toward a desired outcome. Most plans are based on task analyses, or breaking seemingly complex tasks down into simple component steps, and proceeding in a list wise fashion. Clearly, the more specific, concrete, and obvious, the more likely the plan will work.
- (2) **P**ractice, or repetition is the cement for learning which makes complex and cumbersome and boring tasks more automatic and effortless. With practice and repetition, even complex tasks become automatic and habitual. That is, a habit, or automatic robots, performs the tasks for us without special effort, energy, concentration, memory, and so on.
- (3) A **P**romoting or facilitative attitude provides the motivation that fuels persistence and mobilization of energy necessary for accomplishment of a progressive series of desirable but challenging goals.

Importantly, the greatest obstacle to learning or relearning is the redirection of energy away from goal directed activity and toward debilitating activity. Some of the most potent relearning or rehabilitation debilitating attitudes, or poisons, are depression, anger and resentment, feelings of victimization, fear, and inertia. These take our energy away from relearning and put it somewhere else. Relearning is challenging, but can become impossible in the presence of significant internal obstacles.

In an attempt to summarize the adaptive, facultative, or rehabilitation promoting attitudes characterized by rehabilitation patients who have accomplished remarkable progress despite insurmountable odds, the "Five Commandments of Rehabilitation" has been devised. These commandments serve as a prescription for rehabilitation achievement.

Notably, the envisioning of a progressively more desirable future is the guiding principle, or magnet, that pulls persons to their goals. To the extent that one focuses on the vision of a desirable future, breaks progress down into small, progressive steps, and develops facilitative habits, incremental movement toward desired goals can be expected. Importantly, patterns of interpreting events, and expectancies about how things will turn out, represent predictions of the future. Habitual patterns of expecting failure or dissatisfaction, or mistreatment, and habitual patterns of becoming depressed, or angry, or fearful, etc., are debilitating habits that help drag persons toward failure. In contrast, the single best remedy, or antidote, is a graduated successes, self-esteem habit. This facilitative habit is broken down and presented in the Commandments of Rehabilitation. Making accurate comparisons, learning new ways to do old things, building one self up and employing positive self-coaching, and viewing rehabilitation as a series of small steps each requiring celebration, are some of the important prescriptions offered by "the commandments".

The antidotes included in the "Five Commandments of Rehabilitation" are the medicines that interrupt the rehabilitation poison cycles. Energy will multiply in a cyclical fashion. If it proceeds in a negative direction, more and more energy will be robbed from the healing reserve, wasted in poisonous attitudes and made unavailable for relearning and accomplishment. For example, a depression habit in response to physical losses can reduce activity and hence relearning, which will lead to more depression by depletion of brain chemicals that protect mood, and, in turn, lead to poorer progress and more reason to be depressed.

Antidotes like the "Five Commandments", a positive vision of a gradually improved future, and planning and practicing compensatory behavioral self-control strategies serve to protect the healing reserve by inoculating persons against depression, anger, and destructive emotion. This ensures that energy and motivation will be available so that desired goals can persistently pursued, with each step of progress adding new energy, hope and effort for the next step. With the addition of task analyses and scheduling that help promote routines, energy is turned toward protecting your healing reserve, taking your antidotes, and letting your goals pull you toward a more desirable future. Remember, anything that is consistently repeated will become a habit. Therefore, promote the attitude and activity routines will produce facilitative habits that turn your energy toward protecting your attitudes, taking your antidotes, and letting your healing reserve pull you like a magnet toward your goals.

The Five Commandments of Rehabilitation

Commandment 1: Thou Shall Make Only Accurate Comparisons. Thou shall not make false comparisons. That is, it is only fair (and adaptive) to compare oneself to persons with similar injuries, illnesses, disabilities and stress. It is unfair to compare ourselves to others without similar challenges, or to ourselves before we were challenged, as this makes us look poor by comparison. It is fair, however, to compare ourselves to others of similar injury, challenge, age, etc., as this comparison allows us to accurately measure ourselves.

Commandment 2: Thou Shall Learn New Ways to Do Old Things.

Learning new ways, or finding another way to do desired tasks, vs. giving up & feeling hopeless because the old way doesn't work, is the key to Challenging obstacles and overcoming them.

...Overcome Thinking that the old way is the best way (i.e., Stinking Thinking)

Commandment 3: Thou Shall Not Beat Thyself Up...Instead, Thou Shall

Build Thyself Up! We clearly understand that when we have a physical injury, such as a broken leg, getting mad, yelling at, or hitting (i.e., beating up) the leg only delays recovery, increases symptoms and pain, and makes us and the leg function worse. We know that pampering the leg, massaging it and coaxing it along gently & patiently will help it recover. Unfortunately, we too often forget that our brains are similar. An injured brain will perform poorly when we get mad with it, or get frustrated. Instead, understanding it, pampering it, being patient, using pacing & coaxing it along in a supportive way will help you function your best, and help your recovery and

rehabilitation. Talking to ourselves in supportive and understanding ways (vs. getting mad at ourselves for being injured) and coaxing things out gently is a good way of building ourselves up in order to face the challenges of rehabilitation. Rewarding ourselves for efforts and each small step of progress, despite tremendous obstacles & challenges, is the best way to build ourselves up!

...Child & Spouse Abuse are recognized as illegal and immoral....Self Abuse is just as bad!

Commandment 4: Thou Shall View Progress as a Series of Small Steps.

Rehab is appropriately viewed One Step At a Time - by focusing on the gains over where we were when we were one step behind where we are now, we can focus on (and celebrate) the Graduated Successes and feelings of accomplishment (despite giant obstacles) which will leave us feeling proud and hopeful and enable us to focus and reach the next small step ahead, and make progress through the many small steps necessary to make substantial progress. Focusing on our current gains and small steps of progress (compared to where we were earlier in rehab and when we were at our worst) will build hope and a sense of challenge and growing victories (versus comparing ourselves to before the injury, which only makes us feel sad & depressed.

Inch by Inch & It's a Cinch. Meter by Meter, Life is Sweeter.

Commandment 5: Thou Shall Expect Challenge & Strive to Beat IT.

By Converting Complaint (*I don't want*) To Challenge (*I want*), We Can Make Our Future Through Our Vision and Driving Thoughts. We will actively shape our future by focusing on a vision of hope, challenge, control & satisfaction. By changing our focus from complaint and feelings of victimization & helplessness & pessimism, we can avoid giving up and giving in to a pessimistic prophecy of dissatisfaction and doom. (cf. **"Thou Shall not Pretend to Have a Contract Guaranteeing Freedom from Injury, Disease, Illness or Unfair circumstances or Significant Challenge or Stress!"**)

Catastrophic Reactions, the Propagation Imperative & 5 Commandments of Rehabilitation

Mike Martelli, Ph.D.

Concussion Care Centre of Virginia and Tree of Life

Early after injury, the discovery of losses of accustomed abilities, especially ability to perform simple physical movements or express intentions or needs through speech, can be overwhelmingly devastating to the affected individual. Sudden loss of function in a limb, inability to stand, inability to control one's bowels or express a need through speech or understand another person's words can produce a powerful reaction characterized by extreme despair & distress.

This response has been observed after stroke, brain injury and other neurologic insults for a very long time and has been labeled a "catastrophic reaction". The acute despair that is experienced usually lessens with time, and usually fairly quickly, although a fair amount of distress can remain. As the closeness to injury passes, the distress becomes much less visible. However, based on observations of patients over long periods of time, one can argue that although lessened, this reaction can continue to operate on persons long after injury and even forever.

From the perspective of a habit retraining model of brain injury rehabilitation, brain injury recovery is conceptualized in terms of replacing lost habits through an incremental rebuilding process. The 3 P model for habit retraining based brain injury rehabilitation stipulates that this process requires a well designed

- ◆ **Plan** (usually based on a thorough task analysis),
- ◆ **Practice**, repeated and consistent, over many trials and months, and finally,
- ◆ **Promotional attitude** maintenance that facilitates and shapes continued practice, incremental (baby step) expectancies, self-reinforcement for incremental gains, and resistance to such attitude poisons as significant anger, frustration, depression, fear, pessimism, feelings of victimization, self pity and, importantly, the kind of low grade chronic catastrophic reaction that is left over from the early days after injury.

Clearly, this kind of left over reaction, now less visible and more hidden, can continue to exert the kind of despair that contaminates progress generating hope and energy with feelings of powerlessness and helplessness and being overwhelmed by the challenge of coping with impairments. In fact, the remnants of early catastrophic reactions seem to frequently underly the negative, energy robbing emotions that deplete precious energy, effort positive goal directness and patience necessary for successful goal achievements.

Another important concept with regard to rehabilitation is the Propagation Imperative. Basically, this imperative dictates that every force and organism, good or bad, strives to expand and grow and take over.

For instance, have you ever heard of a fungus that only wants a little piece of an apple? Or a cancer that only wanted a little piece of skin and was satisfied?...or a sperm cell that had a headache?...or an army that wanted to give up territory? In traditional psychoanalytic theory, two basic forces in life are seen as battling for supremacy. These are Eros, or Life Instinct, and Thanatos, or Death Instinct.

Life for psychoanalysts is a struggle between life forces and energy versus death forces and energy. The two are seen as opposites engaged in a battle for life or death. Rehabilitation can be viewed using this conceptualization. Brain injuries and strokes represent death forces with an ultimate goal of progressing from disease and disability to death. Recovery, in contrast, strives for expanding health and life.

Importantly, energy multiplies in a cyclical fashion that feeds itself with increasing momentum. If it proceeds in a negative direction, more and more energy will be *robbed from the healing life reserve*, wasted in poisonous attitudes and made unavailable for relearning and accomplishment. For example, an anger or depression habit in response to physical losses can reduce activity and hence relearning, which will lead to more depression by depletion of brain chemicals that protect mood, and, in turn, lead to poorer progress and more reason to be depressed. Propagation means growth towards disease, disability and death, or the opposite of life.

The antidotes included in the "Five Commandments of Rehabilitation" should be considered life force medicines that interrupt rehabilitation poison growth cycles. Antidotes like the "Five Commandments", a positive vision of a gradually improved future, and planning and practicing compensatory strategies serve to protect the healing reserve by inoculating persons against depression, anger, and destructive emotion. This ensures that energy and motivation will be available so that desired life goals can persistently pursued, with each step of progress adding new energy, momentum, hope and effort for the next step.

With the utilization of incremental goals and achievements, energy is turned toward protecting the life forces and healing reserve, using the Rehabilitation Commandments as antidotes against poisonous attitudes, and letting positive, baby step life achievements pull survivors toward a more desirable future. Remember, anything that is consistently repeated will become a habit. Therefore, promote the attitude and activity routines that will produce facilitative habits that turn energy toward protecting attitudes, taking antidotes and letting your healing reserve pull survivors like a magnet toward their positive life goals.

Science, Sports and Rehabilitation Imperatives: Inspirational Stories for Survivors

...liberties take for enhanced effect!

Mike Martelli, Ph.D.

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A psychologist was conducting experiments on rats and stress. White rats that have been handled by humans are known to drown after about one hour when placed in buckets of water. The psychologist raised rats in two environments and found that rats raised in high stress, crowded conditions lived five minutes less than rats raised with low stress and lots of room. He found that the low stress rats lived 5 minutes longer. One day, while conducting experiments, the water leaked out of the buckets, and the rats escaped without dying. He repeated the experiment the next day with the same rats. During the experiment, he got called away on an emergency and forgot about the rats. The next day, when he returned, he remembered the rats and expected them to be dead. He got a screen to remove the dead rats, but when he got to the buckets, they were all still alive.

He repeated his experiment and found that rats die after about one hour in water if it is the first exposure. However, if they are placed in water and removed just before they drown, they can live and tread water almost indefinitely.

Compare Surviving near death from TBI!

Psychologists (relatives of the Marquis de Sade) have studied pain tolerance in humans for a many years. In one interesting series of studies, college students were paid good money (e.g., \$50.00) to place their hand in bags of ice and given one of two sets of instructions: (1) "Keep your hands in the ice for as long as you can and you will earn \$50.00"; 2) "Keep your hands in the ice for two minutes and you will earn \$50.00." Importantly, students paid \$ for keeping hands their hand in ice for two minutes are almost all able to do so, most report that it is not that hard, and some keep their hands in longer asking if they could earn even more money. In contrast, students asked to keep their hands in the ice for as long as possible generally pull their hands out well before two minutes, usually complain of great difficulty, often complain about suspected frostbite, sometimes even cry and say that the money is not worth it.

Note: Rehab requires **3 P's**: a good **P**lan for gradual improvement, **P**ractice & a **P**romotional attitude

It was the world series in the 1950's and the Yankees were playing. The Yankees were the best team in baseball. It was the seventh and final game of the world series, the series was tied, and the winner of this game would win the world series.

It was the bottom of the 9th inning, two men on, two men out and a count of 3 balls and 2 strikes. The Yankees were ahead by one run and Whitey Ford, the best pitcher in baseball, was on the mound. The pitch would determine the game. If Whitey struck the batter out, the Yankees

would win. If he let him hit a pitch, the Yankees would lose. Well just as Whitey got ready to wind up, the coach came running out to the mound yelling: "Whitey.. .whatever you do, don't throw a high fast ball...". Whitey, as he was letting go of the pitch, was overheard saying something that began with an "f" and rhymed with 'duck'. The batter hit a home run and the Yankees lost.

For many years, Whitey traveled the country doing motivational talks to businesses and athletes. He always repeated the World Series game story and admonished others against thinking about what they didn't want, as this could make it happen. Instead, he offered strong alternative advise that basically suggested "Always think about what you want, and program yourself to get it."

Your Vision Dictates Your Reality, Your Future, and Your Destiny!!!!

Personality & Coping with Brain Injury

Mike Martelli, Ph.D

Injuries do not occur in a vacuum or to people with uniform histories and personalities. Each of us possesses a unique history and style and strengths and weaknesses in coping. Each injury also brings a unique set of stressful demands. The more the demands of the injury conflict with an individual's personality and coping style, the greater the difficulty that can be expected in adapting to its residual effects.

The following table depicts several personality styles associated with difficulties in adaptation following brain and other injuries. Often, conflicts between personality style and injury cannot be overcome without special support. Psychological intervention can often help reduce such mismatches and bolster more adaptive coping styles and facilitate better adaptation to impairments following injury.

Vulnerable Personality Styles		
Style	Premorbid traits	Post morbid reactions
Overachiever	Sense of self derived from driven accomplishments, which is frequently accompanied by obsessive compulsive traits	Catastrophic reaction if drop in performance is perceived
Dependent	Excessive need to be taken care of, frequently leading to submissive behaviors and a fear of separation	Paralyzed by symptoms if critical erosion of independence occurs
Borderline personality traits	Pattern of instability in interpersonal relationships and self-image with fear of rejection or abandonment	Exacerbation of personality disorganization, including despair, panic, impulsivity, instability, and self-destructive acts
General Insecurity	Weak sense of self, which can include shame, guilt, and dependency needs	Magnification of symptoms

Grandiosity	Overestimation of abilities and inflating accomplishments, can include need for admiration and lack of empathy	Minimization or denial of symptoms. If failure results, crash of self-esteem can result in catastrophic reaction
Antisocial traits	Tendency to be manipulative or deceitful, temperamental, impulsive and irresponsible; lacks sensitivity to others	Possible exaggeration or malingering, increased risk taking, irritability, takes little responsibility for recovery
Hyperactivity	Restless, unfocused and sometimes disorganized	Attentional difficulties and impulsivity may be compounded; possible oppositional behavior
Depressed	Mood fluctuations dominated by negative affect	Increase of depressive symptoms, despondency
Histrionic style	Emotionality and attention seeking behavior	Dramatic flavor to symptom presentation; blaming behavior
Somatically focused	Preoccupation with physical well being, reluctance to accept psychological conflicts.	Endorsement of multiple premonitory physical symptoms intermixed with new or changing post morbid residua
Post traumatic stress disorder	Prior stressors produced an emotional reaction of fear and helplessness	Decreased coping ability, cumulative effect of traumas with exaggerated reaction to current crisis
from Ruff, RM, Mueller, J and Jurica, P. (1996). Estimation of Premorbid Functioning after traumatic brain injury. NeuroRehabilitation, 7, 39-53.		

The ingredients for rebuilding these automatic habits are the 3 P's: **Plan, Practice, Promotional Attitude**. The result is rehabilitation, or replacing obstacles with efficient habits that increase independence.

Task Analyses represent or parallel learning strategies that have been applied in rehabilitation of such habitual skills as walking and general activities of daily living (ADL's). For example, in retraining walking, Physical Therapists use a task analysis approach to retraining the steps involved in walking. Similarly, Occupational Therapists have long used checklists for sequencing steps for both retraining such activities of daily living as bathing and grooming and preparing meals, and/or as a compensatory strategy for persons with such cognitive problems as sequencing, memory, and executive deficits.

More recently, psychologists and rehabilitation psychologists have begun applying task analyses to retraining memory in amnesics (e.g., Baddely & Wilson, 1994) and also retraining functional living tasks in efforts at community reintegration of persons following Traumatic Brain Injury (e.g., Kreuzer & Wehman, 1991). Finally, Martelli (2002) has extended the advocacy of using Task Analytic approaches not only for various cognitive and behavioral abilities and even full daily routines, but even in designing individualized psychotherapeutic procedures for behavioral and emotional control.

Several samples of different types Task Analyses for various simple activities and routines (tasks, cleaning routines, daily schedules) are included below., while the accompanying slides includes examples of numerous task analytically derived treatment protocols for neurobehavioral deficits and integrated psychotherapeutic procedures.

Concussion Care Centre of Virginia
Medical Psychology / Rehab Neuropsychology Service

Task Analysis (TA) Protocol

TA's likely represent the most important and potent learning and rehabilitation strategy. TA involves breaking any task, chore or complex procedure into single, logically sequenced steps & recording the steps in a Checklist. The list can be checked off as completed. TA's always make task initiation, completion & follow through much easier. Performing a TA and generating a checklist can greatly improve ability to perform tasks in persons with limitations in memory, attention, energy, initiative, ability to sustain performance, organization, etc. Importantly, TA's are consistent with an errorless learning procedure and the method of diminishing cues, and represent a potentially effective learning procedure even in persons with profound memory impairment.

Task Analysis Checklists are also extremely useful in minimizing fatigue by reducing energy demands required by memory, planning, organization, prioritizing and deciding the sequences for a task. Task analyses are useful for both basic and complex behaviors. Once completed, task analyses allow performance of tasks or routines without assistance from others. Most importantly, through repetition and relearning, they re-establishing the efficient routines that make up normal everyday human activity. When the procedures assisted by Task Analyses are repeated consistently, they eventually become automatic [habits] and become as automatic and effortless as tying a shoe.

TA Samples: Single Tasks

Weekly Shopping Checklist

- MILK
- PAPER PLATES/CUPS
- HAND LOTION
- CHEESE
- NAPKINS
- CHAP STICK
- BUTTER
- PAPER TOWELS
- SHAMPOO
- EGGS
- PLASTIC WRAP
- AFTER SHAVE
- FRUIT
- TRASH BAGS

'Making A Bed' Cheatlist

- 1. Strip sheets, blankets and pillow cases
- 2. Put blankets and pillows on table
- 3. Take break
- 4. Get sheets and pillow cases from closet with Mom:
- 5. Put on fitted sheet
- 6. Put on top sheet, evening it out
- 7. Put on blankets and tuck in corners
- 8. Put pillow cases on pillow
- 9. Put comforter on bed

At This time doing

Vacuum Cleaning Task Analysis

1. Remove Cleaner and Parts From the Closet

___ canister ___ handle ___ floor brush ___ hand brush, ___ crevice

2. Unwind Power cord

3. Decide task

___ carpets
___ wood/vinyl floors
___ hand dusting
___ change dust bag

4. For Carpets

___ attach power handle
___ adjust carpet level on canister
___ turn on power
___ vacuum first in main traffic paths and then to the sides
___ turn off power

5. For Hard Floors

___ attach long handle brush
___ turn on power
___ vacuum from the center outward
___ turn off power
___ remove handle
___ clean brush head with vacuum power

6. For Hand Dusting

___ attach brush head to hand grip
___ turn on power
___ carefully dust all surfaces
___ turn off power
___ remove brush and clean it with vacuum handle

7. Change Dust Bag

___ when red light on canister comes on, or check monthly
___ when bag supply is low, purchase more at Sears. Bring code# to store.
___ open canister, carefully pull bag off attachment.
___ place dirty bag carefully into the trash
___ put new bag following reverse procedure

8. After Cleaning

___ recoil power cord into canister
___ store all parts in the closet

TA Sample: Daily Habits & Routines

AT's Initiative/Energy Retrainer

MORNING

- Wash Face
- Shave
- Apply medication to face if needed
- Brush Teeth
- Comb Hair
- Dress before "morning" nap
- Check finger nails & toe nails; trim when needed
- Check hair length and get a haircut as needed
- Shower and wash hair
- Perform an Activity/Chore (Choose from Menu)
- Check Schedule (e.g., M,W,F=Y; Tues=RedX)
- Check your appearance before leaving the house

AFTERNOON

- Fill Out Chart (Behavioral Activity Monitor & Points)
- Eat Lunch
- PowerRelaxationNap (PRN; Use Tape)
- Perform Activity or Chore (Choose from Menu)

EVENING

- Eat Dinner
- PRN (PowerRelaxationNap; Use Tape)
- Engage in Evening Activity
- 10:00pm: Complete Chart (Behavioral Activity Monitor & Tally Pts)
- Shower (if not done in am; or, again?)
- Watch TV News
- Prep for Bed (PJ's, Brush Teeth, etc.)
- BedTime

TA Samples: Cleaning Routines

TB's Bachelor Pad Cheat Sheet

I. CLEAN APARTMENT:

A. KITCHEN:

- CLEAN COUNTERTOPS DAILY
- SWEEP FLOOR DAILY
- ORGANIZE CABINETS & WIPE OFF ICE BOX
- EVERY WEDS MOP FLOOR & WIPE WALLS

B. BEDROOM

- FOLD CLOTHES OR HANG THEM UP AND STORE WHERE APPROPRIATE DAILY
- SWEEP AND VACUUM FLOORS WHEN APPROPRIATE OR PRN
- ORGANIZE COMPUTER AREA
- EMPTY CAT BOX DAILY
- MOP FLOORS WHEN APPROPRIATE PRN

C: DEN:

- SWEEP FLOOR
- VACUUM DAILY
- DUST DAILY
- STRAIGHTEN UP DAILY
- VACUUM UP
- MOP

D. LIVING ROOM

- DUST DAILY
- STRAIGHTEN UP DAILY
- SWEEP DAILY
- VACUUM ONCE A WEEK
- MOP ONCE A WEEK
- USE A CHECKLIST TO ENSURE DOING ALL

2) SET A CLEANING SCHEDULE:

- A: DAILY DUTIES DUST, SWEEP, STRAIGHTEN UP EACH ROOM
- B: EVERY WED MOP ALL ROOMS AFTER A IS COMPLETE

Single Doctor Chores CheatList

BATHROOM

- Dust around the Mirror and Light and Window, including the tops of the light and mirrors and window sills.
- Dust, with a damp cloth, around the windowsills, on the front of the blinds and the back (reverse sides by adjusting slats up and down), and along the tile division.

Tub and Toilet

- Wipe down the bathtub walls, going to the ceiling.
- Use cleanser and a brush to quickly wipe grime in the tub, and scum stains on the wall.
- Use soapy brush to quickly wash and rinse the inside shower curtain.
- With a soapy disinfectant, clean the toilet top, seat, behind the seat, and under the seat, along the walls to the floor
- Fold all tiles neatly on the tile racks

Floor

- Sweep the floor, including behind the toilet.
- Take out the rug and shake it off of the porch vigorously to remove dirt and dust.
- Remove and empty the garbage can.
- Mop the floor, using ammonia or Clorox and be sure to get behind the toilet.
- Use a rag to get the floor behind the toilet. Be sure to get in all the nooks and crannies along the edges of the floor, near the tub, etc.

LIVING ROOM

- Dust Furniture, including all shelves
- Use broom/duster to dust along all baseboards, window sills, ceiling molding & fireplace mantle
- Sweep and Vacuum Under Rugs
- Sweep and Vacuum Floors
- Vacuum the couch, love seat, and chair

KITCHEN

- Empty Trash Can
- Clean Top of Refrigerator and Microwave (Wet Soapy Cloth)
- Clean Inside Refrigerator and Microwave
- Wash Any Dishes and Clean Sink with Cleanser
- Clean Sink and Surrounding Countertop
- Sweep, and then Mop Floor

STUDY/OFFICE

...

DINING ROOM

BEDROOM

- Dust dresser tops, around doors and windows, and along baseboard and ceiling molding

LAUNDRY

- 9:00am Saturday: Take Clothes to Dry Cleaners before 10:am
- 5:00pm Saturday: Pick up clothes from Dry Cleaners and Arrange in closet
- 10:00am Sunday: Launder socks, underwear, bathroom towels, bed sheets, etc.
- 11:00am Sunday: Use Dryer & Fold & replace clothes when done. Hang Dry other clothes
- 11:20am Sunday: Steam mist to refresh any pants, shirts in need
- Sunday 9:00pm: Fold, hang, put away dry clothes

TA Samples: Daily Activity Trainers

DH's Daily Plan Checklist

MORNING

- Wake 6:00 AM to the Alarm Clock
- Take Medication
- Make Bed
- Shower
- Get Dressed
- Comb Hair
- Make and eat breakfast
- Clear, rinse, stack breakfast dishes (for pm wash)
- Wipe counter, table stovetop if needed
- Feed animals
- Brush teeth
- Gather items to take for the day
- Leave house at 7:00; go to Grandma's

REHAB CENTER

- Arrive between 7:30-8:00Am by van
- Follow Morning Schedule (In Rehab SchedBook)
- Lunch at 11:30, Take medication
- Follow Afternoon schedule
- Leave for Grandma's between 3:30-4:00

LATE AFTERNOON

- Dinner at Grandma's & take medication
- Home between 6:00-7:00PM
- Get mail, read & sort; put bills on microwave

EVENING: PREPARE FOR THE NEXT DAY

Laundry if needed (clothes, sheets,bath/kit towels)

- separate colors and whites
- set water level
- put soap in
- put clothes in
- turn on
- put clothes in dryer - set timer for 45min
- Listen for Buzzer - fold when dry
- PUT CLOTHES AWAY: Drawers/Closets

Kitchen

- wash dishes
- wipe off countertops, stovetop;
- rinse out sink
- sweep floor; mop if needed
- Change or empty cat litter if needed
- Vacuum Carpet/Rugs if needed
- Dust Furniture if needed

Bathroom if needed

- clean sink, tub, countertop
- put toilet cleaner in toilet
- clean floor, mirror
- wash toilet inside and out
- change towels, mat, washcloths
- Check off things needed on list; write out list when going shopping -Keep list in kitchen drawer
- Pick & lay out clothes to wear for the next day

Relax/Free Time

Prepare for Bed

- Floss/Brush Teeth
- Wash Face
- Shave
- Put away clothes (in hamper or drawer/closet)
- Set Alarm for 6:00AM

DG's Daily Checklist

MORNING

- _____ WAKE 5:30 AM TO THE ALARM CLOCK
- _____ TAKE A SHOWER-Wash and condition hair
- _____ SHAVE
- _____ PUT COLOGNE ON
- _____ COMB HAIR
- _____ PUT DEODORANT ON
- _____ BRUSH TEETH
- _____ GET DRESSED
- _____ MAKE BED
- _____ AT 6:00 AM TAKE MEDICATION
- _____ MAKE AND EAT BREAKFAST
- _____ CLEAR, RINSE, STACK BREAKFAST DISHES TO PREPARE FOR PM WASHING
- _____ WIPE COUNTER, TABLE, STOVE TOP IF NEEDED
- _____ BRUSH TEETH
- _____ GATHER ITEMS TO TAKE FOR DAY - including medication
- _____ AT 7:00 AM LEAVE HOUSE &GO TO PICK-UP POINT FOR SHELTERING ARMS

LOCK DOOR

REHAB CENTER

- _____ ARRIVE 8:00-8:30 AM BY THE VAN
- _____ FOLLOW MORNING SCHEDULE
- _____ LUNCH AT 11:30, TAKE MEDICATION
- _____ FOLLOW AFTERNOON SCHEDULE
- _____ LEAVE BETWEEN 3:30-4:00 PM TO GO TO THE PICK-UP POINT

LATE AFTERNOON

- _____ TAKE MEDICATION AT 6:00 PM
- _____ GET MAIL, READ & SORT, PUT BILLS IN APPT BOOK TO GIVE TO MY SEC.

BUSINESS RELATED ACTIVITIES

- _____ CHECK FOR MESSAGES
- _____ RETURN CALLS
- _____ MAKE DINNER

EVENING: PREPARE FOR THE NEXT DAY

KITCHEN

- _____ wash dishes
- _____ wipe off countertops, stovetop
- _____ rinse out sink
- _____ sweep floor, mop if needed
- _____ CHANGE /EMPTY TRASH CAN - If Needed
- _____ LAUNDRY IF NEEDED (CLOTHES, SHEETS BATHROOM& KITCHEN TOWELS)

- _____ separate colors and whites
- _____ set water level _____ put soap in
- _____ put clothes in _____ turn on
- _____ put clothes in dryer
- _____ fold when dry
- _____ PUT AWAY CLOTHES: DRAWERS/ CLOSET

VACUUM CARPET/RUGS IF NEEDED

DUST FURNITURE IF NEEDED

BATHROOM IF NEEDED

- _____ clean sink, tub, countertop
- _____ put toilet cleaner in toilet
- _____ clean floor
- _____ wash toilet inside and out
- _____ change towels, mat, washcloths
- _____ WATER PLANTS ON FRIDAY IF SOIL DRY
- _____ CHECK OFF THINGS NEEDED ON LISTS, WRITE OUT LIST WHEN GOING SHOPPING - KEEP LIST ON KITCHEN COUNTER
- _____ PICK AND LAY OUT CLOTHES TO WEAR FOR NEXT DAY
- _____ GATHER AND ORGANIZE ITEMS TO BRING FOR NEXT DAY

RELAX/FREE TIME

PREPARE FOR BED

- _____ BRUSH TEETH
- _____ WASH FACE
- _____ SHAVE
- _____ PUT AWAY CLOTHES (in hamper or drawer)

____ PUT ON SWEATS
____ SET ALARM FOR 5:30 AM

L's Automatic Habit Retrainer

MORNING

- Get up When Awakened**
- Take Morning Medications, with Water**
- Go to Bathroom**
 - Wash Face
- Go to Kitchen**
 - Drink Coffee and
 - Eat Breakfast
- Go back to Bathroom and Brush Teeth**
- Go to Bedroom and**
 - Remove Nightie
 - Put on Panties & Bra
 - Look on Bed and Put on Clothes that have Been Laid out
 - ___ Put Top on ___ Put Bottom on ___ Put Socks on ___ Put Shoes on
 - Get Hairbrush and Brush Hair (with help)
- Finish any Remaining Milk or Coffee**
- Get Memory Book**
 - Check for Pen - get one from kitchen table if needed
- Go To DayCenter**
 - Take Memory Logbook and Pen
 - Go out Front Door and Go To Car
 - Open Car Passenger Door
 - Get in Car
 - Shut Car Door
 - Leave for DayCenter
- Arrive at DayCenter**
 - Go to Activity Board
 - See Daily Scheduled Events
 - Participate in Activities
 - Write down in log book each activity

LUNCHTIME

- Eat Lunch at Lunchtime
- Take Medication with Lunch
- Participate in Afternoon Activities
- Write down in log book each activity

Leave DayCenter to Return Home

EVENING

- Listen to Music Tapes**
 - Go to Mom's Bedroom and Get Music Tapes from Table
 - Return to Rec Room
 - Choose and Play a Tape
 - When Finished Return Tapes to Mom's Bedroom Table
- Dinner Time**
 - ___ Go To Kitchen ___ Eat Dinner

Work on Memory Book and Complete for Day

BEDTIME

- Get Nightie From Bed**
- Go To Bathroom**
- Shower**
 - Take Clothes Off
 - ___ Turn Water On ___ Get in Shower
 - Pick up Soap
 - Put Soap on Scrubber
 - Wash Self with Scrubber
 - Wash Soap Off
 - Wet Hair Thoroughly
 - Put Shampoo On
 - Make Sure There is Plenty of Shampoo
 - Shampoo Hair Thoroughly
 - Rise Hair Thoroughly
 - Shut Water Off
 - ___ Get Towel ___ Dry Off
 - Get out of Shower
 - Put on Nightie
 - Put on Face Lotion and Rinse
 - Brush Teeth
- Go To Bedroom**
 - Get HairDryer from Bed
 - Plug in and Turn on
 - Take Evening Medication
 - Floss Teeth

Set Alarm Clock for 7:30

Go To Bed

Kevin's Daily Task Initiatives

MORNING

- 6:00am - Rise to Alarm
- Go To Bathroom - Toilet and Wash Hands
- Prepare Breakfast
- 6:30am - Eat
- Put Dishes in Sink and Clean Counter
- 7:00am - Dress
- Brush Teeth
- Brush Hair
- Pack Book bag - Lunch Tickets, Keys, Schedule
- 8:00am, Get Ready to Catch Bus

CIVITAN

- 8:30 - Bathroom - Toilet, Wash Hands
- 9:00 - Check Productivity
- 10:30 - Check Productivity
- 12:00 - Bathroom - Toilet, Wash Hands
- 12:30 - Eat Lunch
- 1:00 - Clean Up
- 2:00 - Bathroom - Toilet, Wash Hands
- 2:30 - Break
- 3:00 - Check Productivity
- 4:00 - Get Ready for Bus

EVENING

- 4:30 - Bathroom - Toilet, Wash Hands
- 4:45 - Prepare Dinner
- 5:00 - Eat Dinner
- 5:30 - Clean Table
- Prepare Lunch for Next Day
- Clean Dishes in Sink
- Clean Counter
- Bathroom - Shower and Clean Tub
- Dress
- Pick up Bedroom - Put Clean Clothes in Drawer/ Dirty Clothes in Basket
- Make Bed
- Free Time
- 9:30 - Prepare for Bed - Toilet, Wash Hands, Brush Teeth & SET ALARM
- 10:00 - In Bed - Sleep

Kevin's Special Duties
Automatic Habit/Energy/Initiative Retrainer

ONCE PER WEEK:

DAY/Time: _____

- Change Bed
- Vacuum Floor
- Dust
- Wash Kitchen Floor
- Wash Bathroom Floor
- Scrub Bath Tub
- Scrub Bathroom Sink
- Scrub Kitchen Sink

THREE WASH LOADS PER WEEK

DAYS/Time: _____

- Gather Clothes
- Take to Basement
- Sort Clothes
- Load Washer and Start
- Load Dryer
- Fold Clothes (with help)
- Take Clothes Upstairs (with help)
- Put Clothes in Drawer (with help)

Compensatory Habit Retraining is the use of strategies, self-talk, notes, log books, breaking things down into small steps, doing things one step at a time, using checklists, etc.

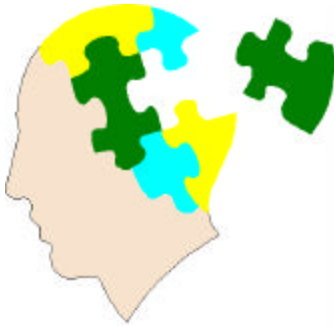
It feels like a pain in the Butt!

Not remembering, however, is a Colossal and Gigantic Pain in the Butt!

So be aware, When Habit Retraining Strategies become Habitualized, they become Automatic and produce good memory and other skills, and are No Longer a Pain in the Butt!

Think of Retraining with Strategies As a Temporary Pain in the Butt that is really an Opportunity to Get Rid of Permanent Gigantic Pains in the Butt.

A Protocol for Rebuilding Life and Self Satisfaction and Identity After Brain Injury



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Life Satisfaction and Self Esteem Protocol: Instructions

1. Complete Life Analysis Form (i.e., follow instructions to rate each area, Love, Work and Play, according to your current satisfaction level from 0 or couldn't be worse, to 10, or couldn't be better) to get a baseline starting point for comparison farther down the road, as you work toward and make progress in each area.
2. Complete Life Satisfaction & Self Esteem Form Ratings (i.e., follow instructions to rate each goal area according to your current satisfaction, from 0 to 10; when completed, divide the total score by the number of goals, to get your "Self Satisfaction") to get a baseline starting point for comparison farther down the road, as you work toward and make progress in each area.
3. Continue working on identifying strategies and objectives to work toward Each Goal on your Master Life Organizer Task List. On the small calendar on page 1, please mark with a checkmark for any day for which work is done toward a goal (if more than once in that day, put more than one check).

Life Analysis



- ▶ Family
- ▶ Community
- ▶ Religious Affiliation
- ▶ Romance

LOVE

Life & Self Satisfaction

PLAY

WORK

- ▶ Recreation
- ▶ Leisure
- ▶ Sports
- ▶ Hobbies
- ▶ HorsePlay

Procedure

▶1- Rate each Domain (Love, Work, Play) From 0 (Nothing, Zilch) Through 5 (Mixed) to 10 (Couldn't be better; Ideal)

▶2- Interpret Data: If Overall Score is 15 or Less, or if Score for either of your two highest categories is less than 6, then action is needed!

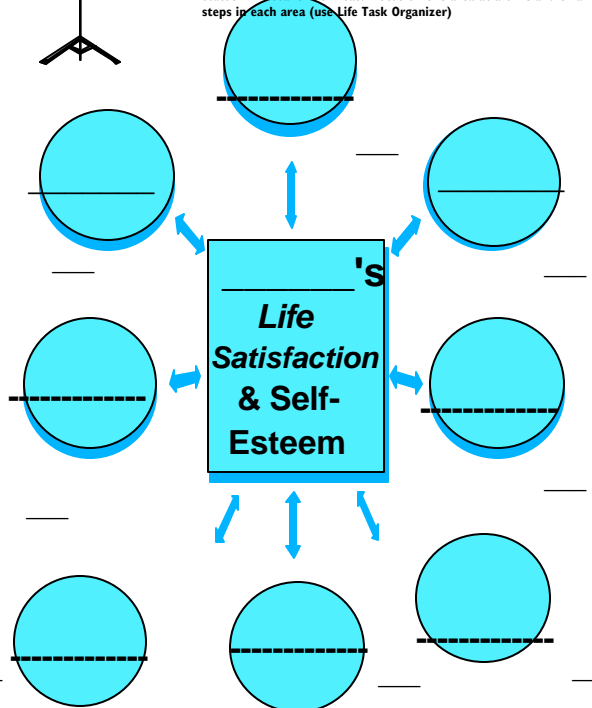
▶3- As needed, Employ the Rehab Imperative #4:

- ✔ First - Want to Be More Satisfied
- ✔ Second - Believe that You Can Be More Satisfied
- ✔ Third - Set a Series of Gradual, Incremental Goals so that You Can Increase Satisfaction in Small Steps!

- ▶ Therapy
- ▶ Hobbies
- ▶ Chores
- ▶ Job
- ▶ Career
- ▶ School
- ▶ Parenting
- ▶ Volunteering, etc.

Prescription for Achieving a Stable and Satisfactory Self / Identity

- ▶1) Devise a list of important Life Areas
- ▶2) Rate Satisfaction in each area (0=None; 10=Ideal)
- ▶3) Add Area Satisfaction Score. Divide by 8 for "Average Life Satisfaction"
- ▶4) Complete Goal Attainment Scales (GAS) with steps for Increasing Satisfaction in each Life Area
- ▶5) Devise Plans for Moving Toward a More Desirable Future & Improving Status in relevant Life Areas. Focus on one area at a time and small steps in each area (use Life Task Organizer)



Life Task Organizer/Analyzer Name: _____ Page: _____

Master Task List		M	T	W	Th	F	St	Sa
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

<i>Specific Task/Action List:</i> _____		No: _____
A		
B		
C		
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<i>Specific Task/Action List:</i> _____		No: _____
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Life Task Organizer/Analyzer Name: _____ Page: _____

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A Behavioral Protocol for Increasing Initiation, Decreasing Adynamia

By Mike Martelli, Ph.D

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Part 1: Task Analyses

Task Analysis involves breaking any task or chore or complex procedure into single, logically sequenced steps & recording the steps in a Checklist. The checklist allows checking off each step as it is completed. Task analyses always make task initiation, completion & follow through much easier. Performing a Task Analysis and generating a checklist can greatly improve ability to perform tasks in persons with limitations in memory, attention, energy, initiative, ability to sustain performance, organization, or almost any other difficulty.

Task Analysis Checklists are also extremely useful in minimizing fatigue by reducing the demand for, and energy consumed by reasoning and problem solving associated with planning, organizing & having to recall, make decisions & prioritize appropriate steps and sequences for a task. Task analyses are useful for both basic and complex behaviors. Most importantly, Task Analyses allow re-establishing the efficient routines that make up normal everyday human behavior and activity. When the procedures assisted by Task Analyses are repeated consistently, they eventually become automatic [habits] and become as natural as tying a shoe.

The ingredients for rebuilding these automatic habits are the 3 P's: Plan, Practice, Promotional Attitude (see additional handout). The result is *rehabilitation*, or removing obstacles to independence, and systematic achievement of incremental goals in desirable life areas.

Case Study #1:

Rehabilitation Loss of Initiative - Drive Following Anterior Communicating Artery Stroke

Background:

AT is 52yo high school principle who sustained an ACoA aneurysm that produced three week coma, inability to return to work. Premorbidly, AT worked 50 - 55 hours per week, and engaged in activities with children, yardwork, weekend activities, etc., and was reported to have a slightly above average activity level. He was seen 1.5 yrs post, about the time his wife was trying almost a last effort before divorce, because he wouldn't get out of bed most mornings before early afternoon, would return to bed after getting out and completing only one or two poorly executed grooming or washing tasks, and wouldn't shave, do nails, get haircut, etc. Patient complained of primary, pervasive lack of energy ("I got no get up and go...it's too hard...just let me sit/lay here a while...").

Intervention:

Amantadine was initiated, with only the slightest noticeable improvement. Psychostimulants produced side effects greater than energy / initiative increase.

A behavioral plan was initiated that included designing a Task Analysis (see below), represented as a poster check list. AT was cued by his wife, family, to follow steps, and showed almost immediate improvement with structured task analysis. Within three weeks, he was able to

complete the routine without fail and even without referring to the check list, although he did initially require some supervision with getting out of bed to start the routine. Eventually, he was able to set and respond consistently to the alarm and independently initiate and complete the routine.

Concurrently, a contingency management plan was adopted, involving patient rating difficulty of tasks preferred by wife, wife rating desirability of these, patient rating desirability of a few hard to identify motivating appetitive interest rewards (only a few could be identified at first: foot massage, home made chocolate cream pie, sex, etc; over a couple months, a list of approx. 20 was identified, with increased activity being associated with identifying new motivating rewards), wife rating difficulty of providing rewards, with results compiled into a simple multiplication calculation (i.e., desirability X difficulty on 1-10 rating scale) that produced points for performed activities that could be exchanged for appetitive desires.

Outcome:

Data are represented in a proliferation in number of activities, increasing from an average of about 10 per week pre-program (with requirement of considerable effort and cueing) to an agreed quota of 50 per week, usually with minimal cueing, after implementation. Patient become semi-autonomous with activity completion, needing only minimal supervision from wife most of time (e.g., occasional calls, reminders about chores that could be completed), and more intense supervision, cues, phone call reminders, at other times. Every change in routine (e.g., holidays) produced regression and return for a booster treatment session, but the behavioral management strategies were mostly adopted by his family so reduced need for formal intervention was noted. Eventually, his family devised a contingency wherein patient could 'prime' his own pump by increasing activities back to quota to avoid having to visit psychologist (1 hour drive, and extremely fatiguing and unpleasant trip)

Task Analysis Sample

AT's Initiative(Automatic Habit/Energy) Retrainer

MORNING

- Wash Face
- Shave
- Apply medication to face if needed
- Brush Teeth
- Comb Hair
- Dress before "morning" nap
- Check finger nails & toe nails; trim when needed
- Check hair length and get a haircut as needed
- Shower and wash hair
- Perform an Activity/Chore (Choose from Menu)
- Check Schedule (e.g., M,W,F=Y; Tues=RedX)
- Check your appearance before leaving the house

AFTERNOON

- Fill Out Chart (Behavioral Activity Monitor & Points)
- Eat Lunch
- PowerRelaxationNap (PRN; Use Tape)
- Perform Activity or Chore (Choose from Menu Provided)

EVENING

- Eat Dinner

- PRN (PowerRelaxationNap; Use Tape)
- Engage in Evening Activity
- 10:00pm: Complete Chart (Behavioral Activity Monitor & Tally Pts)
- Shower (if not done in am; or, again?)
- Watch TV News
- Prep for Bed (PJ's, Brush Teeth, etc.)
- BedTime

Part II: Behavioral Contingency Management Programs

PURPOSE: Increase the frequency of highly desirable but infrequently occurring behaviors by rewarding their performance with highly desired outcomes or rewards.

METHOD: Identify highly reinforcing events and highly desirable behaviors and design a formal behavioral contingency program which allows exchange of points earned by performing desirable behaviors for highly rewarding events, as follows:

- (1) Explain program rationale and Identify Reinforcers (motivating rewards)
 - Complete a list of reinforcers through a collaborative effort involving therapist and client/patient, as well as caretaker/family member/staff. Interview and survey homework which includes completion of the Motivating Rewards Survey, is usually necessary; for couples or family members, administration of the "Communication Enhancement Strategies: Pleasures/ Displeasures Survey" may be helpful.
 - Rate Reinforcers (from 1 to 10) according to:
 - Amount of perceived Enjoyment/Reward (usually completed by the client, patient, etc.)
 - Amount of perceived Provision Difficulty (usually completed by the caretaker, spouse, parent, staff, etc.)
- (2) Identify Desirable Behaviors (reward worthy desirable behaviors)
 - Complete a list of desirable behaviors or behaviors which are targeted for increase in frequency of occurrence, through collaboration between therapist and caretaker/family members/staff, as well as client/patient. Interview and Homework, including completion of structured lists, is usually necessary; for couples of family members, administration of the "Communication Enhancement Strategies: Pleasure/ Displeasure Survey" may be helpful Administration of the Neurobehavioral Symptom Checklist is recommended.
 - Rate Desirable Behaviors (from 1 to 10) according to:
 - Desirability, or how desirable they are (usually completed by the spouse, caretaker, staff, etc)
 - How Difficult they are to Provide (usually completed by the client, patient, etc.)
- (3) Compute Point Values
 - Reinforcer Values or Motivating Rewards, representing number of points required for purchase (formula: Reward Value = Enjoyability rating X Provision Difficulty rating)
 - Desirable Behavior reward points, representing number of points awarded (formula: Earned Points = Desirability rating X Provision Difficulty rating)
- (4) Complete Motivating Rewards and Rewardable/Desirable Behavior Goals Forms. Review, discuss and modify as deemed appropriate

- (5) Provide a form for recording transactions regarding point accumulation for desirable behavior completion and exchanging earned points for motivating rewards (i.e., "The Bank"). Instruct participants in program function, and begin program
- (6) Assess results, solicit feedback and revise program to increase effectiveness (i.e., alteration of point values, addition of new rewards or desired behaviors, reinforce, etc.)
- (7) Reinforce progress, continued participation, perceptions of control, etc.

Case Study#2

Rehabilitating Efficiency in Everyday Routine Following Traumatic Brain Injury.

Background:

Brain Injury Rehab Professional who sustained a complicated mild TBI with 8 hr. PTA and right parietal bleed that spontaneously resolved. Despite returning to work within one week to regular job, part time, and increasing to full time in one month, it was noted, after almost two years post injury, with adequate adaptation at work and no reported change from preinjury level of performance, that many ordinary daily routines were significantly less efficient, more time consuming, etc., with subsequent reduction in time for personal life. For example, taking more time to dress in am meant getting to work later, having to stay later, returning home in greater fatigue, reducing time available for desirable activities, etc. A task analysis was employed to identify employed tasks and sequences employed prior to injury.

Outcome:

Upon implementation, reinstatement of approximate premorbid level of everyday efficiency, as gauged by self reported estimate of time required to dress in am, maintain a relatively clean house, engage in social activities, pursue dating, etc. The list was employed for several weeks before storing away and only reviewing once or twice in the following year. Follow up one year later revealed that most, albeit not all, efficiency habits had been maintained (e.g., house cleaning habits were less consistently followed).

Single Doctor Chores CheatList (summary)

BATHROOM

- Dust around the Mirror and Light and Window, including the tops of the light and mirrors and window sills.
- Dust, with a damp cloth, around the windowsills, on the front of the blinds and the back (reverse sides by adjusting slats up and down), and along the tile division.

Tub and Toilet (bi-weekly)

- Wipe down the bathtub walls, going to the ceiling.
- Use cleanser and a brush to quickly wipe grime in the tub, and scum stains on the wall.
- Use soapy brush to quickly wash and rinse the inside shower curtain.
- With a soapy disinfectant, clean the toilet top, seat, behind the seat, and under the seat, along the walls to the floor
- Fold all tiles neatly on the tile racks

Floor (weekly)

- Sweep the floor, including behind the toilet.

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- Take out the rug and shake it off of the porch vigorously to remove dirt and dust.
- Remove and empty the garbage can.
- Mop the floor, using ammonia or Clorox and be sure to get behind the toilet.
- Use a rag to get the floor behind the toilet. Be sure to get in all the nooks and crannies along the edges of the floor, near the tub, etc.

LIVING ROOM (bi-weekly)

- Dust Furniture, including all shelves
- Use broom/duster to dust along all baseboards, window sills, ceiling molding & fireplace mantle
- Sweep and Vacuum Under Rugs
- Sweep and Vacuum Floors
- Vacuum the couch, love seat, and chair

KITCHEN (weekly)

- Empty Trash Can
- Clean Top of Refrigerator and Microwave (Wet Soapy Cloth)
- Clean Inside Refrigerator and Microwave
- Wash Any Dishes and Clean Sink with Cleanser
- Clean Sink and Surrounding Countertop
- Sweep, and then Mop Floor

STUDY/OFFICE, DINING ROOM ...

BEDROOM

- Dust dresser tops, around doors and windows, and along baseboard and ceiling molding

LAUNDRY

- 9:00am Saturday: Take Clothes to Dry Cleaners before 10:am
- 5:00pm Saturday: Pick up clothes from Dry Cleaners and Arrange in closet
- 10:00am Sunday: Launder socks, underwear, bathroom towels, bed sheets, etc.
- 11:00am Sunday: Use Dryer & Fold & replace clothes when done. Hang Dry other clothes
- 11:20am Sunday: Steam mist to refresh any pants, shirts in need
- Sunday 9:00pm: Fold, hang, put away dry clothes

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**BEHAVIORAL MANAGEMENT PROGRAMS:
CONTINGENCY CONTRACT**
(Rough Draft)

PURPOSE: Increase the frequency of highly desirable but infrequently occurring behaviors by rewarding their performance with highly desired outcomes or rewards.

METHOD: Identify highly reinforcing events and highly desirable behaviors and design a formal behavioral contingency program which allows exchange of points earned by performing desirable behaviors for highly rewarding events, as follows:

- (1) Explain program rationale and Identify Reinforcers (motivating rewards)

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- Complete a list of reinforcers through a collaborative effort involving therapist and client/patient, as well as caretaker/family member/staff. Interview and survey homework which includes completion of the Motivating Rewards Survey, is usually necessary; for couples or family members, administration of the "Communication Enhancement Strategies: Pleasures/ Displeasures Survey" may be helpful.
- Rate Reinforcers (from 1 to 10) according to:
 - Amount of perceived Enjoyment/Reward (usually completed by the client, patient, etc.)
 - Amount of perceived Provision Difficulty (usually completed by the caretaker, spouse, parent, staff, etc.)
- (2) Identify Desirable Behaviors (reward worthy desirable behaviors)
 - Complete a list of desirable behaviors or behaviors which are targeted for increase in frequency of occurrence, through collaboration between therapist and caretaker/family members/staff, as well as client/patient. Interview and Homework, including completion of structured lists, is usually necessary; for couples of family members, administration of the "Communication Enhancement Strategies: Pleasure/ Displeasure Survey" may be helpful Administration of the Neurobehavioral Symptom Checklist is recommended.
 - Rate Desirable Behaviors (from 1 to 10) according to:
 - Desirability, or how desirable they are (usually completed by the spouse, caretaker, staff, etc)
 - How Difficult they are to Provide (usually completed by the client, patient, etc.)
- (3) Compute Point Values
 - Reinforcer Values or Motivating Rewards, representing number of points required for purchase (formula: Reward Value = Enjoyability rating X Provision Difficulty rating)
 - Desirable Behavior reward points, representing number of points awarded (formula: Earned Points = Desirability rating X Provision Difficulty rating)
- (4) Complete Motivating Rewards and Rewardable/Desirable Behavior Goals Forms. Review, discuss and modify as deemed appropriate
- (5) Provide a form for recording transactions regarding point accumulation for desirable behavior completion and exchanging earned points for motivating rewards (i.e., "The Bank"). Instruct participants in program function, and begin program
- (6) Assess results, solicit feedback and revise program to increase effectiveness (i.e., alteration of point values, addition of new rewards or desired behaviors, reinforce, etc.)
- (7) Reinforce progress, continued participation, perceptions of control, etc.

The Bank

Date:	Deposit:	Withdrawal:	Balance:

INSTRUCTIONS: Please review with ___ the number of earned points at the end of each shift for each day, and add them as a Bank Deposit, signing off with staff initial. Anytime that Scott makes a points withdrawal, indicate the amount as a withdrawal, sign off with initial, withdraw it from the total amount deposited and include the sum under the “Balance” (again signing off)

Instructions: Please record all enjoyable stimuli or events (present, past, or potential)

MOTIVATING REWARDS SURVEY For _____			
1 EATING			
2 WATCHING TV/ VIDEOS			
3 TRAVELING/ VISITING/LEISURE, etc.			
4 INTIMACY			
5 HOME ACTIVITIES, GAMES, etc			

6 OTHER		

Medical Psychology Service

Instructions: Please record all Desirable Behaviors (i.e., behaviors which you would like to see occur more frequently). Note: Desirable behaviors are often the opposite of (or incompatible with/ preferred instead of) behaviors which are displeasing or undesirable.

REWARDABLE (Desirable) BEHAVIORAL GOALS SURVEY		
1	_____:	
2	_____:	

3	_____:		

Instructions: Please Rate (the Following from 0 (not at all) to 10 very much) According to How (Enjoyable / Difficult to Provide) they are:

	MOTIVATING REWARDS For _____		Rating (0=Not at all; 10=Very Much)
1	EATING		
2	TV/ VIDEOS, Going to Movies, etc..		
3	TRAVELING/ VISITING/LEISURE, etc.		
4	INTIMACY		

5	HOME ACTIVITIES, GAMES, etc _____ _____ _____ _____ _____		
6	OTHER _____ _____ _____ _____ _____		

Instructions: Please Rate (the Following from 0 (not at all) to 10 very much) According to How (Enjoyable / Difficult to Provide) they are:

	REWARDABLE BEHAVIORAL GOALS		Rating (0=Not at all; 10=Very Much)
1	_____ : _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____		

2	_____:	
3	_____:	

=====

Martelli, M.F., Zasler, N.D. & Pickett, T. (2000). Awareness Isn't Always Necessary for Rehabilitation. *Archives of Clinical Neuropsychology*, 15, 659.

Martelli, M.F. (2000). Isn't Awareness Always Necessary for TBI Rehabilitation? *HeadsUp: RSS Newsletter*, Vol. 3, No. 2 (May).

Isn't Awareness Always Necessary for Rehabilitation Following ABI

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Introduction

Conventional wisdom, and the guiding principle for virtually all cognitive and neuropsychological rehabilitation efforts, assumes that awareness of impairments is a necessary first step in the rehabilitation of such residual brain injury deficits as memory, problem solving, and self-control difficulties. While this assumption is intuitively appealing, facilitating increased self-awareness in some brain injured individuals may also restrict and block rehabilitation interventions. Improperly applied, it can even undermine the optimization of adaptive behavior, a higher level goal that transcends the development of self-awareness.

Unawareness of deficit, often referred to as anosagnosia, has been recognized in the neurological literature for over a century. Increasingly, the phenomenon of unawareness has resurfaced in brain injury literature because it can generate significant dilemmas for rehabilitation. In the treatment of acquired brain injury (ABI), unawareness of deficits is often considered by clinicians to be a core problem that impedes progress and greatly influences outcome. An accumulating body of research has confirmed the clinical view that unawareness is both prevalent in ABI and predictive of poor outcome. In fact, large sample studies of persons with ABI indicate that a high proportion present with some degree of unawareness of deficit (Prigatano, 1996). This unawareness can seriously impede participation in rehabilitation by persons with TBI, and cause problems with motivation, engagement in therapy tasks, compliance with suggestions for behavioral change, and the use of compensatory strategies (Fleming, Strong, & Ashton, 1998).

A number of factors have been identified as possibly influencing the development of self awareness, including severity of injury as measured by initial Glasgow Coma Scale (GCS), length of coma, or length of posttraumatic amnesia (PTA), and location of brain lesion. Lesion site may impact the degree of self-awareness possible, as damage to frontal systems could produce a general decrease in levels of self-awareness, for example. McGlynn and Schachter (1989) have theorized that generalized unawareness of deficits – and cognitive deficits in particular – is due to impaired

executive cognitive abilities associated with anterior cerebral dysfunction. In an applied sense, individuals capable of increased self-awareness after ABI pose a significant challenge to any rehabilitation team. An individual's ability to deny their deficits may be adaptive in the sense that this allows for the preservation of self-esteem and hope for the future. Therefore, treatment methods that highlight deficits in a confrontative way may trigger deeper depression and catastrophic reactions and be counterproductive in some individuals.

Denial of acquired disability has been proposed as a coping strategy for loss of previous life style in those with acquired injury and in those with major diseases such as stroke, lung cancer, and heart disease. It has also been suggested that both the prevalence and persistence of unawareness in those with ABI is more complicated in that it is brought about because of some mixture of organic impairment and psychological factors. Prigatano commented, "patients cannot maintain a productive lifestyle unless they have come to face the realities of their life and this means improving self-awareness and self-acceptance." (Fleming et al., 1998, p. 40). With respect to the hypothesis that self-awareness is necessary for successful ABI rehabilitation, however, the research findings have been mixed. In fact, a number of studies have failed to support the hypothesis that self-awareness of deficits positively impacts TBI outcome. Hence, the question remains whether or not self-awareness is necessary for ABI Rehabilitation.

Research Findings: Awareness and TBI Rehabilitation

The literature is more conclusive regarding the positive correlation between increased self-awareness and greater risk of experiencing emotional distress. Extreme emotional reactions (e.g., depression, anxiety, and catastrophic reactions) sometimes accompany the development of self-awareness and influence or compete with level of motivation. Several studies indicate a relationship between enhanced emotional reactions and increased self-awareness. For instance, Prigatano and Fordyce (1986) found a negative correlation between unrealistic self-appraisal and emotional distress. In this study, those patients who overestimated their abilities (relative to staff members) experienced less emotional distress. Ranssen, Bohaska, and Schmitt (1990), in their study of 32 TBI patients, found a modest correlation ($r = -.36$; $P = .041$) between self-report of depression and the discrepancy between patient and staff ratings of competency. They observed relatively higher levels of depression in those patients with self-ratings closer to staff ratings. Linn, Allen, and Willer (1994), in a study of 60 TBI patients who were 6 years post injury, demonstrated that higher self-ratings of cognitive disability and social aggression were

associated with higher depression. Godfrey, Partridge, Knight, and Bishara (1993), in a cross-sectional study of groups of TBI subjects at 6 months, 1 year, and 2 to 3 years post injury, demonstrated that greater self-awareness of behavioral deficits was associated with greater emotional distress at later stage post injury. The question remains as to whether the effects of emotional distress may impede involvement in rehabilitation and ultimately compromise outcome, or whether such distress serves as a motivator to rehabilitate for certain patients.

Fleming et al. (1998) found relatively greater motivation to change and more emotional distress among a high self-awareness group. This finding is consistent with the theories and anecdotal reports proposed by those who have observed a negative relationship between denial and depression, a positive relationship between motivational and emotional states, and complex interactions among denial and self-awareness, motivation, and emotion. Less clear is the relationship of self-awareness with outcome. Several researchers have reported better participation (Lam, McMahon, Priddy, & Gehred-Schultz, 1988) and better outcomes (e.g., Ezrachi, Ben-Yishay, Kay, Diller, & Rattok, 1991; Prigatano et al., 1994) for those postacute brain injury rehabilitation patients who demonstrated the most accurate self-awareness (Malec & Moessner, 2000). On the other hand, in their research, Fleming et al. (1998) hypothesized that persons with greater self-awareness of deficits would achieve better functional outcomes and community integration as a result of their enhanced motivation to comply with treatment, adopt compensatory strategies, and engage in behavioral change.

Findings failed to support this hypothesis, however, as no significant differences emerged in any of the outcome variables between the high self-awareness and low self-awareness groups. Explanations for this finding included the following:

- (1) In the high self-awareness group, depression formed a feedback loop influencing motivational state, which led to a reduction in positive coping behaviors.
- (2) No differences between high and low self-awareness groups may reflect measurements that were taken prematurely (1-year follow up). Perhaps given more time, the high self-awareness group may work through their emotional distress, and the high involvement in rehabilitation may begin to show results.

Other research (e.g., Fordyce & Roueche, 1986; Cavallo et al., 1992) has similarly failed to find a positive relationship between self-awareness and rehabilitation outcome (as measured by vocational or employment status) from traumatic brain injury.

Case Studies

The following is a striking example of overzealous attempts to increase awareness. A 23 year old severe brain injury survivor was unaware of the extent of his residual memory, mobility and behavior problems and seemed to cope with job and friend loss through excessive drinking. He initially was referred to a clinical psychologist who immediately proscribed drinking and enlisted family support to restrict purchase of alcohol. Within one week of forced sobriety, the survivor attempted to commit suicide and almost succeeded. Fortunately, his treatment provider consulted a rehabilitation neuropsychologist, and the new treatment plan called for specific assistance in coping with loss of job and friends, setting incremental goals for finding new friends, improving chances of sustaining reasonable employment through stepwise efforts, finding new, constructive activities to replace previous drinking, and education regarding drinking after brain injury. With simple encouragement and supportive counseling aimed at improving situational stress and general coping skills, drinking gradually reduced to infrequent.

In other cases, we have observed where significant improvements in behavior and coping are achieved without much or any increase in awareness. The following recent example is illustrative. A 47 year old New York executive who sustained a severe TBI almost 10 years ago had been treated at the best brain injury rehabilitation centers in the country. Despite this, and despite having received very specific, targeted, aggressive treatment for unawareness, he continued to interact with others in an insulting, impatient, aggressive, too frequently dictatorial and sometimes abusive manner. Initial treatment efforts with this clinician involved trying to identify his red flag situations (change in schedule, having to wait for a request, etc.), teaching him to recognize these, and respond with a strategic self corrective procedure. After a lot of practice and consistent staff intervention to help make it become a habit, this strategy showed some benefit. However, it was still a multiple-step procedure with room for error and misuse, it did not work on bad days or when he was already angry or for new situations that did not exactly fit with the red flag list. Further,, even though it was an easy procedure, he had trouble remembering, especially when angry, and the requirements for divided attention presented an additional obstacle. Subsequently, a much simpler and easier approach was tried. This approach did not require awareness, did not even involve confrontation with any unpleasant realizations about personal weaknesses. Instead, it emphasized an acceptable premonitory style relating to his being a New York native and instead even allowed jokes about his New York style. With practice, this strategy was

soon adopted as a habit that worked pretty effectively in most situations. The strategy essentially involved instruction to increase smiling when talking with others...”the more important the communication, or the stronger you feel, the more you smile”. Shaping to reinforce this habit was liberally provided and clearly assisted with acquisition.

In this second case example, a simple and intermittently present behavior, smiling, was increased as a habit. Importantly, smiling tends to produce pleasant interactions. It is incompatible with insult, aggression and an interpersonally abusive style. By its increased presence, it tended to produce noticeably mellowed responses that were more pleasant and less impatient, aggressive or dictatorial in style. As a result, he continues to receive more satisfactory responses from others, which removes reasons for anger and increases reasons to smile. As time passed, the positive responses from others and the more satisfactory responses to his requests reward his smiling, in a cyclic and self-perpetuating fashion.

Finally, there are situations where limited cognitive abilities, including concrete thinking, may leave persons unable to adequately increase awareness of problem behaviors. A recent illustrative example is that of a fairly bright 40-year-old severe TBI survivor who had some unusual residual “holes” in cognitive abilities. He was treated for three years at some of the better brain injury rehabilitation centers and was transferred between institutions without improvement in persistent childish behaviors and without first offering new coping strategies may bring about overwhelming stress and/or emotional and behavioral deterioration that will hamper rehabilitation efforts. Attempts to incrementally increase awareness as a prerequisite step to modifying behavior failed, as did simple behavioral modification programs aimed at rewarding more adaptive behaviors. After several months at his fourth treatment program, it was determined that a combination of an unusual and concrete thinking style, an Axis II pre-morbid personality style and significant hysterical and other psychiatric symptoms made increasing awareness a near impossibility. As a result, his treatment program was modified considerably. Rather than emphasizing awareness, which was apparently too complex, behavioral interpretations were simplified and paired with dichotomous “positive” or “negative” labels. Explanations and attempts to appreciate his behavior beyond this were curtailed. A list of “negative” behaviors along with alternatively desirable “positive” behaviors was devised and reviewed extensively. Rewards were assigned for increasing ratios of good to bad behaviors and staff provided encouragement and praise for increasing semblance of “positive” behavior. In a short period of time, a pattern of consistent increases in appropriate behavior, and decreases in inappropriate behaviors, was observed.

Conclusions

Because the development of increased self-awareness is helpful in rehabilitative efforts for some TBI patients (and potentially harmful to others), devising reliable ways to identify candidates who would benefit from insight-oriented interventions is of paramount importance. Prigatano (1999), in his 10th Principle of neuropsychological rehabilitation, noted that “failure to identify which patients can and cannot be helped by different (neuropsychological) rehabilitation approaches creates a lack of credibility for the field” (p. 4). Facilitating self-awareness in certain TBI patients may have dire consequences if such persons are unable to cope with increased psychological insight. Individuals with relatively more severe organic deficits and/or psychologically fragile individuals might experience overwhelming distress when their customary defenses are disabled. In short, the increased knowledge of factors influencing self-awareness may assist rehabilitation professionals to determine which patients will benefit most from “insight-oriented” rehabilitation programs.

We argue that increasing awareness without first evaluating a person’s self-esteem, abstract or higher level reasoning, or general coping abilities, is a “beginner’s mistake” for any therapist. Inexperienced therapists, for example, might employ confrontational strategies without realizing that a patient’s unawareness may defend against powerful feelings of grief and/or helplessness. Stripping patients of primitive defense mechanisms without first offering new coping strategies may bring about overwhelming stress and/or emotional and behavioral deterioration that will hamper rehabilitation efforts. As such, approaching TBI rehabilitation from a stress/coping perspective, old and ineffective strategies should be replaced with newer, more effective ones. We believe that ineffective coping strategies are preferable to none at all, however, and that existing coping strategies (ineffective or not) should remain until another is offered in its place.

In summary, although increasing awareness about deficits and maladaptive coping that results from brain injury is often important, and although it is often a logical or necessary first step in modifying ineffective behavior, it is not always necessary. In fact, there are many situations in which efforts to increase awareness before new coping strategies are acquired will cause increased emotional distress and catastrophic fears to the point that more harm than good can occur. Further, there are situations where it is infinitely easier to change a behavior than change awareness. Finally, there are situations where limited cognitive abilities, including concrete thinking, may leave persons unable to increase awareness of problem behaviors. In these situations, simplifying expectations and rewarding desirable behaviors, in order to build

desirable habits, is a more effective alternative to increasing awareness.

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NETWORK THERAPY: A Potent Therapeutic Tool

Mike Martelli, Ph.D.

An individual's social network, as aptly defined by Garrison (1975) is the sum of those human relationships that have a significant effect on his or her life. Members of an individual's network may represent both affective (i.e. psychosocial support and supplies, such as personal interest and emotional support) and instrumental (i.e. money, housing, etc.) resources, and include relatives, friends, neighbors, associates, employers and so on.

Social Network Therapy is further defined by Garrison as the clinical technique of involving a person's social network with the goals of modifying the network of emotional influence or affective resources in order to facilitate active reality based coping and problem-solving and articulation of the instrumental resources available. His underlying assumption is that the solution to a variety of "human dilemmas" lies within the expectations and collective resources of an individual's social network.

Reuveni (1979) describes the process as "a time limited, goal oriented approach that will help family members in a crisis to assemble and mobilize their own social network of relatives, friends and neighbors; this network will become collectively involved in developing new options and solutions for dealing with a difficult crisis". This is, in Speck's (1973) words, the setting in motion "the forces of healing within the living social fabric of people", and the revamping of the social network by increasing "bonds" and decreasing "binds" between people. Reuveni's underlying assumption is similar to Speck's in that it extends deeper than Garrison's, positing that our lives, well-being and even ability to function on a daily basis "depend on the quality of our social support systems and our ability to mobilize these systems, particularly during crises" (1979).

Some related approaches, all hall marked by their mobilization or resources in an individual's relational field, have been variously referred to as social system psychotherapy, ecological therapy and kinship therapy. These approaches share similar goals, designate the social network as the therapeutic unit of intervention, and employ similar techniques for achieving their goals and can therefore be considered synonymous with social network therapy or "networking". Given the systems oriented nature of networking, as a reference point, a brief sketch of the historical development is in order. The antecedents or historical roots of the networking approach generally includes general systems theory, group and family sociology/ anthropology, group psychotherapy, family therapy, multiple family therapy, field theory, and the community mental health movement.

Tracing the clinical development, Pattison (1975) notes six distinct steps:

- v 1. The proliferation of the child guidance movement in the 1920's which included the parents in the treatment of "disturbed" children.
- v 2. The development of group psychotherapy, partially dictated by of the traditional one-to-one psycho- dynamic model & economy.
- v 3. The development of family therapy in the 1950's, where interpersonal and systems conceptualizations began to eschew treatment of individuals "in vacuo" and instead on pathological interpersonal interactions.
- v 4. The organization of multiple family therapy groups in which several families were treated simultaneously as one group. Again, economy and expedience, as well as theoretical influences from general systems & field theory, prompted inception of this approach.
- v 5. The development of home visit treatment programs. Most noted, is Minuchin's work with slum families, where he found that the typical middle- class nuclear family was fragmented, and their functions met by extended family members, friends and other significant others (1). Other clinicians also reported that when home visits were conducted, significant others who were not part of the nuclear family, or even extended family were present and played essential roles in family functioning and were hence allowed or invited to participate.
- v 6. The formalized "network therapy" approach, first elaborated on by Ross Speck (12) which included nuclear and extended family members and those related by friendship, community residence or employment (typically around 40 people).

A significant influence on the development of the network approach was exerted by the theoretical formulations of Kurt Lewin and von Bertalanffy. Lewin's Field Theory maintains that human behavior can only be adequately conceptualized in relation to ongoing human relationships. That is, the social field in which a person operates will significantly influence that person's behavior, and it follows that a person's social field, especially in the case of an emotionally disturbed or crisis stricken person, can be especially therapeutic or detrimental.

General Systems Theory of Physical Energy, as noted by Marmor (1975), was originally expounded on by von Bertalanffy, and defines a system as a complex of components in mutual interaction, or as a set of units containing common properties that are conditioned by or dependent on the state of other units; that system may itself be a subsystem of a larger system and may have subsystems within it. A system has permeable boundaries, allowing information and energy to pass from inside to out and the converse. Assimilated into the system theory when applied to active organismic systems such as man is the idea that the total system is greater and different than the sum of it's parts. Thus, an individual is an integral, inseparable part of a highly complex system, the family, which is itself a subsystem of it's functional social

network of extended kin, friends and significant others (itself a subsystem).

Another area that has greatly contributed to the development of the network approach is the area of group and family sociology/ anthropology. The kinship system that has predominated human societies is the extended kinship system, in which an individual's social network is comprised of members of the extended family, who provide affective (i.e. psychosocial supplies like emotional support and involvement) and instrumental (i.e. food, shelter, money, etc.) resources (Garrison & Howe, 1978). In recent times the extended family has often been replaced by a complex of friends, neighbors, clergy, social agencies, associates, employers and so on, but this social network remains an important source of affective and instrumental resources, or in Caplan's (1976) terminology, basic supplies. In comparing traditional to modern societies, Pattison analyses the response of each to disruptions in psychological well-being. In the traditional society, which employed an "open" model of psychotherapy, the whole kinship network is mobilized and its functioning is dependent upon returning the member to his previous level of functioning. In the modern "closed" one-to-one system of psychotherapy, the individual, who is much more expendable, is often isolated and the process is a private one, in which the social network is mostly excluded. Interestingly, many of the network oriented therapists explicitly compare their' treatments to tribal healing ceremonies.

Further, as reviewed by Pattison (1975), much data has accumulated evidencing the disruption of the social network in families with "disturbed" members. Studies comparing groups of normal families with those of a members applying for treatment at family service agencies have found that the client families had fewer memberships in voluntary associations, fewer friendships with relatives and fewer relations living in the same community (and, fewer pets). Similar results have been found for families applying to group services agencies. On the basis of these findings, Pattison (1975) developed a psychosocial kinship inventory and found that the normal, healthy (urban) person has an intimate psychosocial network of 20 to 30 members, whereas mildly and severely mentally ill individuals have less intimate social networks of 10 to 12 and 4. to 5, respectively. In addition, the social connectedness/ unconnectedness ratio (i.e. members in one's social network who have relationships with each other divided by those who don't) was much lower for the neurotic and psychotic populations. In general, the compiled data shows that impoverished social networks where the resources of a social network are not available are highly correlated with maladjustment. Tying right into this research is the development of the community mental health movement. Caplan and Killilen (1976) in an effort to conceptualize the preventive and public health side of "community psychiatry", have proposed that professionals must learn to appreciate the "fortifying potential of the natural person-to-person supports in the population", and discover ways to use it in developing helpful community action. They notice the value of support

systems" in providing protection against the vulnerability of persons in crisis and high risk (for decompensation) situations, and emphasizes the families role as a natural support system. Additionally, mutual help organizations and other artificially built social support networks such as widow, rape and ex-mental patient groups, have emerged and prospered.

In summary, various trends and approaches to dealing with emotional difficulty have converged and culminated in a network therapy approach, and erected an observation and tenet as to the importance of the social network in maintaining stable adjustment and functioning of it's members.

The first author credited with coining the term "network" therapy was Ross V. Speck (1973), who initially experimented with involving the social network in families with schizophrenic patients. Later, in conjunction with Carolyn Attneave and eventually Uri Rueveni, this approach was refined and applied to numerous other disorders. Speck and Rueveni are currently at the Eastern Pennsylvania Psychiatric Institute and have developed similar formulations of the network intervention process. They have developed a training course program of seminars/workshops for teaching the network intervention process. (In fact, they often utilize members of the training group to fortify networks of individuals with few or unavailable members). It includes the theoretical and experiential-didactic components and the introductory program involves meeting 10 consecutive Friday afternoons. In addition, videotapes of actual network sessions are available from the E.P.P.I. in Philadelphia, although they usually require the hire of a lecturer.

Rueveni, in *Networking Families in Crisis* (1979) outlines the network process. It begins with a home visit of the nuclear family, which allows assessment of the feasibility of mobilizing the network support system (i.e. availability, willingness, etc.), familiarizing the nuclear family members with the process and establishing the concerns of the "ailing" family and their degree of desperation or motivation. The most appropriate families for the network process are believed to be those who are both desperate and willing and for whom other treatment modalities have failed. It is during the home visit, subsequent to a decision to employ the networking approach that the logistics in terms of space, invitations, etc., for the first network session are discussed.

Six distinct phases of the network process are delineated, including: Retribalization, Polarization, Mobilization, Depression, Breakthrough & Exhaustion - Elation. Notably, these phases happen in a recurring cycle and are present regardless of the frequency or duration of the network intervention process and even tend to repeat themselves within the course of single sessions.

In the ***Retribalization phase***, the family calls together the network members, providing the setting while the intervention team is responsible for explaining the rationale and significance of the network meeting. A problem-solving explanation in which the difficulty or "problem" is redefined in terms of the functioning of the social network is utilized, and a

blueprint for the, different phases to occur is given to the entire network. In addition, the intervention team must reduce tension and promote a "we" feeling through encounter type experiences aimed at making the network visible and rebuilding ties or bonds between members.

Some of the specific retribalization techniques which are employed to rapidly increase the participation and energy level of network members have been borrowed from experientially oriented practitioners in Gestalt, Psychodrama, Group and Family Therapy. Network Milling involves the instruction for members to make contact with as many people as possible in a 3 minute period. They greet each other, exchange bits of information and move on, and variations include shaking hands or touching. "Network Screaming" occurs when members are first instructed to scream simultaneously, followed by pairing up, exchanging and screaming each others first names. Variations include jumping up and down in place and joining in small groups of name screaming partners. "Circle Movements" involves holding hands in a circle and moving toward and away from each other as one body; with variations including pattern and direction changes and sound making. The "Family Song" occurs when nuclear family members choose a song which the whole network joins in to sing, with such variations as clapping hands and swaying. The "Network Speech" is given by the network intervention team leader who: 1) introduces him/her self; 2) outlines the need to work toward solving the family's problems; 3) indicates that the family needs all the help it can get from the network in helping the family to solve the crisis; 4) emphasizes involvement, sharing openness and the development of support. The "Network New Times" consists of a recap of events over the past week. The team leader shares what he has heard through the network "grapevine" and encourages others to do likewise.

The ***Polarization phase*** involves the family presenting to the network problems and issues relating to the crisis, and the network members offering different reactions to these issues. The intervention team functions to find and activate the conflicting positions and points of view and sharing of concerns and discourage dependency on themselves and to encourage greater participation and involvement, especially of "activists" to initiate problem solving efforts. The goal of this phase is to draw out different attitudes and feelings of members and promote confrontations that shake up old stereotypes and lead to new interpersonal perceptions.

Polarization techniques allow for rapid involvement by network members. In the "Inner -Outer Network Circle", nuclear family members form an inner circle and are prompted to report how they perceive family conflicts. When finished, they switch places with network members in the outer circle who now comment on what they heard (in terms of thoughts and feelings). In the "Empty Chair", an empty chair is placed in the inner circle and taken by network members wishing to comment, who vacate it when finished (a modified version is "sit next to the one you feel closest to"). "Whose Side Do You Take?" is simply that provocative interrogative, and

other variations include intervention team members asking "Who is having a problem in the family?" or "Are there any secrets in the family?" "Removing Family Member" is employed when, in order to interrupt an intense and escalating scapegoating of a single family member, it is suggested that that individual temporarily leave the room accompanied by a team member (variants include changing topic of discussion, stating the observation or placing the individual at the periphery of the room). "Communication With an Absent Member" is utilized when an important family member is unavailable (due to sickness, death or unwillingness). Communication with the absent member can be encouraged through, for example, the use of the empty chair, role playing or the telephone.

The ***Mobilization phase*** entails the effort and work of the entire network, including the small groups having formed within it, to generate possible solutions to specific problems. The intervention team, meanwhile, presents specific problems to the network and facilitates productive group interactions, aimed at focusing the energy and resources of the network on creating, new solutions. Mobilization techniques aimed at mobilizing network member resources usually promote confrontations and often result in strong cathartic expressions of emotion.

In "Promoting Direct. Confrontations", a family member is asked to setup up onto a chair and talk to the family member he wishes to confront. Some variants are having the confronted person kneel down and look upward, having the confronting member shout, and having either the network members stand on both sides of the confronting member and add encouragement, or the team leader touch and encourage confrontation. Further, a switching of places in the confrontation, as well as the nonverbal expression of feelings between the two members may be encouraged. "Stimulating Disengagement from Home" helps family members experience and acknowledge the desirability and feasibility of such a move. One variation is to have the family member physically try to break in or out of a circle of hands-joined network members (symbolic disengagement). Another is to tie a rope around two symbiotically attached family members and sparking discussion. "The Death Ceremony" is a powerful technique for dealing with issues of disengagement, as well as loss of a family member. A family member is selected and asked to lie on the floor and imagine they are dead, while covered with a sheet. Each network member is then encouraged to kneel down beside and eulogize the "dead" family member, expressing his or her feelings. "Sculpting the Family Network" generally requires some variation of having family members arrange themselves spatially to depict a particular feeling they have toward one another. In addition, "Role Playing" and "Role Reversal", followed by discussion are also employed.

The ***Depression phase*** follows when network members get discouraged and frustrated over the difficulty involved in the task. The task of the intervention team is to acknowledge difficulty, provide encouragement and suggest additional efforts to break the impasse using psychodramatic

techniques such as those outlined for the mobilization phase. The important goal of this occasionally non-occurring stage is the generation of positive feelings of solidarity and support to offset discouragement, maintain increased problem-solving efforts and provide new solutions.

The ensuing ***Breakthrough phase*** occurs when network "activists" generate feasible problem solving solutions while the intervention team mobilizes support structures and small support groups for each family member and promotes effective small group interaction. It is characterized by increased activity and feelings of optimism and encouragement and serves to reinforce the relentless problem solving efforts made by the network members. It is followed by the ***Elation/Exhaustion phase*** or period, where, with solutions progressing, most members feel satisfaction and accomplishment combined with a sense of having worked hard, but having been rewarded for it.

A critical factor in the network process is the formation of temporary support groups. The groups form as network activists take clearly defined positions in support of one or more family members. The intervention team then functions to encourage the "activists" to initiate and lead the way in efforts to organize support groups around each member of the nuclear family. Between network meetings, support group members meet with their respective family member to generate an initial course of action and alternative options for crisis resolution. They maintain telephone contact with each other, the family and the team and arrange future meetings and endeavor to develop and mobilize resources, planning current and future strategies for support. Following the completion of the network intervention, the support group members continue to meet and help their respective family member "reconnect" with additional sources of support from each of them and others in the family or community. They pool and mobilize their own resources with regard to available social contacts, jobs, living arrangements and other community contacts while maintaining face-to-face, phone and letter contact.

The network intervention team, as outlined by Ruevini, generally consists of 3 or 4 members, usually professionals, headed up by a team leader, who has considerable experience and knowledge of family dynamics, group process, intervention techniques and teamwork. The team leader helps other team members identify their preferred areas of active involvement and chooses a co-leader. The team meets following the first network intervention session, evaluates the effectiveness of the techniques used, analyzes the network phases experienced and evaluates their individual and overall team functioning. In addition, they must devise a strategy to delineate each team members role, the techniques to be used and the general direction and goals to be worked toward. Finally, after completion of the network intervention, the team again meets to discuss outcome & follow-up plans.

The number of sessions for the network intervention process is variable, but most authors seem to regard somewhere between 3 and 8 as ideal. The number of sessions required depends, of course, on such factors as difficulty of

the problem, resistance by network members, availability of resources within the network and even the community and so forth. In expounding on the appropriateness of the approach, Reuveni emphasizes the presence of desperation on the family's part, especially when other approaches have proven unsuccessful, which implies additional resources are indicated in order to solve the crisis. Just a few examples of what he considers appropriate referrals for networking include: the experiencing of intolerable turmoil, when, following several years of couple therapy, the husband who was suffering from progressive multiple sclerosis and shunned the help of his family and friends, became unmanageable when his private nurse of several years decided to leave: the continual conflict between family members in response to a depressed son, which interfered with managing the other children: the bizarre behavior of a 29 year old daughter who barricaded herself in her parent's house, refusing to leave following a disappointing love affair; a mother's decompensation as she tried to escape a symbiotic bond to her son.

What is shared in common, by Reuveni and others such as Speck, Garrison, Pattison, and so on, is an eschewing of the traditional psychodynamic one to one model of treatment for those in emotional distress. Again, the unit of intervention is not the individual or even the nuclear family, but rather the social network, with emotional distress formulated in terms of a deficiency in the support systems.

Garrison (1978) has evolved a five component network approach which has been implemented in cases of drug abuse, for elderly persons during times of crisis and as an adjunct in psychiatric hospitals and the community mental health system with psychiatric nurses. His approach, although similar to that of Speck and Reuveni, is somewhat more structured and specific, at least in outline. The five essential components he lists are:

- ✓ 1. Inventorying the elements of the situation and very specifically defining the problem;
- ✓ 2. Listing alternative courses of action:
- ✓ 3. Listing liabilities and assets for each alternative;
- ✓ 4. Deciding on and testing an alternative and specifying criteria for improvement; and
- ✓ 5. Evaluating the outcome and scheduling another session if necessary.

Garrison's networks have included from five to forty persons and have lasted from one to three hours, usually covering two or three sessions spaced from two to eight weeks apart. The network approach is explained to the family as "a problem solving session where we will put our heads together (with the client) to try to find a solution". In a case report of intervention with an elderly client, a 72 year old woman who became increasingly depressed and withdrawn following a physical injury, despite her total recovery (abdominal operation), is described. A list of presently significant others was formulated, the persons invited to the network session and an explanation of the approach was given. The members were asked what Mrs. X was like before her "spell", which led to a period of reminiscing and circulation of a family photo-album, while positive statements were reinforced

(reminiscing is essential for interventions with the elderly in this approach). The problems that were then listed included "not getting out of bed, not taking daily walks, not cooking, unfriendliness, chronic complaining" and "not smiling", offered by a grandchild. A list of goals and objectives by which improvement could be assessed was created (e.g. smile, take daily walk), and discussion revealed that Mrs. X seemed to enjoy the near total care she was receiving after negotiation between network members and Mrs. X, a list of agreements were reached, which included; 1) cooking if Mr. X would accompany her for an afternoon walk; 2) Mrs. X agreed to play cards at a friend's if her 90 year old aunt drove her; 3) several people agreed to call daily to check on progress and provide encouragement; and a few other points. A second session was scheduled and the progress report was satisfying to everyone (e.g. Mrs. X had cooked everyday, taken walks with husband, played and even enjoyed, won card game, smiled, etc.) and maintained at the six-month follow-up.

Cohen (1975), in an article dealing with nocturnal neurosis (syndrome characterized by mixed neurotic symptoms with a pronounced nocturnal increase in severity, occurring in the recently isolated elderly) has analyzed the problem in terms of a failure of the social network support system to function during the evening hours (apparently due to fear of evening city hazards). A number of suggestions for reactivating the system during the evening hours tailored to the Manhattan, New York area are proposed. Suggestions include: the scheduling of evening activities at hotels with large numbers of elderly tenants, social service staff members accompanying elderly tenants to inexpensive restaurants, the scheduling of evening activities at senior citizen centers with transportation provided, group outings held out of senior citizen centers in the evenings (e.g. movies, cards, etc.), and establishment of evening telephone liaisons.

The crisis network approach has also been extended into the area of prevention. Implicit in the network approach (with its assumption of the importance of the social network support system) is the potential utility of fortifying the social network for individuals in high risk categories. In one report of a pre-retirement seminar at a community college (Guerin, 1976), subjects mapped out their social networks and examined retirement plans in relation to their social networks (which resulted in reassessment of plans to move to Florida, for example, for certain couples), as well as the construction of a network in order to help in dealing with the retirement of a school principal after 40 years in the same community. The potential benefits of networking (whether as an intervention response to an actual or anticipated crisis) seem especially promising for the elderly. Finally, some additional areas that are offered by various authors as potential targets for the networking approach include the birth of a handicapped child, death of significant other aside from spouses, crises of old age and life transitions, institutionalization and crises experienced by persons while in institutions (such as death of significant others), discharge from institutions, drug abuse, natural disasters and so on.

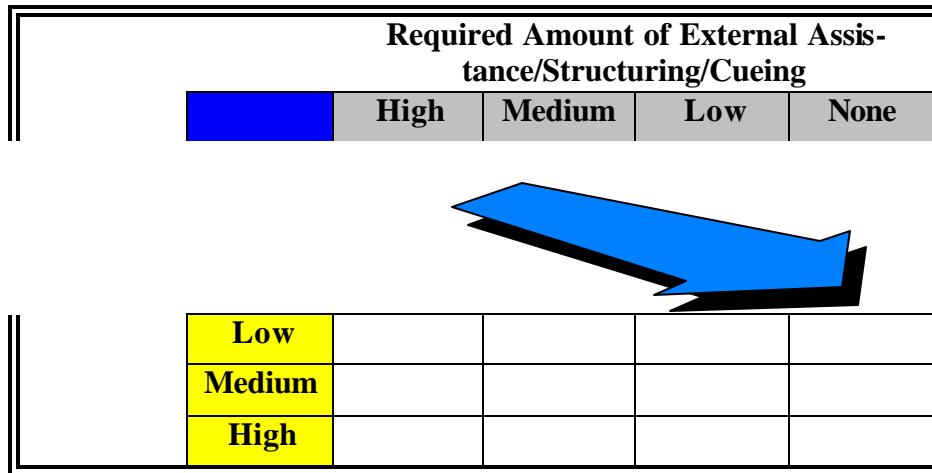
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7. Cohen. C.I.: Nocturnal Neurosis of the Elderly: Failure of Agencies to Cope With the Problem. Journal of the American Geriatrics Society, 24:2, 86-8
8. Copeland, H.B. and Resnick, E.V.: The Tuesday Evening Club: Using Community Resources to Treat Chronically Ill Patients. Hospital & Community Psychiatry, 26:4, April 1975, 227-30
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For more information, contact the Medical Psychology Service at Concussion Care Centre of Virginia, 10120 West Broad St., Ste G-I, Glen Allen, VA 23060, or call: 804-270-5484.

In the broader context, as considered by Speck, political & social issues and problems may be appropriate for a retribalizing of persons sharing similar concerns. In this sense, the anti-war movement of the late 60's & early 70's, the anti-"nuke" movement of the 80's, and other issues capable of enlisting social concern & activism are serving to fortify supportive bonds between people. Ultimately, one may wish to extend this network conceptualization to its fullest macrosocial application & envision a retribalization of the whole planet, in which bonds between people abound, while binds are few.

Treatment Progress & Outcome Measurement: Protocol For Incremental Goal Achievement



Rehabilitation programs typically involve a progressive transition from training on less complex tasks with provision of high degrees of external assistance, to training on increasingly complex tasks with provision of decreasing amounts of external assistance and increasing reliance on internally provided structure and independent task completion. Gains in progress can be demonstrated (and measured) by task completion given:

- “ Decreasing amounts of required external assistance, structuring, cueing, while increasing amounts of self-cueing and internally applied structures, cues, strategies; and/or
- “ Increasing task demands or complexity

Protocol for Increasing Self-Confidence

(Decreasing Self-Consciousness, Anxiety, Low Self-Esteem, etc.)

Initially, noncomplex tasks which can be successfully completed are introduced. Introduction of gradual increases in complexity (challenge) of task only after successes with less challenging tasks will afford graduated success experiences (& absence of failures), during which the following goals can be accomplished:

- “ Increasing Accuracy of Self-Monitoring
- “ Increasing Accuracy of Self-Evaluation
- “ Increasing Self-Reinforcement (or self-delivered reward, praise, recognition, pats on the back, etc.)

Progress is gauged in terms of the progression from:

- “ Initial stages involving as much cueing as is needed for task completion and accurate self-monitoring, self-evaluation & self-reinforcement, to
- “ Middle stages involving increasing internal cueing & decreasing need for external assistance for task completion, accurate self-monitoring, self-evaluation & self-reinforcement, to
- “ Later stages involving independent task completion and independently conducted accurate self-monitoring, self-evaluation, & effective self-reinforcement
- “ Subsequent introduction of slightly more challenging tasks and reintroduction of the above noted process of maximum to gradually diminishing cues (*method of diminishing cues*)

Protocol for Management of Emotional Reactions Associated with Temporal Lobe Epilepsy (TLE)



Poster Presentation:
NAN 2000
Orlando, FL
Thursday, Nov. 15,
2000

Michael F. Martelli, Ph.D, Nathan D. Zalsler, MD and Treven C. Pickett, ABD
Concussion Care Centre of Virginia, Pinnacle Rehabilitation and Tree of Life
10120 West Broad Street, Suites G, H & I
Richmond / Glen Allen, Virginia 23060

Epilepsy in TLE

Schomer, et al.



- "A seizure occurs when there is an excessive, synchronous, abnormal firing pattern of neurons associated with an alteration in any sphere of neurological function"



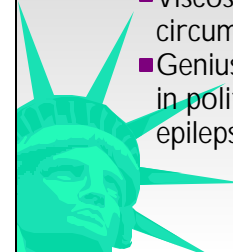
Temporal Lobe Epilepsy

- "Abnormal behavior was more frequent in patients with psychomotor epilepsy when compared to those with other focal or generalized seizures"
 - ➔ Increased incidence of psychosis
 - ➔ Increased emotional expression
 - ➔ Changed religious and sexual concerns
 - ➔ Aggression
 - ➔ Dissociative Experiences



Personality Changes in TLE

- Altered sexual interest (exhibitionism, transvestism, transsexualism, fetishism)
- Hypergraphia (compulsive writing, preoccupation with details)
- Religiosity (religious aura, mysticism)
- Viscosity (prolonged verbal expression: circumstantial and repetitive speech)
- Genius ("a remarkable number of historical figures in politics, religion, arts & sciences allegedly had epilepsy)



Psychopathology in TLE

■ Mood disorders

- Depression
- Mania

■ Psychosis

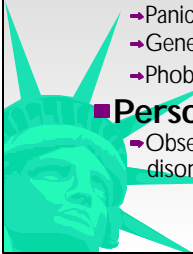
- Schizophrenia-like symptoms

■ Anxiety disorders

- Panic disorder
- Generalized anxiety disorder
- Phobias

■ Personality disorders

- Obsessive-compulsive, Paranoid disorder, Dissociative disorders, Impulse Control disorders)



Special Medical Vulnerabilities and Psychopathology in TLE

■ Genetic predisposition

■ Gender

■ Epilepsy-related

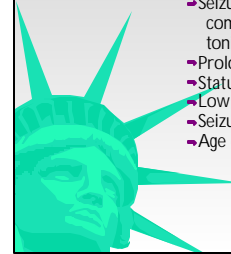
- Anatomic focus
- Lateralization
- Temporal
- Frontal
- Multifocal
- Seizure type (simple partial, complex partial, generalized tonic-clonic, myoclonic)
- Prolonged seizures
- Status epilepticus
- Low seizure frequency
- Seizure cluster
- Age of onset

■ Brain pathology

- Known cause
- Diffuse brain dysfunction
- Early brain injury
- Temporal lobe pathology
- Lateralized cerebral injury
- Cognitive impairment

■ Antiepilepsy drugs

- Polytherapy
- Withdrawal
- Acute or chronic toxicity



Special Psychosocial Vulnerabilities in TLE

- Low SES
- Low educational level
- Vocational problems
- Premorbid personality
- Stigmatization
- Discrimination
- Fear of seizures
- Deprivation



Fear in TLE Patients

■ Ictal fear (10-15% in simple-partial seizures)

- Anxiety/Panic attacks can last 5-10 minutes
- Increased Pd, Pa, Sc & Si scales on MMPI
- Psychiatric hospitalization

■ Postictal fear

- Fear can last for days

■ Interictal fear and anxiety

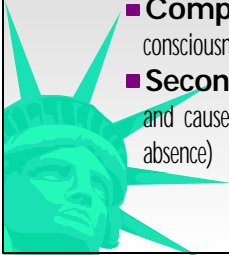
- Occurs in 66% of patients with limbic epilepsy
- Generalized anxiety & panic disorders



Classification of Seizures

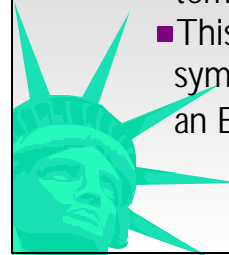
Based on Anatomy and Manifestation

- **Primary generalized seizure** (occurs when the whole cerebral cortex is affected)
- **Partial seizures** (resulting from focal injury)
- **Simple partial seizure** (localized seizure not altering consciousness)
- **Complex partial seizure** (spreads past focal area, alters consciousness and memory for episode)
- **Secondary generalized seizure** (partial seizure spreads and causes tonic-clonic and myoclonic movements, atonia, and/or absence)



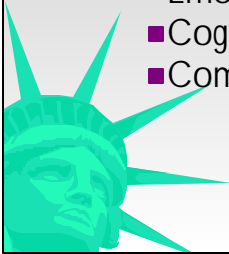
Epilepsy and seizures in TLE

- 60% of patients with epilepsy experience partial seizures
- 60% of those patients that experience partial seizures "fit the definition of temporolimbic"
- This estimation is an underestimate since symptomatology is difficult to record on an EEG



ICTAL Manifestations of TLE

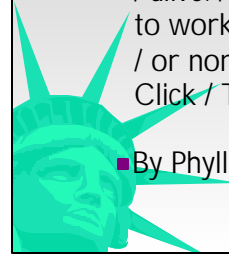
- Motor
- Sensory
- Autonomic
- Experiential
- Emotions and Affect
- Cognitive
- Complex psychiatric phenomena



Poem written by a TLE Patient

- Put a gun to your head / Slowly, pull the trigger / Click / What's that mommy? / Oh, another seizure / Suppose you never knew / If the gun is loaded / Whether every time / That little flick, / That tiny discharge in your brain / goes click / you'll come out / alive. / Talk to a group / Speak to anyone / Just try to work / Never knowing / If there will be / 30 clicks / or none. / Life's a struggle / Everyone knows that / Click / Try it / With this extra / Trick.

■ By Phyllis Tourse, April 16, 1982



Treatments for TLE

- Medical management
- Behavioral and psychiatric symptoms
- Surgical treatments
- Intracarotid Amytal Procedure
- Coritcal Mapping
- Experimental Surgical Approach



REHABILITATION

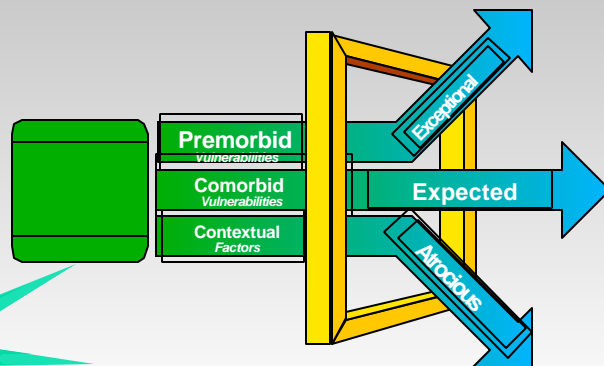
The Systematic Process of:



- Removing Obstacles to Independence
- Accessing Opportunities for Stepwise Achievements (of Desired Goals) in the areas of Love, Work and Play!
- Changing Destiny!



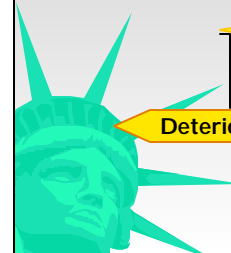
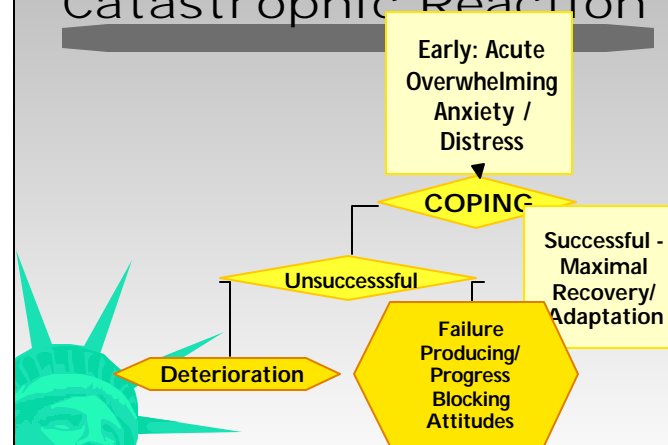
Recovery After Injury ...and Adaptation to Impairment

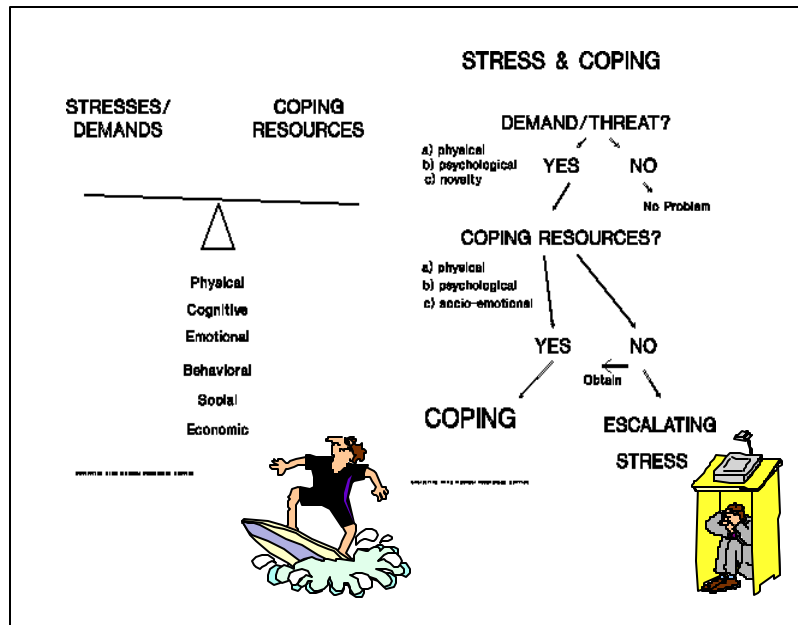


M.F. Martelli, Ph.D., 1999



Catastrophic Reaction





REHABILITATION

Ingredients: **The 3 P's**

Rx ● **Plan:** A strategy or design for stepwise progress toward a desired outcome. Most plans are based on task analyses, or breaking seemingly complex tasks down into simple component steps, and proceeding in a list wise fashion. Clearly, the more specific, concrete, and obvious, the more likely the plan will work.

● **Practice:** Repetition is the cement for learning which makes complex and cumbersome and boring tasks more automatic and effortless. With practice and repetition, even complex tasks become automatic and habitual. That is, a habit, or automatic robots, performs the tasks for us without special effort, energy, concentration, memory, and so on.

● **Promoting Attitude:** A facilitative attitude provides the motivation that fuels persistence & mobilization of energy necessary for accomplishment of a progressive series of desirable but challenging goals.

Gonzalez Carr Center of Biopsych, LLC
Medical Psychology / Rehabilitation Neuropsychology

Rehabilitation Imperative #1

Rx

- ✓ **First - Want to Improve**
- ✓ **Second - Believe that You Can Improve**
- ✓ **Third - Set a Series of Gradual, Incremental Goals so that You Can Improve *in small steps!***

The Five Commandments of Rehabilitation

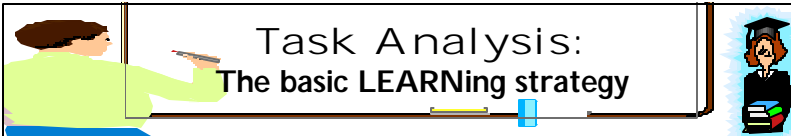
→ Thou Shall Make Only Accurate Comparisons. *Thou shall not make false comparisons.*

→ Thou Shall Learn New Ways to Do Old Things.

→ Thou Shall Not Beat Thyself Up...Instead, Thou Shall **Build Thyself Up!**

→ Thou Shall View Progress as a Series of Small Steps

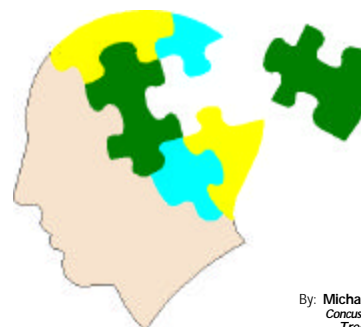
→ Thou Shall Expect Challenge & Strive to Beat IT



Task Analysis: The basic LEARNING strategy


- TA: Breaking a task into single, logically sequenced steps & recording in a Checklist and then checking off each step as it is completed.
- TA's always make task initiation, completion & follow through much easier....greatly improve performance despite limitations in memory, attention, energy, initiative, ability to sustain performance, organization...any other difficulty.
- TA's reduce demand and energy consumed by reasoning and problem solving associated with planning, organizing & having to recall, make decisions & prioritize appropriate steps and sequences for both basic and complex tasks.
- TA's (re)establish efficient habit routines that make up normal everyday activity. 30 to 1000 consistent repetitions produce automatic habits
- Ingredients for (re)building automatic habits are the 3 P's Plan, Practice, Promoting Attitude. The result is (re)habilitation, or increased efficiency accomplished by removing obstacles to independence.

NeuroBehavioral Regulation: Strategies for Habit Retraining




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Concussion Care Centre of Virginia
 Medical & Rehab Neuropsychology



RED FLAGS After Temporolimbic Brain Injury


- **F - Fatigue**...Increased susceptibility to fatigue means you will tire faster (and probably not recognize it) and be more susceptible to increased Emotion, sensitivity to overstimulation, and be more likely to have reduced Temperature tolerance!
- **E - Emotion**...Your emotions will be more intense, especially once relating to anger or insecurities, and they will be most magnified when you are tired, hot, and/or overstimulated!
- **S - Stimulation**...Your sensitivity to over- Stimulation will change and the likelihood of getting tired faster, or more emotional or irritable or blowing up, will increase with Stimulation (noise, commotion, etc. - especially noise, multiple persons talking).
- **T - Temperature**...Your body's temperature regulation ability may change, and you may be more sensitive to heat or cold, with resultant increases in the other areas.



Controlling These is **FEST**ive!
 ...Don't Let Them **FEST**er!

Also, Temporolimbic Brain Injuries Usually Produce Memory Problems

Concussion Care Centre of Virginia
 Medical & Rehab Neuropsychology Service



Management of Emotional Reactions: Temporal Lobe Epilepsy (TLE)

To increase control of emotions and improve problem solving and general stress management and coping, we have developed a 4 step self-control procedure called Re-L.I.F.E..

The general outline for the Re-L.I.F.E. procedure is as follows:

Re:

- L-Label: re-label the feelings as illegitimate, hyper-intensified emotions
- I - Interpret: re- interpret them as emotional amplifications or hyperintensifications caused by electricity (i.e., kindling or hyperconnectivity) or B.S. (Between Seizure electrical amplification)
- F- Focus: re-focus on anything less distressing, more pleasant, different, in order to disrupt the developing escalation of electricity and intensified emotions
- E - Evaluate: re-evaluate the theme of electricity intensifying emotion as a component of epilepsy, as requiring that the primary red flags be monitored, and, when identified, re-interpreted more accurately, so that they can be controlled.

When this "self-talk" self-control procedure is used before the amplification of emotions progresses too far, it can counter amplification, preventing the escalation of emotions that leads to: psychic changes and increased emotional distress; increased fatigue and possible eventual exhaustion; and increased probability of eventual seizures - and a recurring pattern of poor emotional and/or seizure control.

Notably, posters, and graphic representations, with personalized details, are typically employed to assist with learning and application of this self-control intervention.



Rehab Pacing Imperative: N

Neurogenic Fatigue

Remember to Leave Enough Reserve Energy For Brain Recovery, Strengthening & Building of Resilience/Increased Capacity in Brain Cells....

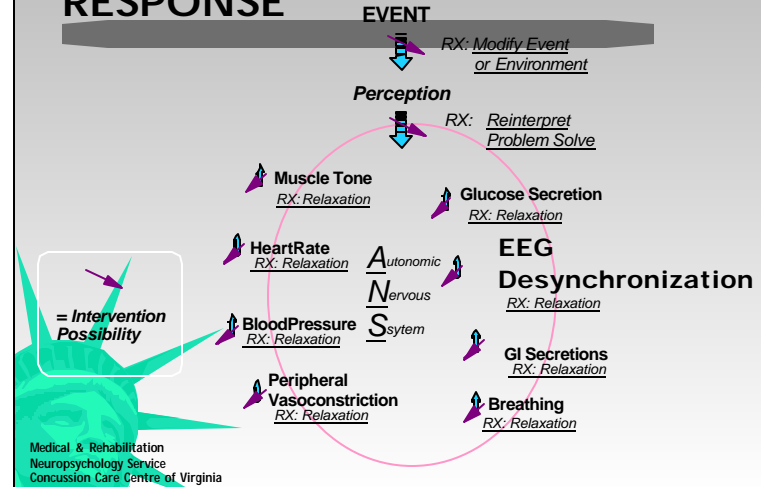
→If You Go as far as Tolerance or Energy Will Let You (i.e., until fatigued and/or sick), you will Not Allow Continued Recovery and Brain Strengthening (...instead, energy will go toward recovery from sickness, which only returns you to where you were...without progressing!)



Pace it...Don't Race it!

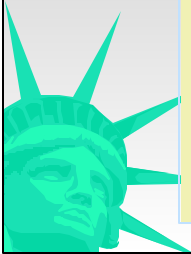
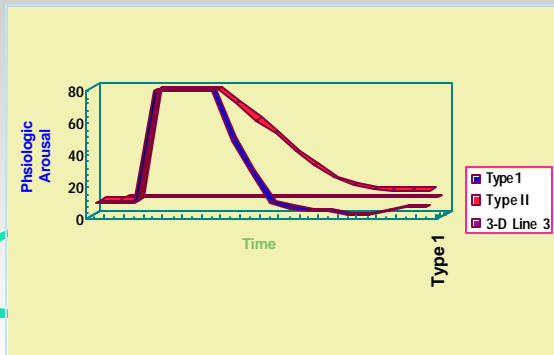
Progress is a series of small Steps...Celebrate each one patiently!

PHYSIOLOGIC STRESS RESPONSE

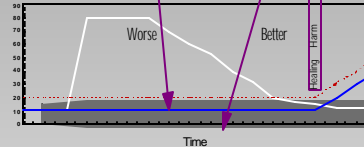


PATTERNING: Physiologic Response Habits

■ Type I (Good) versus Type II (Bad) Stress Response Habit



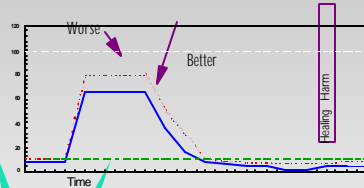
RESTING Baseline



The Basics: The 3 R's of Self Control

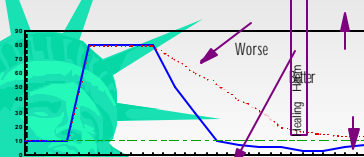
RESTING Baseline refers to the usual state of physiological & emotional arousal - for example, level of muscle tension, heart rate, electrical activity in the brain, or more general level of stress or emotional distress. Decreasing resting baseline level of physiological or emotional arousal provides increased protection against the harmful effects of stress by establishing a healthier regular resting state and a buffer against future stresses.

REACTIVITY



REACTIVITY to stressful events refers to the strength of increases in physiological variables such as heart rate, muscle tension or blood pressure, or the level of increased emotional arousal in response to stressful events. Decreasing our reactivity to stresses in the environment by controlling elevations in individual physiological channels & emotional status is another way of reducing the harmful effects of stress on our bodies and emotions.

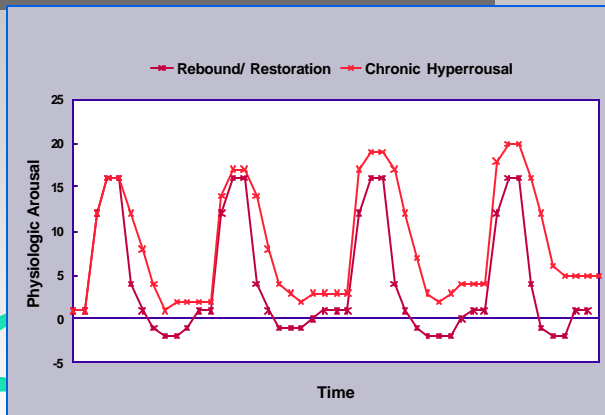
RECOVERY



RECOVERY refers to the length of time required for reducing physiological and emotional reactions to normal levels after stress responses. Learning to more quickly reduce our physiological and emotional responses reduces the harmful effects that come from prolonged stressful reactions and helps produce greater rebound & restoration of general physiological and emotional health. More importantly, it facilitates a habit of healthy recovery after stress that will lower long term physical and emotional distress and promote improved health and resistance to continuing stressors encountered in everyday life.

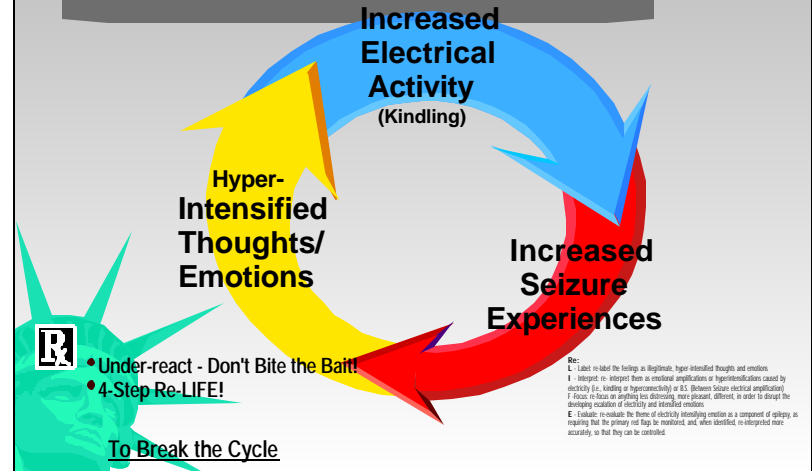
Chronic Stress and Disease Models

Pathophysiologic Resetting

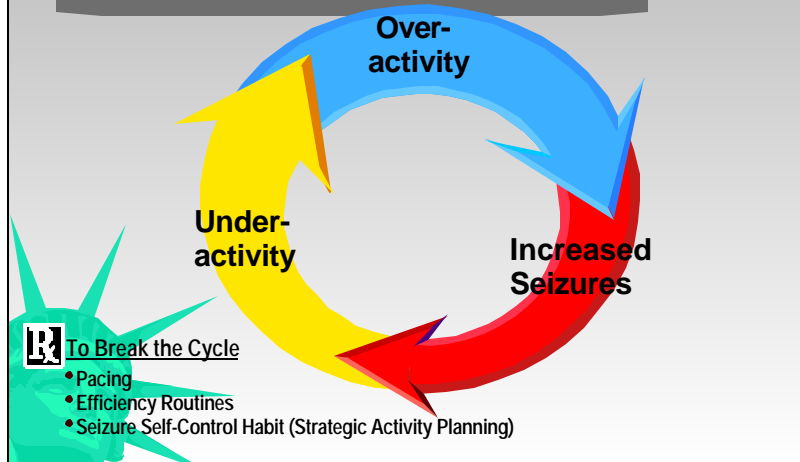


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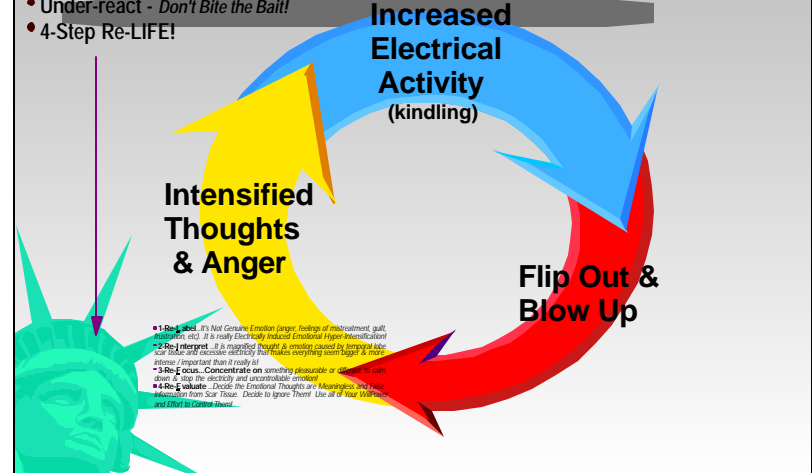
OverIdeation / HyperEmotion Seizure Perpetuation Pattern



Overactivity / Underactivity Seizure Perpetuation Pattern



Eric's Flip Out & Blow Up Pattern

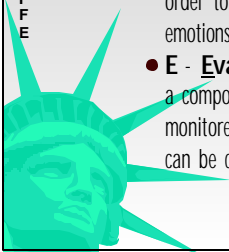


Eric's SEIZURE Self Controller

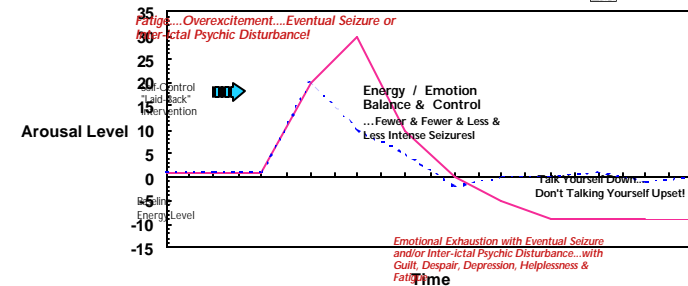


- RE -
- **L - Label:** re-label the feelings as illegitimate, hyper-intensified thoughts and emotions.
 - **I - Interpret:** re-interpret them as emotional amplifications or hyperintensifications caused by electricity (i.e., kindling or hyperconnectivity) or B.S. (Between Seizure electrical amplification).
 - **F - Focus:** re-focus on anything less distressing, more pleasant, different, in order to disrupt the developing escalation of electricity and intensified emotions.
 - **E - Evaluate:** re-evaluate the theme of electricity intensifying emotion as a component of epilepsy, as requiring that the primary red flags be monitored, and, when identified, re-interpreted more accurately, so that they can be controlled.

Re - L I F E



FOR Tom



Tom's Thought & Emotion
Laid Back Control

Uncontrolled - - - Controlled

- RE -
- **1-Re-Label...**It's Not Legitimate Questioning of Yourself or Self-Doubt (or psychic thoughts)It is really Between Seizure (BS) Electrical Activity Increasing and Intensifying Negative Thoughts!
 - **2-Re-Interpret...**It is magnified thoughts & emotion caused by excessive Between Seizure (BS) electricity in the temporal lobes that makes you question yourself and think negative thoughts and feel them intensely!
 - **3-Re-Focus...**Concentrate on something pleasurable or different, to calm down & stop the advancing electricity!
 - **4-Re-Evaluate...**Decide the Thoughts are Illegitimate and Signals of Electricity and Seizures trying to Confuse and Conquer. Decide to Resist and Control Them! Use Your Knowledge, WillPower & Effort to Replace Them with Thoughts that Build Yourself Up (Laid Back / Twisted Steel!)

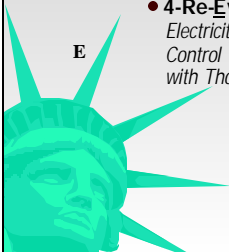
That's (re) L - I - F - E

Tom's Thought & Emotion Laid Back! Controller



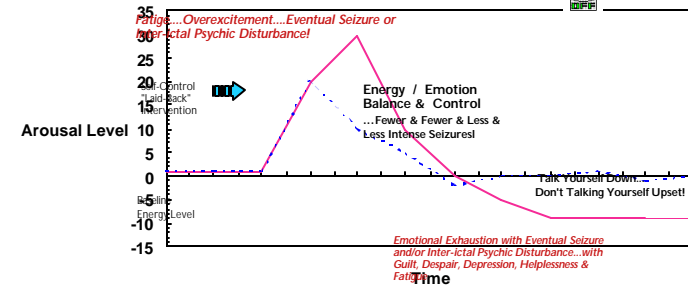
Re - I F E

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That's (re) L - I - F - E

FOR Tom



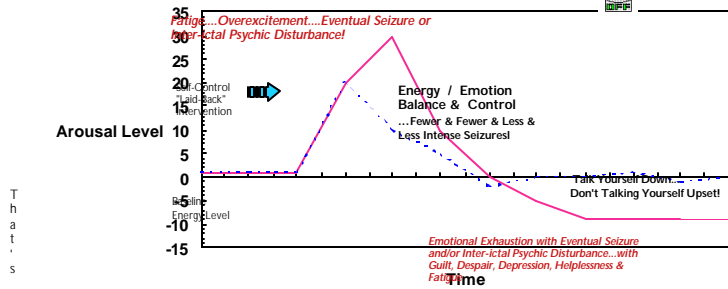
Tom's Thought & Emotion
Laid Back Control

Uncontrolled - - - Controlled

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That's (re) L - I - F - E

FOR Debra



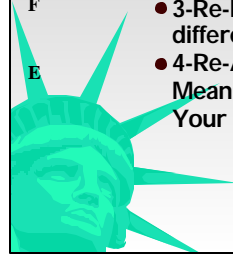
- Debra's Thought & Emotion Laid Back Control
- Uncontrolled - - - Controlled
- 1-Re-Label...It's Not Genuine Emotion (anger, upset about being mistreated, etc)...It is really Electrically Induced Emotional Hyper-Intensification!
 - 2-Re-Interpret (It is magnified emotion & thought caused by excessive electricity that makes everything seem bigger & more intense & important than it really is!)
 - 3-Re-Focus (Concentrate on something pleasurable or different, to calm down & stop the electricity)
 - 4-Re-Appraise (Decide the Emotional Thoughts are Meaningless and Decide to Ignore Them!)

That's (re) L - I - F - E



Debra's Thought & Emotion Self Controller

- Re-
- 1-Re-Label...It's Not Genuine Emotion (anger, feelings of mistreatment, etc) . It is really Electrically Induced Emotional Hyper-Intensification!
 - 2-Re-Interpret...It is magnified thought & emotion caused by excessive electricity that makes everything seem bigger & more intense & more important than it really is!
 - 3-Re-Focus...Concentrate on something pleasurable or different, to calm down & stop the electricity!
 - 4-Re-Appraise...Decide the Emotional Thoughts are Meaningless and Decide to Ignore Them! Use all of Your WillPower and Effort!



That's (re) L - I - F - E