Epilepsy: Classification of Seizures

International League Against Epilepsy
Revised Classification of Epileptic Seizures (1981)

I. Partial (focal, local) seizures:
- **Simple** - motor, somatosensory, autonomic, psychic
- **Complex** -
  - Impaired consciousness at outset
  - Simple partial followed by impaired consciousness
- **Partial seizures evolving to generalized tonic-clonic (GTC)**
  - Simple to GTC
  - Complex to GTC

II. Generalized seizures (convulsive or non-convulsive)
- ----------------------
  - Absence seizures
  - Atypical absences
- Myoclonic
- Clonic
- Tonic
- Tonic-clonic
- Atonic
- Combinations

III. Unclassified epileptic seizures

Definitions:
The list below outlines the general definitions of some commonly found seizure types. It is helpful to learn the names and the terms used to describe these seizures so that you can describe your disorder directly and accurately to other people and to your health care providers.

While there are over 40 types of seizure, most are classed within 2 main categories:
- **Partial seizures** occur when the excessive electrical activity in the brain is limited to one area.
  - The 2 most common forms are:
    - simple partial seizures and
    - complex partial seizures.
- **Generalized seizures** occur when the excessive electrical activity in the brain encompasses the entire organ. The 2 most common forms are
  - generalized absence seizures and
  - tonic-clonic seizures.

**Tonic-Clonic Seizures**
In a generalized tonic-clonic (grand mal) seizure, the person will usually emit a short cry and fall to the floor. Their muscles will stiffen (tonic phase) and then their extremities will jerk and twitch (clonic phase). Bladder control may be lost. Consciousness is regained slowly.

After a seizure, the person may feel fatigue, confusion and disorientation. This may last from 5 minutes to several hours or even days. Rarely, this disorientation may last up to 2 weeks. The person may fall asleep, or gradually become less confused until full consciousness is regained.

**Tonic Seizures**
Tonic seizures are very uncommon, especially when they occur without clonic jerking. They usually are manifest with Lennox- Gastaut syndrome or, less commonly, with multiple sclerosis. Tonic seizures most often develop in childhood, although they can occur at any age.

Tonic seizures are characterized by facial and truncal muscle spasms, flexion or extension of the upper and lower extremities, and impaired consciousness. Several types of tonic seizures exist. Those grouped with absence, myoclonic, and atonic seizures are non-convulsive and tend to be brief. The more prolonged seizures usually are convulsive and may manifest pupillary dilation, tachycardia, apnea, cyanosis, salivation, and the loss of bladder or bowel control. Tonic seizures are often followed by postictal confusion.

**Complex Partial Seizures (Psychomotor or Temporal Lobe Seizures)**
A complex partial seizure occurs when epileptic activity spreads to both temporal lobes in the brain. A complex partial seizure often occurs after a simple partial seizure of temporal lobe origin.
Complex partial seizures are experienced most by children. In some children, they lead to tonic-clonic seizures.

A complex partial seizure does not involve convulsions, but consciousness is impaired. Someone experiencing one will no longer respond to questions after the seizure starts.

A complex partial seizure often begins with a blank look or empty stare. They will appear unaware of their surroundings and may seem dazed. The seizure may progress to include chewing movements, uncoordinated activity, or sometimes performing meaningless bits of behaviour which appear random and clumsy. These automatisms may include actions such as picking at their clothes, trying to remove them, walking about aimlessly, picking up things, or mumbling. Someone experiencing a complex partial seizure may become frightened and try to run and struggle. Following the seizure, there will be no memory of it.

A complex partial seizure usually lasts about 2 to 4 minutes. It may be followed by a state of confusion lasting longer. Once the pattern of seizures is established, it will usually be repeated with each subsequent seizure.

Complex partial seizures sometimes resist anticonvulsant medication.

**Simple Partial Seizures** (Focal Cortical Seizures)

Simple partial seizures result from epileptic activity which is localized in one part of the brain, usually the cortex or limbic system.

Consciousness is not impaired: people experiencing a simple partial seizure can talk and answer questions. They will remember what went on during the seizure.

Simple partial seizures take different forms in different people. They are further classified according to their symptoms:

**Autonomic Seizures** - These seizures are accompanied by autonomic symptoms or signs, such as abdominal discomfort or nausea which may rise into the throat (epigastric rising), stomach pain, the rumbling sounds of gas moving in the intestines (borborygmi), belching, flatulence and vomiting. This has sometimes been referred to as abdominal epilepsy. Other symptoms may include pallor, flushing, sweating, hair standing on end (piloerection), dilation of the pupils, alterations in heart rate and respiration, and urination. A few people may experience sexual arousal, penile erection, and orgasm.

**Emotional and Other** - Simple partial seizures which arise in or near the temporal lobes often take the form of an odd experience. One may see or hear things that are not there. One feels emotions, often fear, but sometimes sadness, anger, or joy. There may be a bad smell or a bad taste, a funny feeling in the pit of the stomach or a choking sensation. These seizures are sometimes called simple partial seizures of temporal lobe origin or temporal lobe auras.

**Motor** - Other simple partial seizures include (clonic, jerking) convulsive movements. Jerking typically begins in one area of the body -- the face, arm, leg, or trunk -- and may spread to other parts of the body. These seizures are sometimes called Jacksonian motor seizures; their spread is called a Jacksonian march. It cannot be stopped.

**Sensory Seizures** - Some simple partial seizures consist of a sensory experience. The person may see lights, hear a buzzing sound, or feel tingling or numbness in a part of the body. These seizures are sometimes called Jacksonian sensory seizures.

Simple partial seizures usually last just a few seconds, although they may be longer. If there are no convulsions, they may not be obvious to the onlooker.

In some children, simple partial seizures lead to complex partial seizures, or to tonic-clonic convulsions.
Protocol for Management of Emotional Reactions Associated with Temporal Lobe Injury and Epilepsy (TLE)

In our neuropsychological rehabilitation service, persons with seizure disorders frequently experience one of more of the following emotional reactions:

- **Intensified Emotions**: tendencies to experience emotions with greater than expected intensity
- **Over-Personalization**: tendencies to interpret everyday situations in a highly personalized manner; tendencies to attach too much importance to the personal effects of situations, to the point that it interferes with appreciation of feelings of others, realization of practical considerations, etc.
- **Emotional Stickiness** (Viscosity): tendencies toward clinging to (or crowding) others; or tendency to seem to "stick" to others in interpersonal interactions and relationships
- **Ideational/Emotional Perseveration**: tendencies to get "stuck" on ideas or emotions, with difficulty switching focus
- **Hyper-Religiosity**: tendencies toward excessively religious interpretations and experiences
- **Excessive Abstractness**: tendencies to focus on highly abstract aspects of everyday experiences, to the frequent exclusion of practical considerations and details. This may include hyper-graphia, or excessive writing about the personal aspects of experiences and events

Four common themes in emotional reactions for persons with TLE seen in our service include:
(1) Intensified feelings of being deprived, mistreated, or victimized; (2) Intensified anger, and (3) Intensified idealization and positive attraction; (4) Excessive abstraction which interferes with developing and maintaining stable social and vocational adaptation.

In working with patients 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.

Michael F. Martelli, Ph.D.: ©1996
Patient R .... X/X/2002

Re: Analysis of sequence of Progressive Seizure Activity:

• **I.** Vision “playing games” more than usual...
  • Blurring increase,
  • Watering,
  • Off - Focus increase

Followed by:

• **II.** Sense of The forces (alien X-File sensations of forces fighting in his head):
  • Force in middle of brain working outwards
  • Force from outside brain, working inwards
  • Both forces are pounding against each other....
  • Sometimes it causes severe pain, sometimes in the middle and sometime on the outside...

Which produces:

• **III.**
  Sensation Changes:
  • Loopy,
  • Akward,
  • Off balance,
  • Like had one too many Wild Turkey’s

And Cognitive / Physical Changes
  • Can’t Talk sensibly,
  • Words are Slurred...
  • Coordination is Off
  • Balance is Off and

..When this happens, “there is no coming back...until you fall or have a seizure”
...sometimes both

Finalizing in:

• **IV.**
  • Fall And/Or
  • Seizure

Sometimes I just wake up with it...
Sample (rough draft)
Seizure Self-Control Habit

Every day, on a regular basis, and at least in the morning and again in the afternoon:

✓ (1) Rate your Vulnerability to Seizure Occurrences!
   • Vision playing games more than usual...
     • Blurriness increase
     • Watering of eyes
     • Focus decrease

❖ If You Have *Low Vulnerability* (0 Red Flags), you can engage in Seizure Challenging Activities in moderation (i.e., physical activity, noise, etc.)
❖ If You Have *High Vulnerability* to Seizures, engage mostly or only in Seizure Relieving Activities

<table>
<thead>
<tr>
<th>Activity Effects on Seizures</th>
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<tbody>
<tr>
<td><strong>Seizure Relieving Activities</strong></td>
</tr>
<tr>
<td>† Pacing / Going Slow &amp; Even</td>
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<tr>
<td>† Relaxation Exercises</td>
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<td>† ___________</td>
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<td>† ___________</td>
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<tr>
<td>† Soft Calming Music</td>
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<tr>
<td>† Calming Self Talk (4 Step Proc.)</td>
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Additional RX* (forthcoming):
• Strategic Activity Self Control (Self-Control Habit - initial program above)
• Psychological Self Control (4 Step Reinterpretive Cognitive Calming, De-escalation program)
• Physio Self Control (EEG Biof, CES?)
• TX Schedule (i.e, breaks, with no consecutive Cognitive or Physical demand appointments)...

*RX = Regimen eXperimentation
Despite the advances of modern medicine in the treatment of epilepsy, there are still a number of patients with epilepsy who are prevented from living a normal life. This may be due to the fact that anticonvulsant medication is not completely effective in controlling seizures (Tempkin & Davis, 1984). Approximately 80% of individuals with tonicclonic seizures and only 40% of those with partial complex seizures have complete control with medication (Reiter & Andrews, 1987). There are other problems as well. Many patients may find that the level of medication required to completely control seizures produces side effects that are almost intolerable, such as memory loss, drowsiness, inability to concentrate and difficulty in performing basic cognitive processes (Rousseau, 1985).

In centuries previous to the discovery of medication for treating epilepsy, it was known that various physiological and biological factors seem to "trigger" seizures. In the last century, the author of "Alice in Wonderland," Lewis Carroll, discussed his epilepsy, describing the connection he saw between mental stresses and seizures (Cohen, 1982). In fact, "medical writers since Galen (2nd Century A.D.), have described people who could avert seizures voluntarily" (Charlton, 1994).

More recent studies also indicate that emotional and biological stressors trigger seizures (Rajna & Veres, 1989). Based on this knowledge, studies have been conducted using progressive relaxation, cognitive behavioural therapy, biofeedback and counseling to reduce seizure frequency. The Andrews/Reiter Epilepsy Research Program has developed a workbook for patients and professionals to apply these methods in a formalized program (Reiter & Andrews, 1987). Of patients treated in this program, 83% were able to achieve complete seizure control (Andrews and Schonfeld, 1992).

In this paper, there will be a discussion of the Andrews/Reiter program and how it was implemented by the Victoria Epilepsy and Parkinson's Centre.

**Review of Literature**

In a study of the correlation between seizure frequency and major life events, Webster and Mawer (1989) found that acute and chronic stress increased seizure activity. Negative emotions in particular seemed to lower the seizure threshold. They also found that alleviation of chronic stress by psychotherapy resulted in fewer seizures. Another study found that a patient's psychic state, primarily the level of emotional tension, correlated with seizure frequency (Rajna & Veres, 1989). Yet another study found that "minor, chronic, everyday events" not major life events were strongly associated with higher seizure incidence (Temkin & Davis, 1984). One author, in her review of behavioural treatments for epilepsy, suggested that "the cause of an epileptic seizure may not simply be the result of abnormal neuronal activity but rather a complex interaction between the brain state of a person and their interaction with their environment" (Goldstein, 1990).

Several studies in the last decade have used stress reducing techniques in the treatment of
Learning About Epilepsy

epilepsy. For instance, progressive relaxation training employed in one study resulted in a 25% reduction in seizures after only six sessions (Puskarich, Whitman, Dell, Hughes, Rosen & Hermann, 1992). Another study using progressive relaxation showed a decrease in seizures as well as overall wellbeing. "Patients related that they were sleeping better, were less aggravated or less tense during the day, had improved feelings of control over their epilepsy, and were less afraid of their seizures" (Rousseau, Hermann & Whitman, 1985).

In Sweden, a broader spectrum of behavioural treatment methods has been employed in two studies with children. In one study, children were taught symptom discrimination, countermeasures, positive reinforcement and contingent relaxation (Dahl, Melin & Leissner, 1988). Results indicated that only the countermeasures were effective in reducing seizures. These countermeasures involved training the children to use techniques to interrupt and abort seizures during early cues of the onset of a seizure. The success of this treatment was evidenced in the significant reduction in paroxysmal discharges in EEG's as well as reduction in seizures. A second study conducted by Dahl et al, (1992) involved an eight year followup of children who underwent this same treatment. It was found that the significant gains in seizure reduction were maintained by the treatment group throughout the eight years. They found seizure indexes for the control groups had remained unchanged.

In Canada, a study was conducted using cognitive behavioural methods to treat individuals with epilepsy (Tan & Bruni, 1986). Stress inoculation, relaxation and coping skills training, behavioural rehearsal and problemsolving discussions were some of the techniques employed in a group setting. Control groups of supportive counseling (attention control) and wait list (control) were established. Both the behavioural and supportive counseling groups improved significantly following eight twohour weekly sessions. However, no longterm improvement was maintained. It was concluded that cognitive behavioural methods employed in a group setting may not be the most effective treatment for individuals with epilepsy or that the length of treatment was too short (Tan & Bruni, 1986).

Another study which employed individual psychological treatment methods was very successful in reducing seizures as well as improving subjects coping skills and sense of selfcontrol (Gillham, 1990). Treatment included helping subjects to identify factors which contributed to seizure frequency and to learn methods of interrupting or aborting seizures. Brief counseling intervention with regard to social and emotional problems was also part of the treatment. Seizure reduction for all 59 subjects was 33% and half of all subjects achieved a 50% reduction.

The most comprehensive study reporting this kind of work was conducted by the Andrews/Reiter Epilepsy Research Program (1992). A random sample taken of patients treated in this program between 1980 and 1985 revealed that 83% of patients achieved complete seizure control. The methods employed comprised a combination of the methods used in the other studies mentioned: counseling to identify life stressors and seizure triggers, biofeedback training to abort seizures, progressive relaxation and other stress reduction techniques and cognitive behavioural therapy.

Project Summary

In January, 1995, the Victoria Epilepsy and Parkinson's Association undertook a small pilot project using the methods outlined in the workbook, "Taking Control of Your Epilepsy." A counselor, Donna Andrews, developed these methods in conjunction with a neurologist, Dr. Joel Reiter. They coauthored the workbook along with Charlotte Janis.

The "Taking Control of Your Epilepsy" program is a "wellness" approach to treating epilepsy. This method combines counseling to identify stressors and seizure triggers with teaching relaxation methods and biofeedback.

Before counseling sessions began, project participants were asked to keep seizure records for
twelve weeks. This provided a baseline. The project began with intake sessions conducted by Donna Andrews and Jean MacKinnon, epilepsy program coordinator. Andrews provided training and consultation at this time. After intake, the seven project participants were seen individually by MacKinnon in weekly appointments for 12 to 20 sessions. Consultation with Donna Andrews was conducted monthly by phone.

After the counseling period ended, followup was conducted every three months up until one year (January, 1996). Longterm followup will be continued in the future.

Of the seven participants, six showed improvement by a decrease in seizures. One showed an increase in seizures. The table provided shows seizure frequency of the participants for the year of the study and followup (see Table 1).

Initially, participants were taught diaphragmatic breathing methods to abort a seizure during the aura phase. Success in this made it possible for participants to immediate feel a measure of control over their seizures. Some participants also found that paying attention to their breathing throughout the day and avoiding breathholding during times of anxiety also brought an immediate reduction in seizures.

Participants were asked to listen to a relaxation tape daily. This was effective for six of the seven participants who reported a significant reduction in stress as a result. One stated, "I'm a completely different person with this tape".

The biofeedback part of the "Taking Control of Your Epilepsy" program was not implemented due to unavailability of the equipment. Instead, participants learned to identify a relaxed state and practice it by use of the relaxation tape and other relaxation exercises.

In keeping with this, participants were asked to utilize cognitive behavioural techniques to examine their thinking patterns. Some became aware of certain thought patterns or feelings that were habitual. This varied between individuals. For some it was a tendency to feel fearful and anxious, some struggled with a pattern of feeling sad and hopeless, and for others there was an addiction to anger. Participants found that if they avoided their particular thought pattern, they did not seem overtaxed and they were less prone to have seizures.

Participants learned to identify environmental factors that triggered their seizures. For example if there is damage in the auditory part of the brain, a sudden sharp sound may trigger a seizure. One way to prevent seizures is to avoid the trigger, for example by listening to a sound effect tape and training the brain to relax and not go into seizure with the sounds that formerly triggered seizures. Participants were encouraged to try both these methods.

As well as physical and environmental triggers, emotional triggers were examined. Through the treatment period a specific life issue became evident for each participant. This seemed to create lowgrade, longterm stress that highly impacted the seizure frequency. The life issues or common emotional triggers were: achievement anxiety, relationship problems, social anxiety and lack of personal boundaries. Sometimes emotional triggers could not be eliminated. For example, a teacher might trigger achievement anxiety by giving an assignment. In this case the participant could not avoid the trigger, but instead learned to avoid the "negative state" that she or he experienced as a result of the trigger. The participant was taught to respond differently, using cognitive behavioural methods such as selftalk or reframing the situation.

Teaching participants how to set personal boundaries was an important part of this program. One challenge for several participants was to learn to not "take on" the problems of others and to learn to reduce their "caregiver" tendencies. When they learned to be more assertive and less influenced by the needs and demands of others, there was a decrease in seizure activity.
Participants found that by setting boundaries and paying attention to their own needs, they began to establish more healthy lifestyle practices. They found they practiced better eating and sleeping habits and established more regularity in their daily routines. This practice in itself contributed to significant decrease in seizures.

Certain participants were more successful in the program than others. This may be due to a number of reasons. Readiness is one factor. Some were more ready to look at life issues and take responsibility for their wellness. Life situations varied and some faced many more current challenges or had much less support from significant others. Also it must be taken into consideration that there was a variation in the severity of damage in the brain tissue. Age of onset and the severity of the seizure disorder appeared to be important factors in success.

Two of the participants were nine-year-old boys. Counseling and record keeping was a joint effort between parents and children. These two children were able to master the relaxation methods fairly easily, but had greater difficulty coping with the emotional stressors that affected their seizure frequency. Children generally take longer to master all the elements of this program (Andrews, 1995, personal communication).

The one participant who experienced an increase rather than a decrease in seizure activity was an adult. She was unable to control her main emotional stressor. In fact it seemed to worsen as we focused on it.

The other participants noticed improvement through the treatment phase, but further improvement was achieved in the months to follow as the lifestyle changes and relaxation methods were incorporated more completely. None of the participants were seizure free at the end of treatment, but this was achieved by three of the participants in the months to follow.

From this project, it was learned that counseling methods can be useful in reducing seizures for those who have not achieved complete seizure control through medication. Long-term followup of the participants will be continued for the next two years. The Victoria Epilepsy and Parkinson's Centre has made this treatment method available to other clients in the Society with positive results. It is hoped that a controlled scientific study can be conducted in the near future.

REFERENCES


**Stopping Seizures by Yourself**

**From Epilepsy: A New Approach** by Adrienne Richard and Joel Reiter, MD, New York: Prentice Hall Press, 1990

"As I settled into the circle at the first meeting of a support group for persons with seizures, I realized that the man to my left suffered from what these days are called developmental disabilities. Usually we don't see such people at meetings, and I was immediately impressed by the simple courage it took for him to be there, accompanied by his mother and the director of the group home where he lived. As the discussion turned to methods we can use to help ourselves, particularly dispelling fear, he spoke and I was impressed even further. "I do that," he said, his voice somewhat hoarse and halting. "I tell myself, keep calm, keep calm." "Does the seizure stop?" I asked. He nodded. "It goes away." he said.
"Did someone teach you to do that?" I asked.
He shook his head, looking a little hurt. "I thought of it myself," he said. I turned away in wonder, impressed that even a person whose functioning was as compromised as his had found a way to intervene on his own behalf and arrest a seizure. This man's personal...
experience was an addition to the growing number of similar accounts that I had heard since reading Dr. Efron's case history of the woman who aborted her seizures with a sniff of jasmine.

(Dr. Efron's patient was a concert singer whose seizures kept her from pursuing her career. Each seizure was preceded by a warning signal, an "aura," that manifested itself as the hallucination of a disagreeable smell. Dr. Efron gave his patient a small vial of essence of jasmine to sniff whoever she hallucinated this bad smell. It enabled her to stop her seizures before they went full course. Later he taught her through a process of conditioning how to imagine the odor of jasmine and stop her seizures by doing so.)
The Behavior Management Imperative

Replace

Negative Reinforcement (or the "Stick")
with Shaping (or the "Carrot")

<table>
<thead>
<tr>
<th>Negative Reinforcement</th>
<th>Shaping</th>
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<tbody>
<tr>
<td>&quot;The Stick&quot;</td>
<td>&quot;The Carrot&quot;</td>
</tr>
<tr>
<td>&quot;Believes that human nature is basically bad and that bad must be guarded against and kept in check&quot;</td>
<td>&quot;Believes that human nature is neutral and that good and bad are learned. Good can be taught, nurtured and cultivated&quot;</td>
</tr>
<tr>
<td>&quot;Bad&quot; Focused. Avoiding Bad is Good &amp; the Absence of Bad is Good. Focus is with Avoiding and Preventing Bad Behaviors and Negative Behaviors --&gt; &quot;I don't want&quot;...something Negative</td>
<td>&quot;Good&quot; Focused. Good is Good, which Prevents Bad. Focus is with a Driving/ Goal Directed Vision of Making Desirable Changes and a Positive Future --&gt; &quot;I want&quot;... something Positive</td>
</tr>
<tr>
<td>Uses &quot;Should, Ought, Must... Shouldn't; Mustn't&quot;, Frowns, Nods, etc. Leads to --&gt; Anxiety, Distress, Pessimism &amp; Negative Identity</td>
<td>Uses &quot;In Your/Their Best Interest... Not in...Best Interest&quot;, Smiles, Pats, etc.. Leads to --&gt; Confidence, Optimism, Hope &amp; Positive Identity, in My / Their / Our Best Interest</td>
</tr>
<tr>
<td>Uses Distress / Punishment to Decrease and Prevent Undesirable (Bad) Behavior</td>
<td>Uses Rewards to Increase Desirable (Good) Behavior</td>
</tr>
<tr>
<td>Uses Anxiety, Fear, Distress &amp; Guilt Until the Bad Behaviors Stop and Good Ones Begin</td>
<td>Rewards &amp; Praises approximations of Good/Desirable Behavior that are present, and Gradually and Successively Shapes Increases in Desirable Behavior Until Achieved</td>
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Shaping via Reinforcement of Successive Approximations of Desired Behavior:
This involves successively rewarding the smallest movements (baby steps) in the desired direction with carrots (i.e., verbal rewards, expressions of approval & appreciation, smiles & nonverbal gestures of approval, physical/tangible rewards, etc.) Each successful small step is rewarded, which teaches feeling good about being good.

Note: You don't get a rat to press a bar by yelling at it!!
TYPES OF REINFORCERS

I. **Tangible reinforcers**: Food, money, valuable commodities

II. **Social Reinforcers**: Social praise, compliments, smiles, acknowledgments, FEEDBACK, and other socially delivered desirable consequences.

" A. To Increase Behavioral Deficiencies
" 1. **Verbal**
   - I like it when you...... It's nice when you...... Thanks for......
   - That was terrific when you...
   - Great!... Nice Job! ... Super!
   - Fantastic! ... Wow! ... Beautiful!
   - What a nice thing to do for me by... OR ...I am really impressed by the way you...
   - It make me very happy to see you... I always enjoy it when you...
   - You did that by yourself and without a reminder to....
" 2. **NonVerbal**
   - Smile
   - "Thumbs up" sign
   - Handshake OR Pat on shoulder

*Note:*
1. Congruence between Verbal and Nonverbal Channels is Essential!!
2. Be IMMEDIATE with your PRAISE......Don't Wait!
3. Be SPECIFIC with your praise. Tell the client what you liked that s/he did.
4. NEVER use "back-handed" compliments, such as "It's about time you did a nice job" or "This is nice......so why can't you do this more often?"...or "It's about time"...

" B. To Decrease Behavioral Excesses
" 1. **Verbal**
   - "It displeases me when you...and it would please me more if"
   - "I dislike that behavior...and would rather that you... it displeases me when you ____ and it would please me if____"
   - "I like it much better when you show self-control by stopping _____, so I want you to stop now"....
" 2. **NonVerbal**
   - Neutral looks, followed by incremental smiles and signs of approval for efforts suggesting the desirable alternative behavior

Be sure to Follow with liberal verbal/nonverbal praise for performance of requested behavior (e.g. "Thank you, that really pleasces me much more... WOW, you (made a log entry/stopped arguing) ) and that really pleases me...)...and Reinforce SUCCESSIVE APPROXIMATIONS (i.e. smallest Baby Step semblances of movement toward) of the desired behavior!!!

III. **Activity Reinforcers**: Rewards which involve performance of desirable activity (e.g., sports, music)

IV. **Internal Reinforcement**: Providing one's own reinforcement (e.g., "At a boy"; pat one's back). This is shaped through progressive rewarding for requested, & subsequently, independent performance.
The Behavior Management Imperative

Replace

Negative Reinforcement

" Anxiety, Fear and Shoulds, Oughts, Musts, Shouldn't; Mustn't, etc.
" "I don't want"
" Feeling Bad/Anxious/Guilty Until You Quit Behaving Undesirably
" Or punishing for not behaving desirably
" Or punishing until one quits behaving undesirably

with

Shaping

" In your/their best interest; not in your/their best interest
" "I want"
" Rewarding, Praising the pieces of good/desirable behavior that are present, and gradually shaping small increases in the desired direction until the full desirable behavior is achieved
" Or rewarding until one behaves desirably
Self-Reward for Accomplishments

Focus on:

• (1) **Positive self-coaching.** Be prepared to Coach yourself with positive encouragement and praise for every small effort you make towards recovery or improvement. Imitate the best coaching you've ever gotten or given to others. Emphasize strong rewards and positive reinforcement for small gains, and Build Yourself Up - never beat yourself up.

• (2) **Pacing** with positive self-coaching to complete an activity.

• (3) Afterwards, **Complimenting yourself** out loud with 'good job', and use of Visualization as a self-reward for small gains. For example, after making bed, loudly pronounce 'good going'. Then, close your eyes and see you patting yourself on the back and smiling after the activity / accomplishment.
Catalogue of Desensitization Procedure Options (Chronic Pain Focus):

From:


☐ Desensitizing Medications
  ☐ Central Nervous System (CNS) Medications: Anti-epileptic drugs, Tizanidine HCL, Amytal, etc.)
  ☐ Peripheral Nervous System (PNS) Medications: muscle relaxants; homeopathics?

☐ Desensitizing CNS Neurophysiologic Procedures: EEG Biofeedback or EEG Driven Stimulation and adjunctive procedures such as sound and light (AudioVisualStimulation) and CranioElectrotherapy Stimulation), Transcranial Magnetic Stimulation, Brain Electrical Stimulation).

☐ Desensitizing PNS Procedures: EMG, Temp. Biofeedback; Various Relaxation Procedures; TENS

☐ Desensitizing Behavioral Activity Procedures: Graduated Exposure / graduated activity programs; various exposure desensitization nterventions, systematic desensitization, etc.; Pacing

☐ Desensitizing Psychotherapeutic Procedures: emotional desensitization of catastrophic reaction to injury and pain and other fears and trauma; splinting of emotional reactions; calming the catastrophic reaction; emotional reaction systematic desensitization; sensory desensitization / reprocessing psychotherapy; Modified Induced Anxiety, EMDR, Systematic Desensitization, In vitro Systematic Desensitization and Other Desensitization and Exposure Procedures and Relaxation Desensitization procedures, with numerous variants and combination procedures
Cognitive Behavioral Analysis System of Psychotherapy (CBASP)

Components

- **Happened** (Event - newspaper reporter account, minus any interpretation, reaction, emotion, inference, etc....Just the Facts)
- **Meant** (Significance, What makes it good or bad, and why? Relevance of the event, from the individual's phenomenologic perspective and vantage point).
- **Felt** (Emotions, not thoughts, but affective reactions....rejected, abandoned, demeaned, un appreciated, resentful, angry, irate, like I got my hands caught in the cookie jar, like my dog just died, like when my mother used to yell at me when I was little, etc., Noe: Males often need an adjective list of feelings, which we have)
- **Did** (Actual overt, but also covert responses) E.G., did nothing, or yelled, or told him to fuck off, or said okay, etc., etc., etc.,
- **Wanted** (How you wanted the situation to turn out...e.g., wanted him to compliment my work, or at least not criticize it...wanted her to at least pay attention to what I was saying...wanted him to apologize and promise not to do it again....
- **Turned Out** (What actually happened...e.g., nothing, or something bad or unwanted, etc., or a violent explosion with negative consequences, etc., etc.)

Evaluation: How close did it turn out compared to what you wanted (i.e., How much of Wanted was Gotten? See G.A.S.)

CLINICAL MODEL:

- Learning the thematic patterns of maladaptive functional contributions to undesirable situational outcomes, which create ineffectiveness patterns in relationships and living, and give good reason for distressful emotion, negative mood states and general maladaptation, unhappiness and specific to more general life dissatisfaction.
- **RX_1: Analysis of Functional Contributions** at each level
- **RX_2: Allows the Following Specific Remedial Interventions**
  - **Happened**: RX: When relevant, involves changing poor situation selection habits and poor situation involvements.
  - **Meant**: RX: Involves challenging Cognitive Distortions or Inflexible and Distored Interpretive Patterns (overgeneralization and the other cognitive distortions; Give Ellis's 11 irrational ideas and Martelli et al's Therapist and Patient Ideas (to make you distured or help you function) and often Involves Specification of the Global (hard to challenge; e.g., Everybody dislikes me; Bad things always happen to me: Everyone always) to be Specific (easier to examine and challenge; e.g., he did...; he said it was not good; etc.).
  - **Felt**: RX: Remediation of Emotion Modulation Problems (e.g., RX - Relaxation, Distraction, even Assertiveness)
**Relaxation Training and Protocols**

- **Did:** *RX: Training in Skills deficit areas* (assertiveness, anger control, etc.) or self efficacy problems
- **Wanted:** *RX: Remediation of Poor need formulation and problem solving* (*RX: Goal Attainment Scaling*)
- **Got:** *RX: Basically, the formula for effective functioning and mental health is Good approximations of Getting `What You Want.`

In CBASP, therapy is complete when homework Stress Survey Q’s all produce some semblance of desire outcome; therapy always begins with phenomenal mismatches, absence of recognition of functional contributions to situations, and powerlessness to effect outcome or produce desirable situational outcomes.

**Situational Analysis**

The process of situational analysis involves detailing a problem situation in order to personally control/shape your behavior to maximize your chances for a desired outcome. That is, (a) analyze the situation, (b) problem-solve potential actions, and (c) implement the plan that will most likely lead to what you want. A good way to get started with this concept is to think of past situations that caused you to be upset, or role-play situations that could happen. Once you have a problem situation in mind, answer the following set of questions:

- (1) What happened (who, what, when, where),
- (2) What were your thoughts, feelings, and actions at the time
- (3) What was the actual outcome
- (4) What was the desired outcome
- (5) What response (thoughts and actions) would have been more adaptive? That is, what response is more likely to help you get what you want? Having a standard list of adaptive thoughts to refute is helpful.

Example Problem Scenarios:

1. A coworker says to you: I don’t see why YOU should get such special privileges, you’re just pretending you’re blind to get advantages, you can see...
   - How do you feel?
   - What would you like to get out of this situation?
   - How do you react in order to get what you want from this situation?

**SITUATIONAL ANALYSIS STRESS SURVEY**

Name:____________________________   Date:__________   Time of Event:___________

Intensity of the Stress (1:mild - 10:severe):_______

Instructions: *Immediately after a stress event, please fill out this brief questionnaire. Please complete all parts of this situational analysis, as each survey will be reviewed.*

<table>
<thead>
<tr>
<th>Situational Analysis Problem Solving Life Control Strategy</th>
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<tbody>
<tr>
<td><strong>Happened?</strong></td>
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<tr>
<th>Goal Attainment Scaling (GAS) Outcome Expectancy Planner</th>
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<tr>
<td><strong>Best</strong></td>
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<th>Strategic Planning: Response Options</th>
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<td><strong>Likely success (given past efforts)</strong></td>
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Concussion Care Centre of Virginia and Pinnacle Rehabilitation  
10120 West Broad Street, Suites G,H & I, Glenn Allen, VA 23060
<table>
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<tr>
<th>Happened?</th>
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<td>Worst</td>
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</table>
• Do you perform unnecessary rituals in your daily routine?
• Are you a hoarder, afraid to throw anything out, no matter how useless?
• Are you unable to control runaway thoughts?

If you answered yes to any of the above questions, you may be among the five million Americans who suffer from OCD (obsessive-compulsive disorder), a mental disorder that can wreak havoc in the daily lives of its sufferers and their families.

In Brain Lock, Dr. Jeffrey M. Schwartz, a psychiatrist at the UCLA School of Medicine, shows you how to:

Free yourself from obsessive-compulsive behavior! Schwartz's revolutionary Four-Step method helps you defeat your irrational impulses by a process of Relabeling, Reattributing, Refocusing, and Revolving to defeat your obsessive-compulsive tendencies.

Change your own brain chemistry! Schwartz's groundbreaking shown that by using his Four-Step program you can alter your brain and modify your genetic disposition.

High energy use in the brain of a typical person with OCD

Lead a happier, healthier life! Achieve peace of mind as you banish your bothersome OCD symptoms and regain control of your own destiny.

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http://www.harpercollins.com

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ANADA $19.00

A Four-Step Self-Treatment Method to Change Your Brain Chemistry

Jeffrey M. Schwartz, M.D.
with Beverly Beyette
KEY POINTS TO REMEMBER

• Step 1 is the Relabel step.
• Relabel means calling the intrusive unwanted thoughts and behaviors what they really are: obsessions and compulsions.
• Relabelling won’t make unwanted thoughts and urges go away immediately, but it will prepare you to change your behavioral responses.
• When you change your behavior, you change your brain.
• The key to success is to strengthen your Impartial Spectator, your ability to stand outside yourself and observe your actions with mindful awareness.

KEY POINTS TO REMEMBER

• Step 2 is the Reattribute step.
• Reattribute means answering the questions “Why do these thoughts and urges keep bothering me? Why don’t they go away?” The answer is, because of a medical condition called OCD.
• OCD is related to a biochemical imbalance in the brain that results in a malfunction of the brain’s gearshift: The brain gets “stuck in gear.”
• Because the brain is stuck in gear, its “error-detection circuit” keeps firing inappropriately. This causes very uncomfortable feelings.
• Changing your behavioral responses to the uncomfortable feelings and shifting to useful and constructive behaviors will, over time, make the broken gearshift come unstuck.
• As the brain starts to shift gears properly, the uncomfortable feelings begin to fade and become easier to control.

KEY POINTS TO REMEMBER

• Step 3 is the Refocus step.
• Refocus means to change your behavioral responses to unwanted thoughts and urges and focus your attention on something useful and constructive. DO ANOTHER BEHAVIOR.
• This is the no pain, no gain step. You must be ACTIVE. You cannot be passive.
• Use the fifteen-minute rule: Work around your symptoms by doing something wholesome and enjoyable for at least fifteen minutes. After fifteen minutes, make mental notes of how your symptoms have changed and try to Refocus for another fifteen minutes.
• Use your Impartial Spectator. It will strengthen your mind.
• When you change your behavior, you change your brain.

KEY POINTS TO REMEMBER

• Step 4 is the Revalue step.
• Revalue means don’t take your symptoms at “face value”—they don’t mean what they say. See them for what they are.
• Work to Revalue in an active way, by seeing the reality of the situation as quickly and clearly as possible. Strengthen the clarity of your observation with assertive mental notes, such as “It’s not me—it’s just OCD.”
• When you Revalue and devalue unwanted thoughts and urges, you are strengthening your Impartial Spectator and building a powerful mind.
• A mind that can take note of subtle changes and understand the implications of those changes is a powerful mind.
• A powerful mind can change the brain by altering responses to the messages the brain sends.
• This is true self-command. It results in real self-esteem.
CAREGIVER SURVIVAL RULES

Developed and Adapted by Mike Martelli, PhD

1. Caretakers can not take care of anyone if they BURN OUT from not taking care of themselves. For starters, try scheduling one half day per week off for rest and relaxation, in some form of recreation that does not involve treating, helping, caretaking, or being responsible for anyone else, building to one full and one-half day, and moving toward caretaking of no more than 40 hrs/week.

2. It is in the patient and caretaker’s best interest to learn to easily & openly ask others for help!

3. At least some of the caretaker-patient (usually husband-wife) interaction must include non-caretaking activities - i.e. allowing interaction in the patient’s areas of residual strengths and competencies - especially for leisure activities.

   (RX: Perform an inventory of every enjoyable activity ever tried or thought of and start planning and experimenting - the more non-caretaking activities engaged in, the stronger the relationship can become.

4. Be a "Mirror" and not a "Sponge".

   Sponging is absorbing another persons negative emotions (e.g., anger) and reacting to them with similar negative emotions. It is catching the other person’s negative emotions and allowing them to control your emotions and reactions. Mirroring is the process of simply reflecting back another person’s negative emotions (e.g., "You are angry that I did not come when you first called...Hmm"), without emotional reaction, without obligation to respond emotionally, or to agree or disagree, and without "catching" the emotion. By its nature, mirroring involves a slow, deliberate and open look at the other person statements, and prevents escalation of emotions, allowing you to control your emotions by not reacting. It allows under-reacting, keeping a cool head to calm the situation, and prevents you from letting another persons problem become your own.

5. Contract with each other to allow mistakes, not beat each other up when mistakes are made...learning and taking into account the "Rules of Crisis" can help.

Addendum: Necessity of receiving help almost always produces resentment of helper (because it is a reminder of disability)!!

RULES OF CRISIS

♦ Everyone will be at their worst!
♦ Our/Their behavior and communication will reflect our/their worst!
♦ We/They will hold others accountable and Excuse ourselves/ themselves!
♦ When we are hurting, we fail to appreciate other’s hurt!
♦ Things will get better or worse after a crisis, but will not stay the same!

10 Tips for Family Caregivers

From the National Family Caregiver’s Association (NCFA): http://www.nfcacares.org/

1. Choose to take charge of your life, and don't let your loved one's illness or disability always take center stage.
2. Remember to be good to yourself. Love, honor and value yourself. You're doing a very hard job and you deserve some quality time, just for you.
3. Watch out for signs of depression, and don't delay in getting professional help when you need it.
4. When people offer to help, accept the offer and suggest specific things that they can do.
5. Educate yourself about your loved one's condition. Information is empowering.
6. There's a difference between caring and doing. Be open to technologies and ideas that promote your loved one's independence.
7. Trust your instincts. Most of the time they'll lead you in the right direction.
8. Grieve for your losses, and then allow yourself to dream new dreams.
9. Stand up for your rights as a caregiver and a citizen.
10. Seek support from other caregivers. There is great strength in knowing you are not alone.

   A Caregiver's Bill of Rights


I have the right --

1. To take care of myself: This is not an act of selfishness. It will give me the capability of taking better care of my relative.
2. To seek help from others even though my relative may object. I recognize the limits of my own endurance and strength.
3. To take pride in what I am accomplishing and to applaud the courage it has sometimes taken to meet the needs of my relative.
4. To protect my individuality and my right to make a life for myself that will sustain me in the time when my relative no longer needs my full-time help.

   Caregiver Self Advocacy

   4 Messages to Live By

   From the National Family Caregiver's Association (NCFA): http://www.nfcacares.org/

   What does it mean to be a happy person when you are a family caregiver? How can you gain a feeling of confidence in your abilities and have a sense of pride in your achievements? How do you stand up for yourself, take care of yourself and find a balance between your own needs and those of your loved ones? These are heady questions, and ones that we have discussed often at NFCA.

   We've looked for answers in our own experiences, in books, from professionals, and from other caregivers. We've struggled with these issues because they are at the core of our search for meaning and our need to have principles to live by as caregivers. We've now given form to the many ideas we have developed, and we want to share them with you. We call them NFCA's Principles of Caregiver Empowerment. They are the fundamental principles by which we try to live, and we hope you will use them as guideposts in your search for a sense of direction and inner peace.

   1. Choose to take charge of your life. Don't let your loved one's illness or disability always take center stage. We fall into caregiving often because of an unexpected event, but somewhere along the line you need to step back and consciously say, "I choose to take on this caregiving role." It goes a long way toward eliminating the feeling of being a victim.

   2. Honor, value and love yourself. You're doing a very hard job and you deserve some quality time, just for your. Self care isn't a luxury. It's a necessity. Self care isn't a luxury. It is your right as a human being. Step back & recognize just how extraordinary you are. Remember your own good health is the very best present you can give your loved one.

   3. Seek, accept, and at times demand help. Don't be ashamed to ask for help. When people offer assistance, accept it and suggest specific things that they can do. Caregiving, especially at its most intense levels, is definitely more than a one person job. Asking for help is a sign of your strength and an acknowledgment of your abilities and your limitations.

   4. Stand up and be counted. Stand up for your rights as a Caregiver and a citizen. Recognize that caregiving comes on top of being a parent, a child, a spouse. Honor your caregiving role and speak up for your well-deserved recognition and rights. Become your own advocate, both within your own immediate caregiving sphere and beyond.

Adapted by M.F. Martelli, Ph.D; ©1994; 2000
You are not alone
More than 12 million men, women, and children in the United States need some kind of help with daily activities. About five million are working age adults. About half a million are children under age 18.

Where do they get the help they need? Primarily, they are cared for at home by an estimated 18 million family caregivers. A vast majority of caregivers are women. According to one survey, 54% care for their spouses, 21% care for their parents, and 17% care for their children. Over half of them are employed full time.

While most report feelings ranging from anger to guilt to frustration to depression, most all believe that through the caregiving experience they have found inner strength they never knew they had.

You are important
As a family caregiver, there is no one who can do the job you do. Your emotional bond with your loved one makes your relationship special. It cannot be duplicated even though others can provide important services. Your willingness to take on the enormous responsibility of caring for another human being shows an uncommon level of character and compassion. Even though your job is difficult and often seems thankless, you are a role model for everyone who comes in contact with you.

If everyone could make a difference in just one person's life, as you are, the world would be a much better place. As you work to provide care for another, make sure you take time to take care of yourself -- because you are important.

How are you doing?

The biggest mistake a family caregiver makes is usually not involved with patient care -- it involves self care. Family caregivers often don't allow themselves the breaks they need. Sometimes they take the caregiving burden solely on their own shoulders even when there are sources of help. They may wait (resentfully) for others to volunteer to help. When no one does, stress increases and important relationships become strained.

If you've taken on the role of caregiver, pay careful attention to your own well-being: mental, physical, and emotional. When you ask yourself the question, "How am I doing?" and the answer is "Not very well," it's time to get help.

The top 10 needs of family caregivers
1. Information about community resources
2. Help with feelings of resentment and guilt
3. Help with dealing with the patient's feelings of loneliness and depression
4. Information about the patient's diagnosis and prognosis
5. Respite care. A break from caregiving
6. Diet and nutrition information
7. Information about where to get legal advice
8. Help with housekeeping, cooking, and house and lawn maintenance
9. Spiritual comfort
10. The promise that someone else cares about and supports their caregiving work

The 7 signs of caregiver burnout
1. Not eating properly
2. Becoming more emotional
3. Feeling overwhelmed
4. Starting to withdraw
5. Interacting less with peers
6. Having less mental focus at work
7. Having a disheveled unkept appearance

**Get information about the basic caregiving functions**

Despite the best of intentions, family caregivers can cause harm to their loved ones and to themselves. It is best to get information and, if possible, training in providing basic care. Basic categories include activities of daily living such as

- Bathing
- Dressing
- Feeding
- Toileting
- Grooming
- Transfers (e.g., bed to wheelchair)
- Moving around

If caregiving involves giving medications, operating or maintaining medical devices, or monitoring physical signs and symptoms, proper training is essential. Caregivers should know CPR. It is also a good idea to learn about any basic adaptations that would make the home living environment safer or easier to live in.

**Finding the help you need**

Take a "tour" of your phone book and Yellow Pages and see what you can find out by talking to:

- Local social service agencies
- Area churches
- Local support groups
- Nursing homes
- Nursing homes that offer short-term stays
- Home health agencies
- Homemaker services
- Chore services
- Adult day care centers
- Companion services
- Personal assistant services
- Respite care services
- Hospice

**Some other sources of information**

- Families USA Foundation
  - 1334 G Street, NW
  - Washington, DC 20005
- The Center for Applied Gerontology
  - 3003 West Touhy
  - Chicago, IL 60645
  - (312)508-1075
- The National Family Caregivers Association
  - 9621 East Bexhill Dr.
  - Kensington, MD 20895-3104
  - 1-800-896-3650

Check in your bookstore for books such as --
Helping Yourself Help Others: A Book for Caregivers
Single Persons Introductory Guide to Relationships and Dating

Rule #1: Don't Touch Anyone or Get Too Close or Friendly Before you take them out for a 2nd Date. This means Anyone and Everyone!

Rule #2: Never Attempt to Date, get fresh, flirt with, or Touch Any Possible New Friends you meet. Grow these friends to increase your contacts with friends. Only their friends should be considered for dates. That way, if it doesn't work out, you still have a friend to do things with who can then introduce you to their other friends.

Rule #3: Compliment anyone you think you might want to date. Compliment everyone for practice to learn how to compliment unselfishly. Some things to compliment people about, include:
- Are Nice; are Bright; are Attractive
- Have a Nice Personality; are Fun to Be With...
- Are Witty / Funny; are Pleasant

Rule #4: Don't go out looking for dates. The best dates usually sneak up unexpectedly when you are just trying to have fun.

Rule #5: Learn to Fast Dance, and let people know you want to dance more. Look for people to dance with and go out and dance with. Ask your friends out on a friendly basis. Ask What They Like to Do and then ask them to do something they like to do.

Rule #6: Take chances asking others out on dates - let them say no. Don't be too afraid of rejections. It takes three rejections before you learn that it won't kill you, and before you can build up courage.

Choosing Desirable Persons for Possible Friendship:
Enhancing the Possibility of Success

Desirable Traits
- People oriented (interested in people feelings, experiences, background)
- Open and Accepting.
  They Like:
  - Old Folks and Poor Folks
  - Pets
  - Children
  - People who are different
  - People with disabilities
- Judge by a Persons Heart, Attitude, concern for others and "What's Inside"
- Concerned With and Willing to Help Others
- Patience
- Other Centered

Undesirable Traits
- Materialistic (interested in money, cars, clothes, expensive things, status)
- Closed, Judgmental, Critical.
  They dislike:
  - Old Folks and Poor Folks
  - Pets
  - Children
  - People who are different
  - People with disabilities
- Judge by Looks, Money, What You Have, Who You Know, Your Position or Status
- Concerned with Career, Status, Climbing the Social Ladder
- Impatience
- Selfish

M.F. Martelli, Ph.D. & TBI Survivors of Concussion Care Centre of Virginia
TASK ANALYTIC DERIVED COGNITIVE
BEHAVIORAL SELF CONTROL STRATEGIES:
Strategy B: Samples (MF Martelli, PhD)

Sarah's Internal Self-Control Habit

Every day, every two hours:

- (1) Rate your Vulnerability to "Out of Body" Experiences!
  - Have you felt prone to "bones shaking" or "out of body" experiences during he past two hours?
  - Have you felt "out of it" in the last few hours?
  - Have you had any experiences resembling stop-stare experiences anytime today? (or has anyone suggested you may have?)

Key:
- **Low Vulnerability** = "No" to all 3 questions
- **High Vulnerability** = "Yes" to 2 or 3 questions

- (2) Adjust your Daily Activities Accordingly!

- If You Have **Low Vulnerability** to "Out of Body" Distress, you can engage in "Out of Body" Irritating Activities in moderation (i.e., physical activity, noise, etc.)
- If You Have **High Vulnerability** to "Out of Body" Distress, attempt to engage mostly or only in "Out of Body" Relieving Activities

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<thead>
<tr>
<th>&quot;Out of Body&quot; Relieving Activities</th>
<th>&quot;Out of Body&quot; Irritating Activities</th>
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<tr>
<td>☑ Pacing / Going Slow &amp; Even</td>
<td>☑ Fatigue</td>
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<td>☑ Relaxation</td>
<td>☑ Stress / Family Stress</td>
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<td>☑ Naps</td>
<td>☑ Physical Activity / Overactivity</td>
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<tr>
<td>☑ Art Work</td>
<td>☑ Stimulation / Overstimulation</td>
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<tr>
<td>☑ Soft Calming Music</td>
<td>☑ Worry, Irritation, Anger, etc.</td>
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<tr>
<td>☑ Calming Self Talk</td>
<td>☑ Noise &amp; Lights</td>
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For Anticipated, Unavoidable Irritating Activities, Liberally Engage in Well Being Builders Both Before and After

Barb's Fatigue Self-Control Habit

Every two hours, on a regular basis, and every day:

- (1) Rate your Risk For Increasing Fatigue/Distress!
  - Have you felt prone to increasing Fatigue in the past few hours?
  - Have you felt prone to increasing Emotions, distress or irritability?
  - Have you felt overstimulated or Sensitive to Stimulation, noise, lights?
  - Have you noticed decreased Attention or Memory in the last few hours?

Key:
- **Low Risk** = "No" to all 4 questions
- **Some Risk** = "Yes" to 1 or 2 questions, or unsure
- **High Risk** = "Yes" to 3 or all 4 questions

- (2) Adjust your Daily Activities Accordingly (Immediately)!

- If You Have **Low Risk**, you can **Engage in Distress Irritating Activities in moderation** (i.e., physical activity, noise, etc.)
• If You Have **Some Risk** to Increasing Distress, or are not sure, **Engage in Mostly Distress Reducing Activities** compared to Distress Irritating Activities (and ensure that you pace!)
• If You Have **High Risk** to Increasing Distress, attempt to **Engage Only in Distress Reducing Activities**

<table>
<thead>
<tr>
<th>Activity Effects on Distress (Fatigue, Overthinking, etc.)</th>
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<tr>
<td><strong>Distress Reducing Activities</strong></td>
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<tr>
<td>☑ Pacing / Taking Breaks*</td>
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<tr>
<td>☑ Relaxation</td>
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<tr>
<td>☑ Daytime Naps *+</td>
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<tr>
<td>☑ Completing a Chore**</td>
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<tr>
<td>Swimming, Housework, Shopping, WalkingDog, WashingDog, Gardening</td>
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<td>☑ Television</td>
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For Anticipated, Unavoidable Executive Taxing Situations, Liberally Engage in Executive Renewers Both Before and After

**Jim’s Executive Self-Control Habit**

Every day, and every Two Hours, to make it a habit:

• **(1) Rate your Impulsiveness and Executive Status at this Moment!**
  - ☐ Have you been **Scattered** (Been on more than one task or idea or topic at a time) in the last 2 hours?
  - ☐ Have you Been an **Open Book** (i.e., Talking about You, Your Concerns, Your Life Story...Talking Like a Russian Novelist; Disclosing Too Much, Too Quickly...)
  - ☐ Have you Felt **Excited** in any manner in the last two hours?
  - ☐ Has your Thoughts or Speech **Raced** in the last two hours? (or are they Now - Don’t underestimate)

• **(2) Adjust your Daily Activities Accordingly!**
  - ☐ If You Have **Some Vulnerability** (‘Yes’ to 1 question, or unsure) to Dysexecutive symptoms, **Engage in Some Executive Renewing Activities and Closely Monitor and Reduce Executive Taxing Activities**
  - ☐ If You Have **High Vulnerability** (‘Yes’ to 2 or more) to Dysexecutive symptoms, **Reduce all Executive Taxing Activities** (that is, do few, pace and go very slowly) and Engage Mostly or Only in Executive Renewing Activities

<table>
<thead>
<tr>
<th>Executive Renewing Activities</th>
<th>Executive Taxing Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Pace / Slow / 1 Thing at a Time</td>
<td>☑ Overactivity</td>
</tr>
<tr>
<td>☑ Planning/Organization</td>
<td>☑ Stimulating Situations</td>
</tr>
<tr>
<td>☑ Relaxation / Power Nap</td>
<td>☑ Stress &amp; Worry</td>
</tr>
<tr>
<td>☑ Q Reflex/ Deep Breathing</td>
<td>☑ Rumination</td>
</tr>
<tr>
<td>☑ Swimming / Moderate Exercise</td>
<td>☑ Working</td>
</tr>
<tr>
<td>☑ Music/Guitar/Singing</td>
<td>☑ Prolonged Standing</td>
</tr>
<tr>
<td>☑ Reading</td>
<td>☑ Meeting New Persons/Females</td>
</tr>
</tbody>
</table>

For Anticipated, Unavoidable Executive Taxing Situations, Liberally Engage in Executive Renewers Both Before and After
Marie's Balancing Self-Control Habit

Every day, every two hours:
- (1) Rate your Risk For Increasing Dizziness or Balance Problems!
  - Have you felt dizzy or prone to dizziness or imbalance in the past two hours?
  - Have you felt like you would almost fall in the last two hours?
  - Have you had difficulty concentrating in the last two hours?
  - Have you felt tired or stressed in last few hours?

Key:
- **Low Risk** = "No" to all 4 questions
- **Some Risk** = "Yes" to 1 questions or unsure about more than 1
- **High Risk** = "Yes" to 2 or more questions
- (2) Adjust your Daily Activities Accordingly!
  - If You Have **Low Risk**, you can **Engage in Balance Challenging Activities in moderation** (i.e., bending, turning, cleaning, activity, etc.)
  - If You Have **Some Risk** to Increasing Balance Problems, **Engage in Mostly Balance Protecting Activities** compared to Balance Challenging Activities (and ensure that you pace! Don't do anything too quickly or for too long!)
  - If You Have **High Risk** to Balance Problems, attempt to **Engage Only in Balance Protecting Activities**

Piloting Skills: Internal Self-Monitor

Automatic Feedback Mechanism that Powers Self-Control, via:
- 1) **Anticipation of Audience Reaction, Situational Appearance and Desired Outcome**
- 2) **Insightful Anticipation of Individual Rehabilitation Challenges**
- 3) **Insightful Compensation for Rehabilitation Challenges**

ANTICIPATION (sung to the tune of the Carly Simon Song of the same name) is the function of the internal self-monitor, which is like a camera monitor...it watches what we do like a camera man, feeding back how things look. With neurologic problems, the feedback signal is often lost, and with it, the ability to anticipate the effects of our actions...how they look to others (e.g., potential friends, dates, bosses, etc.), or how they can produce undesirable consequences.

1) **General Anticipation** (and Self-Awareness)
   - How will does this look to others (potential friends, dates, bosses, WORST CRITIC, etc.)?
   - How will it effect my important long term goals, or help or hurt the situation to turn out the way I want?

2) **Insightful (Self-Aware) Anticipation** (Your Red Flags: Special situations and perceptions and emotions that must be considered and Anticipated)
   - e.g., Feeling Lonely
   - Financial Fears
   - Anger/Frustration

3) **Insightful Compensation**
   - Deliberately recognizing liability of red flags and tendencies to release ineffective responses (i.e., behaviors that do not help goals, and probably get you into trouble)
   - Employing an Inner running dialogue, with frequent red flag review, and practice inhibiting responses, and ensuring that thoughts/impulses are kept inside when Red Flags are present)

The Goal is to develop Manual Pilot to compensate for defective Auto-pilot, and via Habit training, recapture (rebuild) a competent Auto-pilot.

I.E. When This (red flag), Do this (Brake! - in other words STOP!)
Richard's Pilot Self Montitor Habit

Every day, every hour:

- (1) Rate your Risk for Ineffective Communication!
  - Have you felt distress or excitement about perceptions of:
    - Inequality, unfairness or mistreatment (of self or others)
    - "Stupidity" in others
    - Being ridiculed
    - Feeling Lonely or Horney
    - Financial Problems
    - Boredom
    - Anger/Frustration

  Key:
  - Low Risk = "Yes" to 0 questions; High Risk = "Yes" to 1 or more
  - (2) Adjust your Behavior / Activities Accordingly!

  ❖ If You Have Low Risk for "Alienating Others", you can engage in some "High Alienation Likelihood Activities"

  ❖ If You Have High Risk for "Alienating Others", engage Only "Low Likelihood" Activities

SELF CONTROL STRATEGY
Disinhibition Buster / Potential Releaser

Every Day, Every Moment:

- A) MONITOR Your Behavior at all times;
- B) ID, ID, ID & LABEL any inner excitement of any kind as an Emergency RED FLAG (DANGER signal Associated with worst memories of bad consequences - no $ from dad; rejection, castigation, etc.);
- C) RESPOND reflexively to Red Flags WITH BRAKES;
- D) INHIBIT ACTION and DELAY. Rethink intentions and Possible Effects (Using Dad as Inner Critic) and Strategize a Moderated, Controlled Response Only If one is Required!
- E) Self Reinforce (Pat on back, imagine a great babe winking approvingly and telling you about her available young sister who she would trust with you because you have good self control)

  And, Always
- F) Prepare via pep talk and imaginal practice of monitoring and putting on brakes before all social situations, especially special or stimulating or exciting ones

Allen's Self Management Habit (Rough Draft)

Every day, every two hours:

- (1) Rate your Vulnerability to Unpleasant Stressful Reactions!
  - Have you felt increased Fatigue or "tired" in the last few hours?
  - Have you felt increased worry, anger or any Emotions in the past two hours?
  - Have you been around a lot of Stimulation or commotion in the last two 2 hours?
  - Have you felt increased bother from Temperature in the last two hours?

Key:

- Low Vulnerability = "Yes" to 1 or less questions
- High Vulnerability = "Yes" to 2 or more questions

- (2) Adjust your Daily Activities Accordingly!

  ❖ If You Have Low Vulnerability to "Stress Reactions", you can engage in "Seizure" Irritating Activities in moderation (i.e., worry, stimulation, etc.)

  ❖ If You Have High Vulnerability to "Stress Reactions", attempt to engage in more, or only "Seizure" Relieving Activities
**Chris's Keep Kewl Habit**

Every Day, Every Two Hours:
- **(1) Rate your Risk of Losing Your Cool!**
  - Have I felt increased *Upset, Anger or Anxiety, or Cursed* in the past hour?
  - Have I felt *Impatient* or Frustrated About Anything (e.g., Wanting something Now; Getting My own Way, having to *Wait*; Not being able to find something right away etc.) in last hour?
  - Have you been *Bored* the last hour?
  - Have you felt *uncomfortably Uncertain* about anything in the past hour?
  - Have you made a *Mistake or Criticized Yourself* in the past hour?

**Key:**
- *Some Vulnerability* = "Yes" to 1-2 questions
- *High Vulnerability* = "Yes" to 2 or More questions

- **(2) Adjust your Daily Activities Accordingly!**
  - If You Have *Some Vulnerability* to "Losing Cool", you can **Limit Your Engagement in "Heating Up" Activities** (i.e., worry, stimulation, etc.)
  - If You Have *High Vulnerability* to "Losing Cool", attempt to **Engage Only in "Cooling Off" Activities**

**Jesse's "Keeping Cool" Habit**

Every Day, Every Two Hours:
- **(1) Rate your Vulnerability to Getting Hot/ Losing Cool!**
  - Have you felt increased *Worry, Anger* or any *Emotions* in the past 2 hours?
  - Have you *Cursed* in the past 2 hours, or Felt Any Stress?
  - Have you been *Around Anyone Else who is Angry or Anxious* in last 2 hrs?
  - Have you felt Tired or *Not Gotten much Sleep* the night before?
  - Is Mom Going Out Somewhere without You or Have You Been *Home Alone*?
  - Have you been *Worrying About Money* and Not Having any?

**Key:**
- *Some Vulnerability* = "Yes" to 1-2 questions
- *High Vulnerability* = "Yes" to 2 or 3 questions

- **(2) Adjust your Daily Activities Accordingly!**
  - If You Have *Some Vulnerability* to "Losing Cool", you can **engage in more "Cooling Off" Activities** (Vs. "Heating Up" Activities)
  - If You Have *High Vulnerability* to "Losing Cool", attempt to **engage in only "Cooling Off" Relieving Activities** (No "Heating Up" Activities)

**Kevin's Keep Cool Habit**

Every Day, Every Two Hours:
- **(1) Rate Your Frustration and Risk of Losing Your Cool!**
  - Have you *Been Criticizing Yourself or Your Situation or Having any Negative Thoughts* in last hour?
  - Have you been *Thinking about Sitting Around Not Making Money* in the last hour?
  - Have you felt increased *Anger or Cursed* in the past hour, or *Felt Hot*?
  - Have you *Thought About Not Having a Job or Not Making Enough Money* in the past hour?

**Key:**
- *Some Risk* = "Yes" to 1 question
- *High Risk* = "Yes" to 2 or more questions

- **(2) Adjust your Daily Activities Accordingly!**
  - If You Have *Some Risk* to "Losing Cool", you can **Limit Heating Up or Stressful Activities** (i.e., worry, stimulation, etc.)
  - If You Have *High Risk* to "Losing Cool", attempt to **Engage Only in "Cooling Off or Relaxing" Activities**
Leo’s Self-Control Habit (Rough Draft)

Every day, every two hours:
• (1) Rate your Vulnerability to Partial Complex Seizures!
  □ Have you felt increased worry, anger or any Emotions in the past two hours?
  □ Have you felt increased Fatigue or "out of it" in the last few hours?
  □ Have you been around a lot of Stimulation or activity in the last two 2 hours?
  □ Have you felt increased Temperature in the last two hours?

Key:
• Low Vulnerability = "No" to all 4 questions
• High Vulnerability = "Yes" to 2 or 3 questions

• (2) Adjust your Daily Activities Accordingly!
  忧 You Have Low Vulnerability to "Partial Seizures", you can engage in "Seizure" Irritating Activities in moderation (i.e., worry, stimulation, etc.)
  忧 You Have High Vulnerability to "Partial Seizures", attempt to engage in more, or only "Seizure" Relieving Activities

Rob’s Seizure Self-Control Habit

Every day, on a regular basis, and at least in the morning and again in the afternoon:
• (1) Rate your Vulnerability to Seizure Occurrences!
  □ Have you felt prone to having seizures during the past few hours?
  □ Have you felt "out of it" in the last few hours?
  □ Have you had any experiences resembling partial complex seizures in the last few hours, or anytime today? (or has anyone suggested you may have?)

Key:
• Low Vulnerability = "No" to all 3 questions Some Vulnerability = "Yes" to 1 question, or unsure
• High Vulnerability = "Yes" to 2 or 3 questions

• (2) Adjust your Daily Activities Accordingly!
  忧 You Have Low Vulnerability to Seizures, you can engage in Seizure Irritating Activities in moderation (i.e., physical activity, noise, etc.)
  忧 You Have Some Vulnerability to Seizures, or are not sure, engage in more Seizure Relieving Activities compared to Seizure Irritating Activities
  忧 You Have High Vulnerability to Seizures, attempt to engage mostly or only in Seizure Relieving Activities

Joe’s Keep Cool Habit

Every Day, Every Two Hours:
• (1) Rate your Risk of Losing Your Cool!
  □ Have you felt increased Anger or Cursed in the past hour?
  □ Have you been Impatient About Anything (e.g., having to Wait) in last hr?
  □ Have you been Interrupted while Working, or Had to Switch Activities?
  □ Have you been Uncertain about what to do at work in the past hour?
  □ Have you made a Mistake or Criticized Yourself in the past hour?

Key:
• Some Vulnerability = "Yes" to 1-2 questions
• High Vulnerability = "Yes" to 2 or 3 questions

• (2) Adjust your Daily Activities Accordingly!
  忧 You Have Some Vulnerability to "Losing Cool", you can Limit Your Engagement in "Heating Up" Activities (i.e., worry, stimulation, etc.)
  忧 You Have High Vulnerability to "Losing Cool", attempt to Engage Only in "Cooling Off" Activities
Essential Commandments of Counseling & Psychotherapy

I.  Do No Harm

II.  Know Your Biases and Correct for Them

III.  Read the Best, Know the Best, But Then Forget Everything and Meet Your Client

IV.  SHAPING, SHAPING, SHAPING

V.  Relationship Rules (as in 'is the Ruler')

VI.  Do no Commit Amateur Therapist Mistakes
    - (a) Imposing a strategy that doesn't fit
    - (b) Mismatching counseling style with client style and needs
    - (c) Neglecting to first develop the Relationship
    - (d) Not differentiating client need for ventilation or validation or empathy versus active treatment solution, problem solving, rescue, etc.
    - (e) Blaming the patient instead of the therapist relationship or therapeutic plan or process or therapist skills for failures
    - (f) Failing to Conceptually Convert Maladaptive, Ineffective, Undesirable Behaviors to Alternative, Effective Behavioral Replacements
    - (g) Failing to Make Shaping of Desirable Replacement Behaviors the Primary Therapeutic Focus
    - (h) Failing to Bolster & Provide Structures to Support Learning via Compensating for Necessary Cognition and Motivation Deficits
    - (i) Therapist Learned Helplessness
THERAPIST SURVIVAL RULES

1. Therapists can not effectively treat anyone if they BURN OUT from failure to rejuvenate themselves. For starters, try scheduling at least one half day per week off, for rest and relaxation, in some from of recreation that does not involve treating, helping, caretaking, or being responsible for anyone else.

2. It is in the client and therapist's best interest for both the patient and therapist to both learn to easily & openly ask others for help!

3. At least some of the therapist-client interaction will ideally include non-treatment activities - i.e. activities that allow interaction in the client's areas of residual strengths and competencies - especially for leisure activities, knowledge of client craft, sports, etc. (RX: Identify areas of client enjoyed activities or special knowledge or competence, and allow some engagement in these areas in order to strengthen the therapy relationship)

4. Be a "Mirror" and not a "Sponge". Sponging is absorbing another persons negative emotions (e.g., anger) and reacting to them with similar negative emotions. It is catching the other persons negative emotions and allowing them to control your emotions and reactions. Mirroring is the process of simply reflecting back another person's negative emotions (e.g., "You are angry that I did not come when you first called...Hmm"), without emotional reaction, without obligation to respond emotionally, or to agree or disagree, and without "catching" the emotion. By its nature, mirroring involves a slow, deliberate and open look at the other person's statements, and prevents escalation of emotions, allowing you to control your emotions by not reacting. It allows under-reacting or keeping a cool head to help calm the situation, and prevents you from letting another persons problem become your own.

5. Contract with each other to allow mistakes and to not beat each other up when mistakes are made...learning and taking into account the "Rules of Crisis" can help ... 

RULES OF CRISIS

- Everyone will be at their worst!
- Our/Their behavior and communication will reflect our/their worst!
- We/They will hold others accountable and Excuse ourselves/ themselves!
- When we are hurting, we fail to appreciate other's hurt!
- Things will get better or worse after a crisis, but will not stay the same!
Kinesiophobia and Cogniphobia: Assessment of Avoidance Conditioned Pain Related Disability (ACPRD)

MF Martelli, ND Zasler, RL Grayson and EL Liljedahl
Concussion Care Centre of Virginia, 10120 West Broad Street, Suites G & H
Glen Allen, Virginia 23060

Kinesiophobia is a concept that was derived in response to observations by health care treatment specialists of significant avoidance responses in the treatment of chronic back pain (Todd, 1998). Kinesiophobia is defined as the unreasonable or irrational fear of pain and painful reinjury upon physical movement. Given that lack of patient participation and cooperation are the major factors contributing to poor progress (or relapse) in chronic pain treatment, it follows that phobic responses to pain (or pain phobias), as unhealthy pain maintaining habits, are a major contributor to pain related disability. The K-scale (Todd et al., 1998; see appendix) is a useful instrument for quickly screening for unreasonable fear of movement or reinjury.

Scoring of the K-scale is straightforward. With the exception of four items (4,9,15,17) which are inverted due to being scored in the opposite direction, individual items responses are simply summed for the degree of agreement ranging from 1 to 4. A cutoff score of 37 has been found useful for discriminating clinically significant levels of avoidance conditioned pain related disability (ACPRD). In the case of high scores, and subsequent to ruling out of malingering factors, the most appropriate rehabilitative intervention is the provision of combination therapy. Emphasis on reeducation, countering maladaptive phobic responses and promoting adaptive attitudes and treatment participation/ cooperation are the typically necessary objectives of an effective treatment for reducing ACPRD.

Similarly, Todd, Martelli and Grayson (1998) extended the concept of kinesiophobia to post traumatic headaches. They observed that several cases of poor effort on neuropsychological assessment early after head trauma or whiplash, initially presumed to reflect frank malingering behavior, were actually reflective of phobic responses to anticipated initiation or increase of headache, which is a very frequent consequence of trauma to the head, neck or brain. In a couple of cases, brief graduated exposure and reeducation strategies were effective in countering these avoidant responses within one testing session. However, some of these responses have been observed to persist for one or more years and require formal anxiety reduction procedures to modify.

The concept of cogniphobia was subsequently proposed as an unreasonable or irrational fear of headache pain or painful reinjury upon cognitive exertion. The C-Scale (Todd, Martelli & Grayson, 1998; see appendix), adapted from the kinesiophobia instrument, is designed to assess anxiety based avoidant behavior with specific regard to cognitive exertion. That C-scale is the approximate equivalent to the K-scale applied specifically to assessment of ACPRD in cases of head and neck pain.

Investigations of psychometric properties and utility are underway and preliminary results appear promising. A cutoff score of 37 for the C-scale, like the K-scale appears to allow useful discrimination of ACPRD. Finally, like kinesiophobia, cogniphobia is treatable and can be eliminated through combination therapies that include reeducation, anxiety reduction procedures such as graduated exposure, cognitive reinterpretation and systematic desensitization, and promotion of adaptive attitudes and treatment participation/cooperation.
### K-Scale: Survey of Headache Impact

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree (1)</th>
<th>Agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm afraid that I might make the cause of my head pain worse if I concentrate too much</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>If I were to try to overcome it, my head pain would increase</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>My head pain is telling me that I have something dangerously wrong</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My pain would probably be relieved if I practiced concentration exercises</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>People aren't taking my medical condition seriously enough</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>My accident/injury has put my head &amp; brain at risk for the rest of my life</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Headaches always mean I have an injury or have done something to make it worse</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Just because something aggravates my pain does not mean it's dangerous</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>I'm afraid that I might make my medical condition worse by concentrating too much or being too mentally active</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Simply being careful not to concentrate too hard or too long is the safest thing I can do to prevent my pain from worsening</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>I wouldn't have this much pain if there weren't something potentially dangerous going on in my head</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Although my condition is painful, I would be better off if I were more mentally active</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Pain lets me know when to stop concentrating so that I don't injure myself</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>It's really not safe for a person with a condition like mine to engage in too much thinking and concentrating</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>I can't do all the things normal people do because it's too easy for me to cause harm to my condition</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Even though something is causing me a lot of head pain, I don't think it's actually dangerous</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>No one should ever concentrate on difficult mental tasks when he/she is in pain</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**Cutoff = 37**

D.D. Todd, M.F. Martelli & R.L. Grayson (1998); Adapted from Todd (1998)

### K-Scale: Survey of Pain Impact on Movement

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree (1)</th>
<th>Agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm afraid that I might injure myself if I exercise</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>If I were to try to overcome it, my pain would increase</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>My body is telling me that I have something dangerously wrong</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My pain would probably be relieved if I were to exercise</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>People aren't taking my medical condition seriously enough</td>
<td>5</td>
<td></td>
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<td>8</td>
<td></td>
</tr>
<tr>
<td>I'm afraid that I might injure myself accidentally</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Simply being careful that I do not make any unnecessary movements is the safest thing I can do to prevent my pain from worsening</td>
<td>10</td>
<td></td>
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<tr>
<td>I wouldn't have this much pain if there weren't something potentially dangerous going on in my body</td>
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<td>Although my condition is painful, I would be better off if I were physically active</td>
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<tr>
<td>It's really not safe for a person with a condition like me to be physically active</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>I can't do all the things normal people do because it's too easy for me to get injured</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Even though something is causing me a lot of pain, I don't think it's actually dangerous</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>No one should ever exercise when he/she is in pain</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**C= 37**

Kori, Miller & Todd (1990)

Kinesiophobia and Cogniphobia: Avoidance Conditioned Pain Related Disability

Martelli, et al., 1999
Psychotherapy Throughout the Course of Recovery from Traumatic Brain Injury
Keith D. Cicerone, PhD

Psychotherapy is an essential part of long-term brain injury treatment, assisting the person with a brain injury in adjusting to his/her new capabilities and helping mitigate the cognitive, behavioral and personality changes that can occur following brain injury. Psychotherapy also provides a roadmap for the person with a brain injury’s future, helping him/her maintain a positive attitude and set new goals. The collaborative effort between the therapist and the person with a brain injury is discussed, as is the process of improving awareness and compensation following a brain injury.

The Value of Group Psychotherapy After Brain Injury: A Clinical Perspective
Mary Pepping, PhD

Group therapy has a number of advantages to recommend it as a post-brain injury therapy. It allows people with brain injuries to develop their social skills in a non-threatening environment. Group therapy provides the individual with an environment where there are several people with brain injuries, reducing feelings of isolation and building a peer-support group. Group therapy for a number of people experiencing problems with cognition, perception and social interaction, however, must be handled delicately. The structure of a group therapy environment for people with brain injury is discussed. Family therapy, as a form of group therapy, also is recommended to help reduce the tensions of the family and the individual with brain injury.

Comparing Psychotherapy of Individuals with Brain Injury to Other Forms of Psychotherapy
Robert L. Heilbronner, PhD

Certain factors make the psychotherapy of people with brain injuries vastly different from the psychotherapy of other individuals. The therapist must be prepared to face ineradicable cognitive and behavioral impairments and assist the person receiving therapy to set realistic goals. Oftentimes, it will be more difficult to develop a healthy therapeutic relationship during the course of treating individuals with brain injury, although it is most important to do so. Issues with memory, emotional control and capacity for empathy—among others—are examples of factors often unique to individuals with brain injury, which can throw stumbling blocks into the therapist’s plans.

More than Cure: Existential Method in Psychotherapeutically Promoted Healing after Brain Injury
Eliezer T. Margolis, PhD

The author notes that many forms of psychotherapy have been used to help people adjust to post-injury impairments, but very few individuals and/or programs approach the issue of healing the psyche. The psyche, although not material, also is damaged as a result of a brain injury. It is the belief of the author that if and when the psyche is healed, then cognitive and behavioral rehabilitation will be easier. Unfortunately, by sustaining a brain injury, a person faces not just the trauma of finding that his/her mental abilities have changed, but also the trauma of adjusting to life in a culture where individuals with cognitive disabilities often are perceived negatively. The existential psychotherapist attempts to heal the psyche by helping the person with a brain injury regain his/her capacity to interact with people on a more than mechanical level and approaches him/her not as an all-knowing doctor, but as an equal person trying to help him/her.

The Value of Psychotherapy Following Brain Injury: Two Individuals’ Perspectives

This interview of two people with brain injury examines their views on a number of subjects, including pre-injury opinions on psychotherapy, the scope of psychotherapy in rehabilitation, where and when psychotherapy can be most effective and suggestions to others with brain injury. Their answers differed on a number of issues, such as when they entered therapy themselves, but their opinions on the scope of therapy and its intrinsic value for people with brain injury were quite similar.

An Interview with George D. Prigatano, PhD

This interview of a leading neuropsychologist examines his background in neuropsychology, the history of the field, his opinion on the best therapeutic approach, how brain injury can affect the course of therapy, its role in controlling behavioral and cognitive problems and its value in giving a person with a brain injury a renewed sense of purpose and direction in life.