For this report, EEG was recorded from multiple locations across the scalp, digitally converted and analyzed and then presented in a format providing colored headmaps to indicate levels of deviation from mean reference scores. The dimensions of analysis are Magnitude, Dominant Frequency, Interhemispheric Connectivity, and Interhemispheric Asymmetry. These dimensions were chosen based on clinical relevance and correlation with psychometric and neurocognitive measures. The items chosen for analysis are derived from fMRI research and traditional neurological texts.

The mean reference scores utilized for this report are derived from analysis of both normative and non-normative neurometric databases and significance levels are based on clinical correlations with psychometric instruments. This neurometric system was developed exclusively for clinical purposes relating to the practice of neurofeedback and is not intended for clinical diagnosis.

The initial section of the report provides a simplified presentation for the client and shows a single headmap with the most deviant locations. In addition, sections providing “AT A Glance” meters and an affiliated symptom list showing information on “Cognitive Efficiency” and associated features, CNS “Underarousal” and associated features,” Inhibited” behavior and associated features, and “Over Arousal” and associated features are displayed. The meters and dashboard lights reflect a probability weighting relating to the influence of each dimension of the individual and do not represent feature severity. Two columns of lights are associated with each feature, one column pertains to the level of client endorsement of an item on a questionnaire that relates to the feature and the other column pertains to the level of probability of the feature being present based on the map analysis alone. When both lights are activated, it suggests a correlation may be present between the item endorsed and the abnormal map feature. False positives and false negatives do occur and often indicate a more complex picture is present that require further analysis.

The next section is a more detailed section that operates in the same manner as the first section. In this section there are detailed head maps presented by dimension of analysis that display the commonly analyzed component bands of delta, theta, alpha, beta and high beta. All locations of the international 10-20 system are rated by colored indicators showing relatively typical ranges of EEG activity or activity levels that are approximately one or two standard deviations too high or too low with respect to the measured populations. It requires considerable training to read this section and it is intended for more detailed analysis by individuals trained in qEEG analysis and Neurofeedback. It is not intended for client presentation.

This same section includes a subcomponent analysis section that provides indicators of global significance levels of each component band broken down into small ranges that have demonstrated clinical relevance in the published peer reviewed literature on EEG. This analysis is based on general volume conduction to provide a general overview of spectral relationship between these subcomponent bands. In addition a midline analysis is provided to estimate the degree to which the individual’s overall EEG magnitude deviates from a more normative range of operation. This helps to identify the subpopulation of clients who have very low EEG power that does not provide a useful contrast between component bands when viewed from this more normative range of analysis. The use of the “Magnitude Contrast” feature in the Magnitude section of the map will provide improved contrast for inspection.
### Underarousal

**Global Measures**

**Local Measures**

<table>
<thead>
<tr>
<th>CEC</th>
<th>EEG</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>Impulsive</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Socially Inappropriate</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Hyperactive</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Easily Distracted</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Excessive Speech</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Disorganized</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Hyper-emotional</td>
</tr>
</tbody>
</table>

**Probability Legend**

- ☐ Low
- ☐ Moderate
- ☐ High

### Inhibited

**Global Measures**

**Local Measures**

<table>
<thead>
<tr>
<th>CEC</th>
<th>EEG</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>Victim Mentality</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Excessive Self-concern</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Ruminating</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Anger</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Self-Deprecation</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Agitation</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Irritability</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Passive Aggressive</td>
</tr>
</tbody>
</table>

**Probability Legend**

- ☐ Low
- ☐ Moderate
- ☐ High

### Overarousal

**Global Measures**

**Local Measures**

<table>
<thead>
<tr>
<th>CEC</th>
<th>EEG</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>Worry</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Hyper-vigilant</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Obsessive Thinking</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Dislike of Change/Novelty</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Excessive Rationalization</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Restless</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Poor Emotional Self-Awareness</td>
</tr>
</tbody>
</table>

**Probability Legend**

- ☐ Low
- ☐ Moderate
- ☐ High
Report intended for exploratory data analysis only and should not be considered a medical diagnosis.

Page 2 of 11
Eyes Closed Midline Analysis

Eyes Open Midline Analysis

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
Eyes Closed Brain Maps

**Magnitude**

- Delta
- Theta
- Alpha
- Beta

**Dominant Frequency**

- Delta
- Theta
- Alpha
- Beta

**Inter-Connectivity**

- Delta
- Theta
- Alpha
- Beta

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
Asymmetry

Delta

Theta

Alpha

Beta

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
Eyes Open Brain Maps

Magnitude

<table>
<thead>
<tr>
<th>Delta</th>
<th>Theta</th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
</table>

Dominant Frequency

<table>
<thead>
<tr>
<th>Delta</th>
<th>Theta</th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
</table>

Inter-Connectivity

<table>
<thead>
<tr>
<th>Delta</th>
<th>Theta</th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
</table>

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
## Two Channel Protocol Suggestions - Based on Eyes Open Map

<table>
<thead>
<tr>
<th>Protocol #</th>
<th>Left Protocol</th>
<th>Right Protocol</th>
<th>Sites</th>
<th>Entrainment Frequency</th>
<th>Entrainment Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>8-10d 15-20u</td>
<td>8-10d 12-15u</td>
<td>O1/O2</td>
<td>14Hz Left / 17Hz Right</td>
<td>Blue</td>
</tr>
<tr>
<td>18</td>
<td>9-11d 15-20u</td>
<td>15-20d 9-11u</td>
<td>P3/P4</td>
<td>14Hz Left / 17Hz Right</td>
<td>Blue</td>
</tr>
</tbody>
</table>

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
**Two Channel Protocol Suggestions - Based on Eyes Closed Map**

<table>
<thead>
<tr>
<th>Protocol #</th>
<th>Left Protocol</th>
<th>Right Protocol</th>
<th>Sites</th>
<th>Entrainment Frequency</th>
<th>Entrainment Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>2-7d 15-20u</td>
<td>15-30d 13-15u</td>
<td>F3/F4</td>
<td>14Hz Left / 16Hz Right</td>
<td>Yellow</td>
</tr>
<tr>
<td>18</td>
<td>9-11d 15-20u</td>
<td>15-20d 9-11u</td>
<td>P3/P4</td>
<td>10Hz Left / 17Hz Right</td>
<td>Blue</td>
</tr>
</tbody>
</table>

**IMPORTANT NOTE:** If a patient has a history of epileptic seizures or photic sensitivity you should avoid using the photic lights. You may still run treatment protocols without the photic lights. If a protocol suggests that you use yellow glasses on a client and they have reported symptoms of anxiety use green instead of yellow. Protocol suggestions should not be considered as treatment or cure for any medical conditions.

**Supplements Analysis**

<table>
<thead>
<tr>
<th>Suggested Supplements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetyl-l-carnatine</td>
</tr>
<tr>
<td>Alpha-linolenic Acid</td>
</tr>
<tr>
<td>Alpha-lipoic acid</td>
</tr>
<tr>
<td>Calcium</td>
</tr>
<tr>
<td>Choline</td>
</tr>
<tr>
<td>GABA</td>
</tr>
<tr>
<td>Inisitol</td>
</tr>
<tr>
<td>L-Tyrosine</td>
</tr>
<tr>
<td>Magnesium</td>
</tr>
<tr>
<td>Omega-3s</td>
</tr>
<tr>
<td>Pantothenic Acid</td>
</tr>
<tr>
<td>Phosphorus</td>
</tr>
<tr>
<td>Potassium</td>
</tr>
<tr>
<td>Selenium</td>
</tr>
<tr>
<td>Vitamin Bs</td>
</tr>
<tr>
<td>Vitamin C</td>
</tr>
<tr>
<td>Vitamin E</td>
</tr>
<tr>
<td>Zinc</td>
</tr>
</tbody>
</table>

**Metabolic Analysis**

<table>
<thead>
<tr>
<th>Probability Score</th>
<th>Metabolic Category</th>
<th>Symptoms Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Gall Bladder</td>
<td>Indigestion, Greasy food distress</td>
</tr>
<tr>
<td>4</td>
<td>Thyroid (hypo)</td>
<td>Cold all the time</td>
</tr>
<tr>
<td>6</td>
<td>Liver</td>
<td>Muscle Aches &amp; pains, Excessive Thirst</td>
</tr>
<tr>
<td>4</td>
<td>Kidney</td>
<td>Excessive Thirst</td>
</tr>
<tr>
<td>3</td>
<td>Gastrointestinal</td>
<td>Indigestion</td>
</tr>
<tr>
<td>2</td>
<td>Adrenals</td>
<td>Non-restorative sleep</td>
</tr>
</tbody>
</table>

Report intended for exploratory data analysis only and should not be considered a medical diagnosis.
The items listed below appear as a result of an agreement occurring between the individual’s endorsement of items on a subjective rating scale and items identified from the brainmap as being related to the same problem and operating outside a typical range of electrophysiological activity. The functional significance of items identified from the brainmap are derived from the research literature in neurology and brainimaging studies identifying correlations between anatomical locations and brain functions. Multiple locations inspected through multiple dimensions of analysis including magnitude, dominant frequency, coherence, phase and asymmetry are statistically weighted and scored to assess their significance with respect to each item endorsed.

The items indicated by the maps as being likely to be areas of functional difficulty are based on probability measures and consequently may provide false positives and false negatives. As probability measures, they do not indicate level of item severity but only level of probability that the problem is present. This does not in any manner constitute a diagnosis and should not be used for purposes of medical or psychological diagnoses. They only represent comparisons between the existing map and similar maps of other individuals with confirmed diagnoses or similar processes in these areas. This map is intended for the sole purpose of evaluation and training with respect to EEG Biofeedback.

The results of this report indicate a significant probability of problems in the following areas:

### Emotional

**Inhibited** - Individuals who show significant asymmetry with alpha higher in the left hemisphere than in the right hemisphere typically display many of the symptoms listed in the dashboard. Although other factors such as elevated alpha magnitude, slowed dominant frequency and increased coherence also contribute to these factors, the overall dominant feature is alpha asymmetry. Most individuals begin to develop progressively more negative moods and/or irritability when they are anxious and fearful for sustained periods of time and as they begin shifting into more inhibited and avoidant behaviors. This fearfulness and irritability translates into passive aggressive behavior, angry outbursts, spontaneous episodes of fearfulness and weeping that revolve around excessive self-concern and rumination regarding a sense of powerlessness to correct situations that generate feelings of being victimized or unjustly used. Self-deprecation in the form of negative self-talk and negative expectations regarding performance in social situations is common. In its worst form features of severe clinical depression emerge including social isolation, suicidal ideation, total loss of motivation and episodes of self-inflicted pain or self-harm.

**Overarousal** - Individuals displaying significant asymmetry with beta higher in the right hemisphere than the left hemisphere typically display symptoms of hyperarousal related to anxiety. The primary factors besides asymmetry that frequently contribute to this dimension of analysis include elevated beta magnitude, fast dominant frequency beta and excessive beta hypercoherence. Features typically associated with this dimension include excessive worry, hypervigilance, discomfort with transitions or changes, excessive rationalization and hyper-mentation, restlessness, agitation and diminished emotional self-awareness. Individuals may often feel emotionally numb or disconnected and in extreme forms may experience de-realization, dissociation from their body and panic attacks or tics. These features may often be accompanied by a wide range of physiological symptoms including headaches, insomnia, high blood pressure, and reduced immune function. Overarousal is typically a consequence of chronic demand on the CNS to respond to fear inducing events and social distress. Individuals tend to reduce their level of social interaction and their expression of personal emotion to protect themselves. Over time their physiological exhaustion can lead to episodes of inhibited behavior and social isolation resulting in moodiness, irritability and depression.

**Underarousal** - Underarousal refers to a neurophysiological state of diminished cognitive and emotional function characterized by a dominance of delta or theta globally or in broad regions of the brain. When focal abnormalities in these frequencies occur it may indicate lesions in the grey or white matter due to physical trauma such as TBI or stroke. Recent findings suggest that severe emotional trauma and hypersensitivity to some foods or allergens can enhance diffuse abnormalities in these frequency ranges as well. Frontal slowing in particular can result in impulsive behavior that tends to manifest physically in children and more socially or emotionally in adults. This often results in socially inappropriate behavior and hyperactivity. Other features related to this condition included excessive speech and hyper-emotionalty. Individuals with excessive underarousal are frequently disorganized and easily distracted.

### Executive Processing

Executive processing involves aspects of cortical functioning critical for learning and developing skills for accurate and successful social interaction. Abilities related to conscious orienting and focusing, discriminating and evaluating, planning, generating novel adaptive behaviors while inhibiting previously unsuccessful behaviors and task execution are native to this dimension of processing. Regulating and filtering unwanted perceptual and emotional information is also a critical aspect of executive functioning.

### Verbal Processing

Verbal processing describes a category of skills, listed below, that lead to accurate comprehension and communication and that contribute to building strong
social relationships leading to a sense of identity and fulfillment. Verbal processing is important for learning social norms and mores that define the meaning of circumstances and lead to effective problem solving behaviors. Deficits in verbal processing lead to the acquisition of faulty information that undermines effective categorization, decision making and problem solving. This limits the individual’s ability to access social resources because of continual errors and social inaccuracy. The consequence is discouragement from unfulfilled expectations and frustration due to unnecessary conflict. This especially applies to aspects of academic performance that include paying attention, carrying out multi-step directions, processing information at an appropriate speed for a given task, difficulty with reading, comprehension, vocabulary and following rules leading to successful conduct in class.

### Memory Processing

Memory processing has many dimensions and it is not unusual for individuals to be strong in several dimensions and weak in only one or two. Many of these dimensions are critical for academic performance and the tasks and procedures relating to technical and professional job positions. Difficulties with memory can also lead to misunderstandings and conflicts in personal relations and intimate relationships. It is not unusual for individuals to have a mild deficit and not be aware of the deficit and how it is undermining their effort to conduct their daily life successfully. Learning new skills and remembering schedules is critical to activities of daily living. Common key dimensions which may not be optimally functioning are listed below.

### Visual Processing

Human beings are predominantly visual in their orientation to the world and this aspect of human perception is deeply reflected in how the brain processes information. Important visual information is embedded in every aspect of social life involving the correct identification of meaning related to color, texture, form, motion, and spatial awareness. Difficulties in these subtle areas of processing often go undetected by the individual and others relating to them. They can undermine all aspects of social interaction as well as psychological dimensions of self-efficacy and self-esteem. Performance in academics, sports, and careers in general is often critically affected by this dimension.
CEC Response Assessment

<table>
<thead>
<tr>
<th>Category</th>
<th>Response Count</th>
<th>Average Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>13</td>
<td>2.00</td>
</tr>
<tr>
<td>Anxiety</td>
<td>10</td>
<td>1.70</td>
</tr>
<tr>
<td>Attention</td>
<td>8</td>
<td>2.38</td>
</tr>
<tr>
<td>Depression</td>
<td>4</td>
<td>1.25</td>
</tr>
<tr>
<td>Impulsive</td>
<td>2</td>
<td>1.50</td>
</tr>
</tbody>
</table>

CEC Responses

<table>
<thead>
<tr>
<th>Answer</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>I have trouble filtering out background noises.</td>
</tr>
<tr>
<td>3</td>
<td>I forget what I (did) had to eat the day before.</td>
</tr>
<tr>
<td>3</td>
<td>I have difficulty paying attention to a boring presentation.</td>
</tr>
<tr>
<td>3</td>
<td>I have a short attention span.</td>
</tr>
<tr>
<td>3</td>
<td>I am easily distracted.</td>
</tr>
<tr>
<td>3</td>
<td>I have to re-read a paragraph several times before it sinks in.</td>
</tr>
<tr>
<td>3</td>
<td>I have trouble finding my car in the parking lot.</td>
</tr>
<tr>
<td>3</td>
<td>I have a sensitivity to light and noises.</td>
</tr>
<tr>
<td>3</td>
<td>I feel restless or agitated.</td>
</tr>
<tr>
<td>2</td>
<td>I find it difficult to add numbers in my head.</td>
</tr>
<tr>
<td>2</td>
<td>I have difficulty remembering a phone number long enough to dial it.</td>
</tr>
<tr>
<td>2</td>
<td>I have trouble remembering names.</td>
</tr>
<tr>
<td>2</td>
<td>I find myself wandering while in conversation.</td>
</tr>
<tr>
<td>2</td>
<td>I get lost easily in buildings or malls.</td>
</tr>
<tr>
<td>2</td>
<td>I ruminate over my To Do List constantly.</td>
</tr>
<tr>
<td>2</td>
<td>I feel depressed.</td>
</tr>
<tr>
<td>2</td>
<td>I feel disorganized all the time.</td>
</tr>
<tr>
<td>2</td>
<td>I have insomnia.</td>
</tr>
<tr>
<td>2</td>
<td>I have trouble doing math.</td>
</tr>
<tr>
<td>2</td>
<td>I have poor handwriting.</td>
</tr>
<tr>
<td>2</td>
<td>I feel spacey or out of my body.</td>
</tr>
<tr>
<td>2</td>
<td>I think obsessively.</td>
</tr>
<tr>
<td>2</td>
<td>I have trouble shifting my attention.</td>
</tr>
<tr>
<td>2</td>
<td>I have difficulty organizing information.</td>
</tr>
<tr>
<td>Count</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>2</td>
<td>I have difficulty focusing on an idea.</td>
</tr>
<tr>
<td>1</td>
<td>I get stuck on ideas, thoughts or behaviors.</td>
</tr>
<tr>
<td>1</td>
<td>I feel aware of everything going on around me all the time.</td>
</tr>
<tr>
<td>1</td>
<td>I worry constantly.</td>
</tr>
<tr>
<td>1</td>
<td>I feel generally unmotivated and apathetic.</td>
</tr>
<tr>
<td>1</td>
<td>I have trouble reading people's faces correctly.</td>
</tr>
<tr>
<td>1</td>
<td>I feel manic.</td>
</tr>
<tr>
<td>1</td>
<td>I feel like a victim.</td>
</tr>
<tr>
<td>1</td>
<td>I have difficulty recognizing people's faces.</td>
</tr>
<tr>
<td>1</td>
<td>I have trouble remembering the sequence of past events.</td>
</tr>
<tr>
<td>1</td>
<td>I have difficulty with categorization.</td>
</tr>
<tr>
<td>1</td>
<td>I feel like I am on an emotional rollercoaster.</td>
</tr>
<tr>
<td>1</td>
<td>I have to frequently develop special strategies to get my way.</td>
</tr>
</tbody>
</table>
**Self Dimensions**

### Dependence

Dependent people tend to wait for others to take action. They like others to take the drivers seat. This way they can avoid being responsible for bad decisions. They tend to cultivate exclusive relationships and constantly seek attention from that relationship. They look to others to define the situation and base their emotional state on those around them. They dislike being alone and live in fear of being abandoned. Because disapproval is devastating they will avoid expressing themselves and tend to ignore their own thoughts and feelings when they conflict with others. They like to be taken care of and would prefer to sit back and let others make decisions for them. They let others draw their boundaries for them.

### Independence

Independence can be healthy or extreme. At its extreme it is avoidant and controlling behavior that isolates an individual from others. It can result as a fear of being judged or controlled by others (inverse control). It is passively assertive because it avoids co-operation and consensus for the definition of a social situation. It may be an extreme expression of perfectionism wherein the individual can avoid the messy details of having to compromise. It can be a justification for an inhibitive style of being.

At its best it is an expression of healthy boundaries. Independent people are creative and enjoy exploring new ground. They often know how to sustain themselves without attention from others and have a healthy level of self-esteem. They thrive on adventure. They often make journeys into the unknown and return with gifts and discoveries for those that support them. They are willing to take calculated risks and will often push the limits of a situation successfully. They are not afraid of failure. They are not ruled by the feelings and ideas of others. They like to make up their own decisions and draw their own boundaries. They prefer to solve their problems on their own. Healthy independence reflects an awareness of the need for basic support and co-operation and will respect the rules of any organization, including the family.

Associated Dimensions: Assertive, flexible, regulated, perfectionistic, impulsive

### Competitive

Competitive people are group oriented, but for self-centered reasons. They want to access group resources in order to get attention. They thrive on attention. In a sense they get their attention actively as opposed to dependent individuals who get their attention passively. Their self-esteem is dependent on proving themselves better than others. They can often be very argumentative and they don’t back down from confrontations. They may even cultivate confrontation and become experts in winning the argument. They give up easily and fear being abandoned by others if they are seen to make mistakes or fail at a project. They see mistakes as being deadly; an opportunity for your adversaries to take advantage of you. Competitive people are very vigilant of the actions of others and look for opportunities to denigrate them for their mistakes and gain the upper hand. They risk exposing themselves to the observation of others in novel situations and they like to maintain the upper ground where they know they are familiar with the risks and benefits. They are very rule oriented and know the rules of an organization very well. This allows them to manipulate situations to their advantage.

A mature sense of competition involves a lack of attachment to the outcome. It is often for the fun and excitement of the game and not to feed low self-esteem. It is subservient to higher motives and operates at the service of others and a love of the action of the game itself. The play is the thing.

### Perfectionistic

These individuals tend to always feel incomplete. They are restlessly engaged in always mopping up the details and getting everybody straightened out. They live in a world of careless and sloppy people who never get it quite right and consequently are a threat and a burden to them. It is very frustrating to have everyone dropping the ball on you all the time. However it does allow you to be better than the rest and come to their rescue. You can sit back on high and complain bitterly about the incompetence of others or ride to their rescue with kind condescension.

Perfectionists are never happy with others or themselves. They are compelled to constantly monitor the details and make sure things get done just right. Unfortunately there is only one way to do anything and that is the best way, their way. They can easily degenerate into a 'my way or the highway' stance with others. They often avoid arguments because they would end up arguing with everyone. In a powerful position they are overbearing and intrusive, constantly violating the boundaries of others to set them straight and make things right. They live in constant fear of making a mistake in public and will go to any length to prove themselves right if any doubts arise. Because they avoid mistakes and feel others will think less of them when they make them, they tend to be rigid in their ways and slow to innovate when confronted with problems. Their lack of flexibility may make them seem stubborn to others and is a liability in
Having developed a foolproof mechanism for protecting themselves from criticism, they are on a relentless crusade to convince others of their perfection. Usually a deep seated low self-esteem born of overcritical parents is the true motivation behind their behavior. Men who are perfectionistic tend to take it out angrily on others while women tend to become depressed.

### Assertiveness

Assertive people are usually open and direct. They respond quickly and enthusiastically to communication. They are quick to state their position and clarify the details. They are not afraid to ask questions and focus on details others may disregard. Their goal is to establish their boundaries and become clear regarding the boundaries of others. They want to know the rules of the game wherever they go so that they can employ them appropriately to avoid unnecessary confusion. They are proactive and like to anticipate and defuse problems early. They do not shy away from conflict but are not pushy or overbearing. They have a strong sense of self-efficacy and a fairly well grounded self-esteem. They are not easily manipulated and are quick to say 'no' when confronted with a situation they feel uncomfortable in.

### Passivity

Passive people tend to be afraid of any form of friction or conflict. They avoid confrontations at any cost. Consequently they constantly hide their feelings. They are very afraid of hurting the feelings of others and often suffer considerable guilt for every minor infraction regarding others. They are very unclear on their own boundaries because they violate them by saying “yes” so often, even though they would rather say “no”. They are confused about who they are. They are usually angry because they constantly feel that others are walking all over them. They feel unseen and unheard. They occasionally have outbursts of anger when their boundaries have been violated too much and then feel deeply ashamed of their behavior. They do not like talking to people in authority or strangers. When service is poor they rarely confront the individual or complain to the management. They are unclear regarding their feelings because they hide them so often.

### Impulsivity

This dimension of behavior is very grounded in a persons neurophysiology. We know from research that impulsivity is usually the result of too much slow wave activity in the frontal cortex. The term AD/HD is often applied to individuals with too much impulsivity. These are the people who color outside the lines without thinking. Impulsive people have great difficulty holding back their urges and impulses. It is hard for them to sit still and concentrate. They often loose focus unless they are engaged in a very rewarding task. Their attention wanders constantly and they tend to lose important information from discussions, lectures, and even conversations. This makes them appear careless, rude, unconcerned and irresponsible. They are often poorly organized and constantly lose things. They rush through projects and boring tasks. They frequently do not finish what they start. They may say things without weighing the consequences and act on the spur of the moment with little planning. They avoid details that are often important. They are driven by the excitement of the moment rather than careful assessment and consideration of consequences. Their emotions often overwhelm them and it may be hard for them to calm themselves after an exciting or emotion laden event. Because of these features of behavior they often break rules, norms, and mores that annoy, frustrate, and aggrevate others. As a consequence they may continually receive complaints, admonishments, and even threats from others, especially individuals in positions of authority. This may lead them to see the world as an angry and dangerous place. They may become rebels without a cause. They are often anxious because they are constantly concerned with who is going to be angry or frustrated with them next. They are constantly dealing with their own guilt and the annoyance of others. They may develop a victim mentality and feel persecuted. This can lead to situations where they feel they can never win or achieve anything, at which point depression may also set in.
# Guides to Change

## Dependence

1. Spend more time on your own.
2. Make some snap decisions.
3. Allow yourself to make some mistakes.
4. Practice interviewing others.
5. Plan activities you can do for several other people.

**Visualization:** Construct several situations you commonly find yourself in where you let others do for you and see yourself as taking the lead.

See yourself as giving presents to others and enjoying it.

## Independence

**Promoting Independence**

1. Explore new places on your own.
2. Make an important decision without asking others for their input.
3. Disagree openly when you don’t like an idea or action.
4. Develop a project on your own and spend time alone doing it.

**Visualization:** See yourself doing things alone and enjoying it.

## Competitive

1. Take your winnings and share them as gifts to your fellow competitors.
2. Avoid arguing with others.
3. Keep your victories and conquests to yourself.
4. Share your mistakes with others.
5. Explore novel group situations.

**Visualization:** Imagine a situation where you are the winner and you keep it a secret while giving away your winnings to your competitors. See yourself as finding great reward and enjoyment from this situation.

## Perfectionistic

1. Allow yourself to make a mistake.
2. Avoid correcting someone else’s error.
3. When someone makes a statement you don’t agree with let it stand.
4. Find the positive side of a mistake you made.
5. Do something fun rather than clean up a mess.
6. Tell someone about a mistake you made and how you learned from it.

**Visualization:** See yourself in a situation making a mistake and nobody seems to care, but someone is supportive. See yourself learning a great lesson from your mistake and sharing your insight with others.

## Assertiveness

1. When you are unhappy with service ask to talk with the manager and lodge a formal complaint.
2. If you don’t like an idea someone is sharing, then say so and discuss the pros and cons with them.
3. Introduce yourself to a stranger and start a conversation. Use the interviewing technique.
4. Ask as many questions as you can think of during every conversation.
5. If someone asks you to do something ask them in detail why.

**Visualization:** See yourself in a group of strangers, confidently introducing yourself and taking pleasure in the conversation.

### Passivity

1. Practice expressing your feelings whenever you notice them.
2. Use the word ‘no’ more often.
3. Start up conversations with strangers.
4. Make suggestions regarding what to do next.

**Visualization:** See yourself confronting others with your disagreements and suggesting solutions or other courses of action.

### Impulsivity

1. Take up brainwave training.
2. Learn to play a musical instrument by learning to read music.
3. Take up a sport that requires constant focus like golf or tennis.

**Visualization:** See yourself sitting quietly and without moving, relaxed and focused, reading a difficult text book or contract and enjoying it.
30% Overall Change

Magnitude - 3rd_all_gelled (Eyes Closed): 2/8/2012

Magnitude - 5th map (Eyes Closed): 5/27/2013