# STRUCTURED IMAGE FRAMEWORK THEORY (SIFT):

A neurologically based diagrammatic structure enabling the therapist to describe emotionally distressing situations within known brain functions.

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# Abstract

## Structured Image Framework Theory (SIFT):
## A neurologically based diagrammatic structure enabling the therapist to describe emotionally distressing situations within known brain functions.

The following paper will discuss the dynamics of a newly developed Structured Image Framework Theory (SIFT) and how it directly corresponds to known brain structures. SIFT allows clients to understand how they process everyday and heightened emotional distress and how that emotional distress corresponds to and mirrors recent neurological understanding of how the brain operates.

The SIFT model has been designed and formulated from thousands of clients' descriptions over 25 years of clinical treatment across childhood dynamics, a variety of devastating psychopathologies, community settings and disasters, through to war service adjustment. SIFT enables the client and the therapist to use a structure that can be flexibly applied to a variety of emotionally distressing processes.

The SIFT base model enables the therapist to clearly describe brain structures and functions that correspond to an applied diagram. The SIFT diagrammatic structure highlights what clients have experienced during typical or difficult emotional processing situations. This encourages normalisation, initiates adaptive processing mechanisms and secures a stronger therapeutic alliance in a timely fashion, which increases positive therapeutic outcomes.

This paper presents the broad structures of a therapeutic framework that describes the dynamics of emotional processing. The developed therapeutic guidelines and descriptions of the Structured Image Framework Theory (SIFT) model have been tested and formulated from a wide range of therapeutic interventions across multiple dimensions of personal emotional experience reported during over 25 years of psychological treatment.

To understand how a person processes various emotionally distressing experiences and how exposure to such experiences can affect a person's day-to-day functioning is a complex challenge. This understanding can be achieved by a variety of therapeutic techniques that aim to reassure the client with a sense of personal safety and control. The better clients feel they understand how they have been emotionally impacted from an experience and how they can expect to adjust through predictable processing systems, the better they can develop, grow and adapt to their environment.

As has been shown within the field of psychotherapy, it is vital to promote an expectation that a client can change their emotional discomfort and potentially developed psychopathology to a more positive adaptive thriving state (Prochaska, 1984). To ideally promote positive change, therapy should encourage conscious experiential feedback through cathartic corrective emotional experiences, self-liberation, counter-conditioning and re-evaluation processes. Likewise, the client should be able to test themselves against the environment within educational dynamics of cathartic dramatic relief, social liberation, stimulus control and contingency management (Prochaska, 1984).

Neuropsychotherapy emphasises aspects of how the brain's functions can be shown to promote change and healing through therapy. Under the therapist's guidance, neuropsychotherapy should emphasise how the client's own brain is processing information. Therapy should promote the power of one's own brain and facilitate its capacity to take over and thrive from a stuck point in processing following a significant emotional impact (Shapiro, 2012). The principles of how the brain can change itself through emotional experiences, intimacy, human connections, relationships, learning, culture, addictive patterns, technologies and psychotherapies are vital to promoting individual growth. The fact that neuroplasticity reveals how our brains are self-changing, develop brain structures that vary from person to person and continue to change throughout our lives, gives the therapist and client great hope. Unfortunately, neuroplasticity not only makes our brain more resourceful, but it can also make it more malleable to outside environmental influences leading to maladaptive psychopathology if not guided effectively by the support of others (Doidge, 2007).

The difficulty of encouraging the therapist to have a greater capacity to navigate and moderate a client's emotional distress within felt controlled parameters during treatment remains the challenge. A better understanding of how the brain functions in times of emotional distress can improve the capacity of the therapist and client to control emotional disturbance and promote healthy personal growth (Rossouw, 2014).

As with any sound theoretical framework (Hjelle & Ziegler, 1985), SIFT explains how a person experiencing multiple emotionally disturbing situations can potentially develop maladaptive adjustment. SIFT works within limited clear and explicitly defined developed concepts that can logically generate testable predictions for both therapist and client in the future. SIFT enables the therapist to explore a variety of distressing experiences that can cause negative pain cycles, catastrophic thought patterns, anxiety, Post-traumatic Stress Disorder (PTSD), complicated grief, depression, inconsistent performance and reduced resilience to cope with adversity. The SIFT diagrammatic structure also accounts for how a broad range of emotional experiences affects the client. SIFT does this in an internally consistent manner and comprehensively encompasses a diverse range of behavioural shifts that can be associated with distress throughout life (Hjelle & Ziegler, 1985).

It is an important aim to show how the challenges we face can be represented to the client so that he/she understands how emotionally distressing information is typically processed. SIFT has been formulated to increase the ways in which a client can understand the multiple dynamics involved in everyday emotional processing and potentially in the development of non-adaptive psychopathology disorders. The developed SIFT model has been designed primarily to enable the counselling clinician to facilitate long-term recovery and promote positive personal growth in a client who is having trouble adjusting to life's challenges (Bouda & Diver, 2012).

Van der Kolk's (1994) schematic representation of the effects of emotional arousal on declarative memory showed how explanatory models can give the client and clinician a greater applied understanding of trauma processing. Therefore, it is preferable that an applied model should be concise, simple, flexible and also dynamic enough to be able to expand to review the past, present and future elements of a client's psychological state following a traumatic event.

One of the fundamental factors for someone who may experience psychological distress during a forced time of adaptation is an overwhelming sense of personal loss of control. As depicted in Rossouw's (2014, p.57; Fig. 2) *integrated model of the base elements of the theory of neuropsychotherapy*, it is essential that a sense of personal safety with enriched environmental triggers promotes a greater capacity to approach higher order constructs and better attachment to others, which develops a greater sense of self. If there are compromised environmental triggers, these factors can be hampered or promote avoidance and feelings of being unsafe (Rossouw, 2014). If a sense of safety is compromised within the clinical treatment session, it can be detrimental to use a bottom-up/top-down therapeutic approach with a client who lacks a full understanding of how they arrived at their current highly emotional state. This is where SIFT is invaluable in enabling one to understand how environmental stimuli and activated past memories process within a framework that mirrors multiple dynamics of brain function during treatment (Wilson, 2014).

The following developed SIFT model (see Figure 1) enables clinician and client to understand the processes involved in adapting to everyday emotional processing as well as complex and overwhelming environmental stimuli that are within or beyond a person's current adaptive capabilities.

**THE BASE THEORETICAL ELEMENTS OF THE SIFT MODEL THAT CORRESPOND WITH BRAIN FUNCTION:**

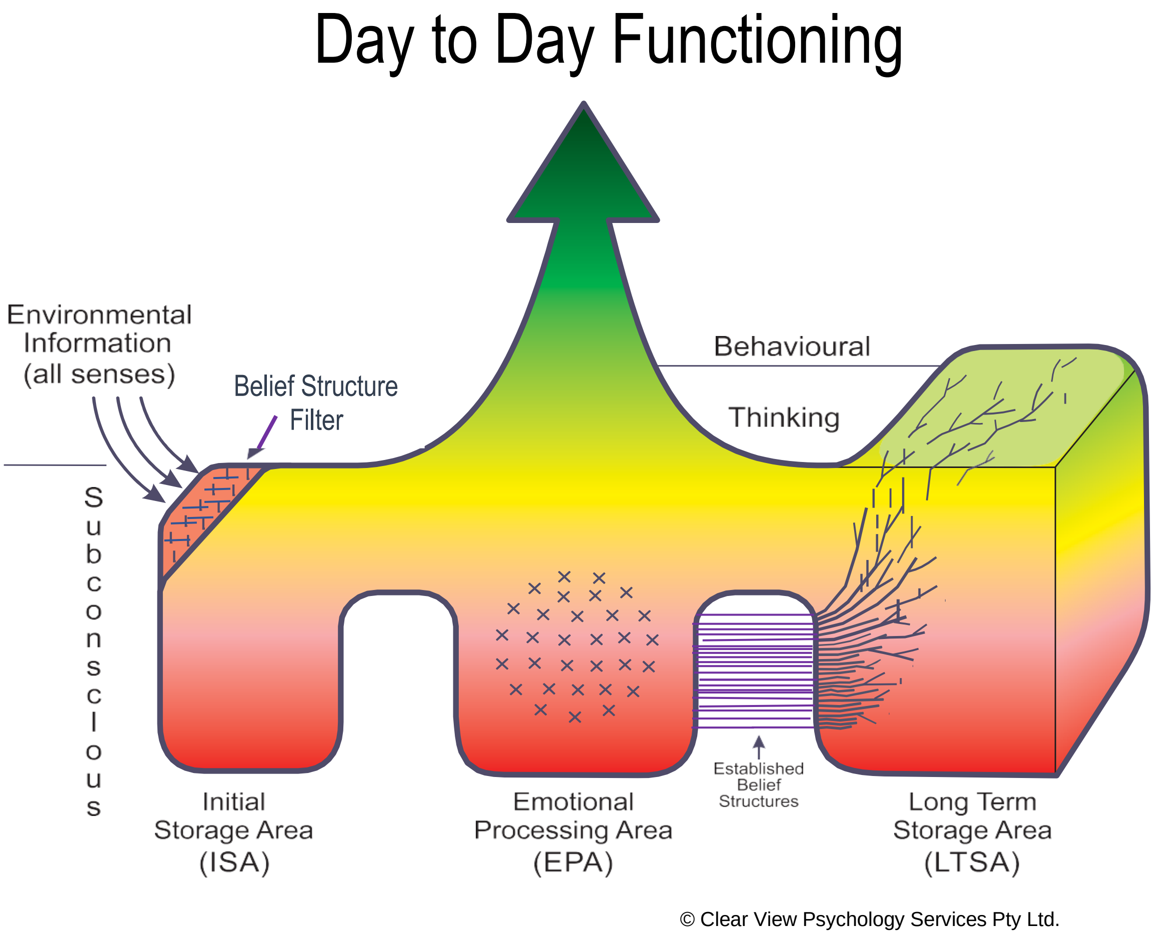



**Figure 1**: **Structured Image Framework Theory (SIFT): Base Model**

## Initial Storage Area [ISA] – Filter

As shown in Figure 1, the ISA Filter represents to the client the access point where environmental information from all senses is initially processed according to a person's established belief structures. The X's across the filter structure in Figure 1 represent the linkage between the X's in the central part of the Emotional Processing Area [EPA] and the connecting lines of the Established Belief Structures, which access the Long-Term Storage Area [LTSA].

The ISA Filter shows how, if a person wants to accept information because they are familiar, curious or have enriched environmental triggers/stimuli (Rossouw, 2014), he or she will accept emotionally based information into the Initial Storage Area [ISA] structure.

If, however, the ISA Filter finds the environmental information irrelevant or compromising (Rossouw, 2014) to the client's world view (i.e. *a summary of one's individually developed belief structures)*, the client will reject, ignore or not notice the information presented for everyday emotional processing. If danger or life threat is perceived, the ISA Filter will 'shut down' and endangering environmental stimuli will rapidly be absorbed into the ISA.

**Initial Storage Area [ISA]:**

As shown in Figure 1, everyday emotionally based stimuli are processed through the ISA Filter structure (derived from individually established belief structures) which influences what is accepted into or rejected by the **Initial Storage Area [ISA]**.

As depicted in Figure 1, once stimuli are accepted as important by a person's individual belief system filter, they are processed beyond this area for immediate day-to-day functioning or rehearsal for future use in the **Long-Term Storage Area (LTSA)**. Emotionally based environmental stimuli pass through the ISA and information goes through a rehearsal process in the **Emotional Processing Area (EPA)**.

This immediate day-to-day functioning and information rehearsal allows labelling of the accepted emotional content by the emotional labelling points (depicted by X's in the ISA Filter and EPA) to be processed into the **Long-Term Storage Area [LTSA]**. This process also allows the emotionally based environmental stimuli to be labelled in a positive or negative emotional orientation, according to an individual's previously reinforced personal belief structures. The **Established Belief Structures** are individually and uniquely developed from a person's ongoing experiences and established long-term understanding of their internally perceived world view from memories held in the LTSA.

**Emotional Processing Area [EPA]:**

As per Figure 1, the **Emotional Processing Area [EPA]** is situated between the ISA and the LTSA structures. The primary function of this area is to label and encode incoming environmental stimuli and recalled memories according to a person's previously established belief structures. It also facilitates immediate emotional responses and enables rehearsal to take place. This emotional content rehearsal allows the individual to continuously update and modify their already personally held belief structures.

Because the EPA is a temporary and central processing area between ISA and the LTSA structures, it is vital for the client to understand this area within the theoretical understanding of the SIFT model. As depicted in figure 1, this area is linked to actioning established belief structure threads, which enable new stimuli and existing memories to be newly encoded or modified according to a person's previous experience base before they are used in **Day-to-Day Functioning**. The SIFT model also describes how, once environmental stimuli have been accepted through the Belief Structure Filter into the ISA, the selected stimuli are emotionally labelled via the EPA and immediately used in Day-to-Day Functioning. The EPA emotional labelling points (illustrated by X's in the Belief Structure Filter and EPA) are held in place by formed, developed, individually established belief structure threads emanating from learnt experiences and memories held in the LTSA.

**Long-Term Storage Area [LTSA]:**

The SIFT model also describes how the EPA confirms recalled past memories from the LTSA when called upon for day-to-day cognitive and behavioural functioning. The emotional labelling points (depicted by X's; see Figure 1) draw from an individual's previously established belief systems to confirm recalled positive or negative long-term memories. Without this confirming process new emotional experiences cannot be influenced by already established personal belief constructs. This process allows recalled associated (reinforcing or denying) memories to become continuously reinforced or modified according to new emotional experiences and currently held personal belief structures.

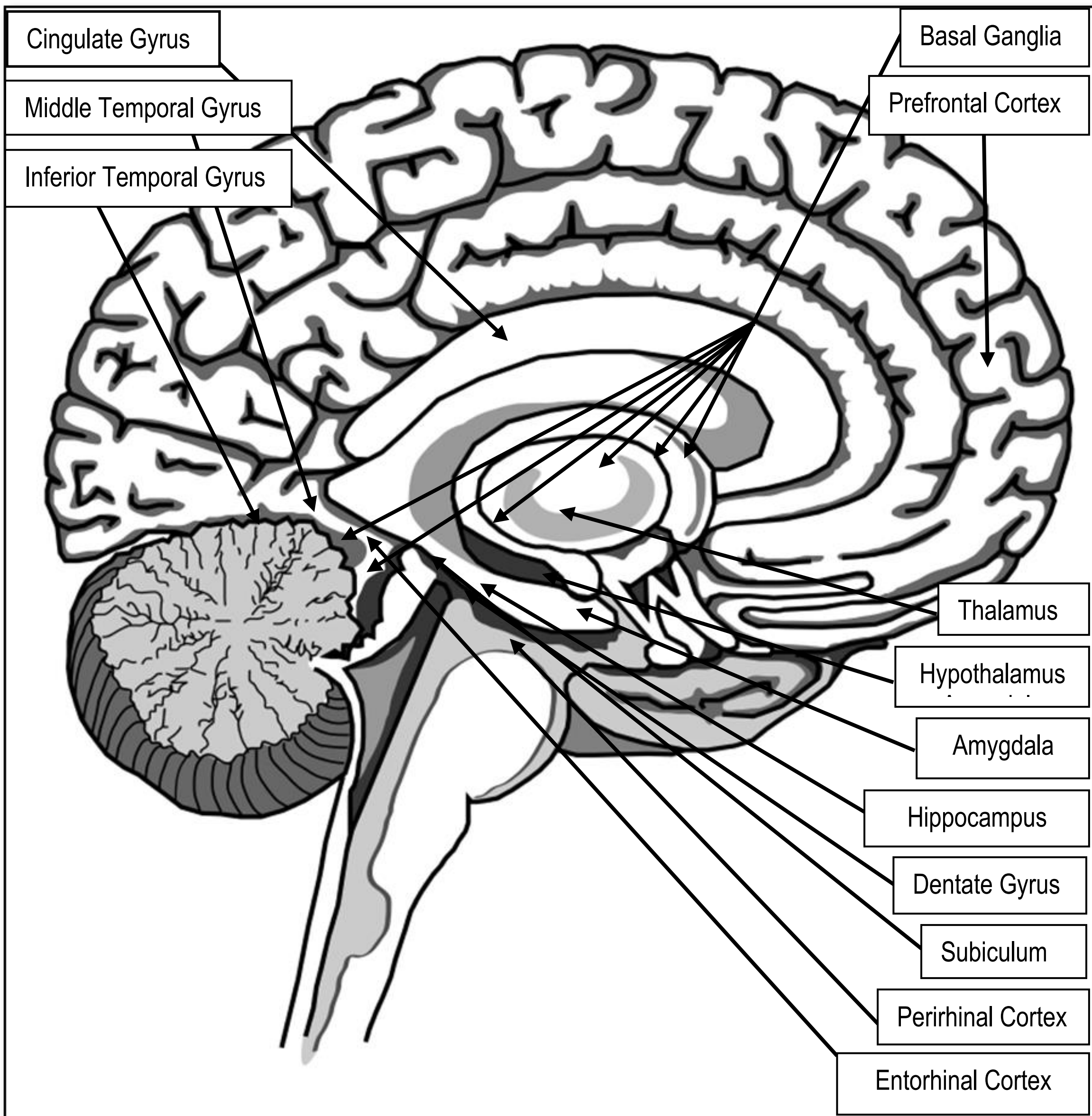
The client's established belief structures are developed through ongoing environmental stimuli being reinforced, rewarded or negatively highlighted and encoded through long-term emotional processes over many years of development. Figure 1 shows how, once environmental stimuli/information have been influenced or encoded by the central emotional processing (which is connected to a person's established belief structures), they think, behave and function in an individually developed and unique way. A person's day-to-day functioning is individually modified in a positively or negatively orientated way according to their uniquely developed and established belief structures.

In summary, the SIFT's theoretical framework aims to describe how everyday emotional stimuli and past memories are processed at a subconscious level for day-to-day functioning, via the central structure of the EPA. The advantage of SIFT is that a client can have a therapeutic and neurological theoretical framework that expansively describes emotional processing dynamics. SIFT also enables therapy to highlight how belief structure interaction, formation and associated memories function in a stable, predictable and organised fashion.

SIFT has multiple developed structures that can best describe how a client experiences an emotional event. SIFT is designed as an inclusive model which allows the clinician to work within a variety of short and long-term clinically appropriate counselling interventions to promote the best therapeutic outcomes for the client. SIFT facilitates ways in which, over time, through a positive, challenging and nurturing supportive environment, a child, adolescent or adult can develop more positively orientated long-term memory structures that promote approaching and learning from one's experiences in life. Alternatively, a person exposed to a threatening or isolative, withdrawn, restricted and limited environment may develop more negatively orientated memory structures, which promote avoidant, withdrawn and individual protective behavioural patterns (Rossouw, 2014).

**<u>THE BRAIN STRUCTURES THAT CORRESPOND WITH THE STRUCTURED IMAGE FRAMEWORK THEORY [SIFT] BASE MODEL</u> [see Figure 1]:**

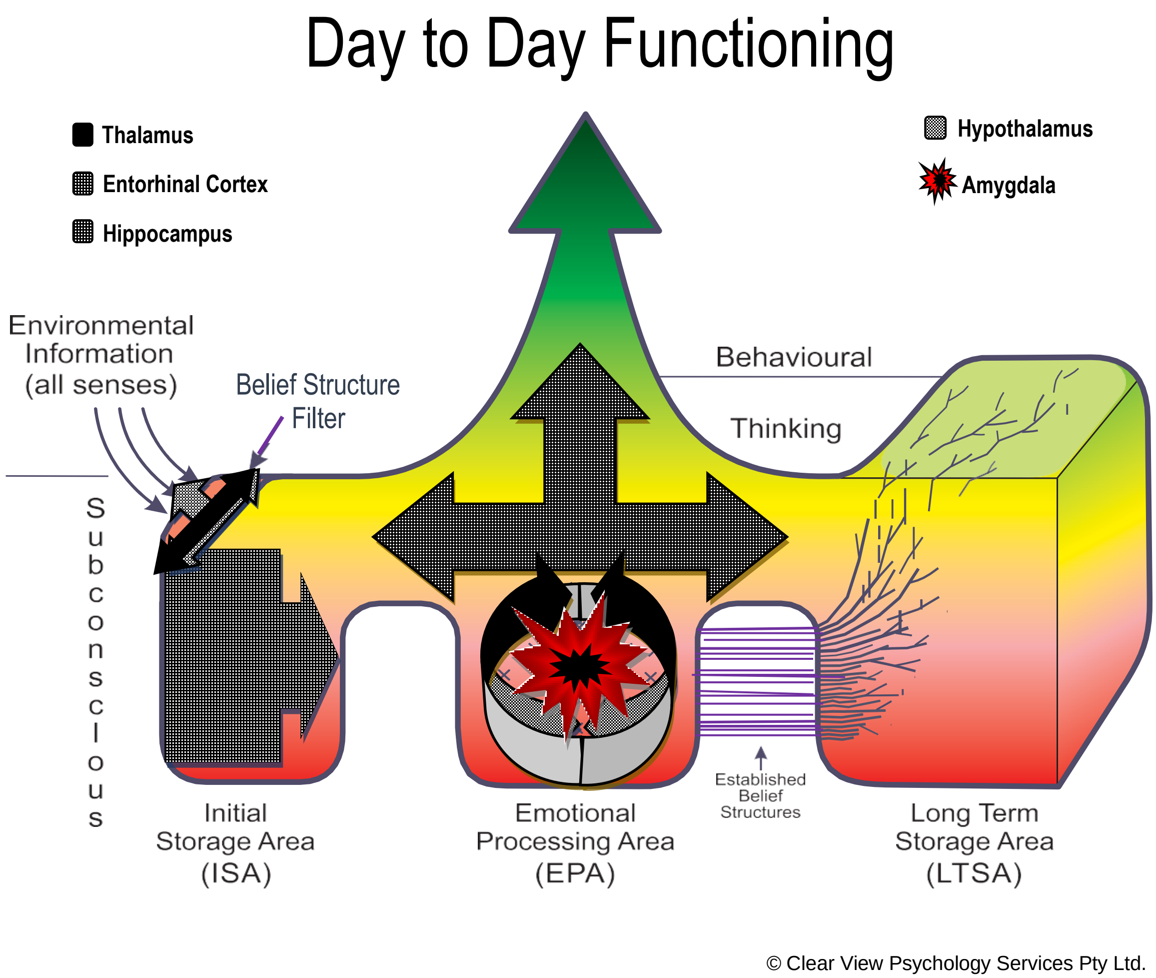
The following diagram (Figure 2) illustrates the structures of the brain that correspond to the SIFT Base Model according to neuroscience and how everyday emotional experiences, significant life events and devastating life-threatening trauma are processed (Carter, 2009; Arden & Linford, 2009).




**<u>Figure 2</u>: Brain structures that correspond to the SIFT Base Model**

**<u>SIFT's Belief Structure Filter / interaction with Emotional Processing Area</u> [EPA].**

Figure 3 highlights how the Base SIFT model (Figure 1), effectively depicts where the thalamus, entorhinal cortex, hippocampus, hypothalamus and amygdala brain structures correspond and interact and how they are situated at the Belief Structure Filter, Initial Storage Area [ISA] and surround/interact with the central Emotional Processing Area [EPA].




**<u>Figure 3</u>: SIFT Base Model corresponding with how the thalamus, entorhinal cortex, hippocampus, hypothalamus and amygdala function in the brain.**

***<u>SIFT's Belief Structure Filter / ISA / EPA interaction</u>* [i.e. thalamus]**

The thalamus interacts with and has several actions that correspond to the SIFT Base model shown in Figure 3. The following highlights how the thalamus is involved in gathering environmental information and relaying stimuli to multiple brain structures.

## Brain structures that correspond with Belief Structure Filter:

The **thalamus** has been described as the 'relay station' for incoming information from the outside world to the cerebral cortex; it regulates brain wave activity (plays a role in sleep and appetite) and is the starting point for all activity triggered by an external stimulus (Arden & Linford, 2009; Carter, 2009)

***Seeing* – L**ight sensitive retinal cells fire and send signals along their axons, which are bundled together to form the optic nerve. The nerve crosses at the optic chiasm where the nerve fibres connect with a specialised part of the thalamus.

***Hearing* –** Nerve impulses are received and processed by specialised neurons in the medial geniculate nucleus of the thalamus. These signals are then sent to the primary auditory cortex, which also feeds information back to the thalamus.

Sound enters the ears and travels via the brainstem and thalamus to the auditory cortex. Here sound is processed by associated areas, such as Wernicke's area, which is involved with interpreting speech.

***Touch* –** From the spinal cord the signal travels through the brainstem, crossing over to the other side of the brain. Here, the nerve fibre connects with a third-order neuron in the thalamus where the signal is relayed to the somatosensory cortex to be processed. Nuclei in the dorsal spinal column and thalamus also process sensory impulses en route.

***Taste* –** Taste and smell are both chemical senses. Receptors in the nose and mouth bind to incoming molecules, generating electrical signals to send to the brain. Both sets of signals pass along the cranial nerves. The pathway of taste related data travels from the mouth along branches of the trigeminal and glossopharyngeal nerves of the medulla, continues to the thalamus, then to primary gustatory areas of the cerebral cortex. ***Note:*** Taste has a survival value, like smell, which allows animals to evaluate and recognise what we can potentially eat or drink. It appears the more poisonous substances tend to taste bad (bitter), while those substances that are nourishing taste pleasurable or pleasant (sweet or savoury).

**Smell –** Only has a combined amplifying role via the thalamus to enhance the processing of taste. Signals from olfactory bulbs pass along the olfactory tract to the olfactory cortex. The olfactory cortex processes signals from the olfactory bulb and relays them to the orbitofrontal cortex and the amygdala (if odour indicates danger/life threat or emotional fear).

## ***SIFT's Initial Storage Area*** **[ISA]: [i.e. entorhinal cortex]**

SIFT's ISA structure shows where initial environmental information is temporarily stored and prepared for further processing that leads into the central emotional processing area. The ISA (i.e. entorhinal cortex) allows environmental stimuli from all senses to be primed or pre-processed for further encoding, reinforcement and action according to a person's understanding of the world via their established belief structures.

**Brain structures that correspond to the ISA:**

The **entorhinal cortex** plays a major role in memory formation. Two major connections from the lateral and medial areas provide the main input to the hippocampus. They are important to pre-processing memorable information.

The lateral input stream is thought to convey spatial information to the hippocampus, while the medial input stream conveys non-spatial information. The stream of information from the entorhinal cortex, through the dentate gyrus, to the hippocampus is called the perforant path (Deshmukh & Knierim, 2011). It is associated with declarative and spatial memory and self-localization. A study by Shaw and researchers (Shaw et al, 2007) found that in children with an increased genetic risk of developing Alzheimer's disease, the entorhinal cortex was significantly thinner. Neuroimaging studies show that the entorhinal cortex is one of the first areas of the brain to have substantial shrinkage in patients with very mild symptoms of Alzheimer's disease (Fischl et al, 2009).

## ***SIFT - across the Emotional Processing Area [EPA] towards long-term memory formation and immediate interaction with the Belief Structure Filter***
**[i.e. thalamus (interaction), hippocampus; hypothalamus and amygdala]**

Figure 3 highlights how the Base SIFT model (refer to Figure 1) effectively depicts where the hippocampus, hypothalamus and amygdala interact during emotional processing.

The hippocampus enables central emotional processing for immediate and consolidating thinking as well as encoding for long-term memory formation and establishing belief structure development, which feeds back and influences future emotional processing. The hypothalamus is shown to surround and influence the amygdala if danger is 'sensed' or identified at the Belief Structure Filter.

**Brain structures that correspond with the EPA.**

The **hippocampus** is responsible for short term memory and relays information to the Left PFC; it is also responsible for long term memory storage and processing during REM sleep. Insignificant details are discarded during sleep and the hippocampus clears details for the new day after sleep. If sleep is hampered or interfered with, changes in the stress relieving process of discarding benign details can form short term memory thought loops (OCD/Anxiety/catastrophised thinking). The hippocampus also maps events, develops context and associates fear with environmental stimuli (Champagne et al, 2008; Frodl, 2004; Kelly 2010)

The **hypothalamus** initiates the stress response; prepares the body to handle stressful events (fight/flight/freeze); monitors and controls internal systems (sleep, circadian rhythm, appetite, thirst). The hypothalamus **p**roduces the stress chemical CRF. Overactivity with too much stress response can create a disproportionate anxiety (Rossouw, 2014)

The **amygdala** collects all sensory data via the thalamus (except olfactory); has a major role in the brain's early warning system; is constantly aware of changes in the external environment – possible danger (Beretta, 2005: Phan et al, 2006)

**_SIFT_ – from the EPA into the encoding and retrieval structures of the LTSA**
**[i.e. cingulate gyrus, dentate gyrus, middle and inferior temporal gyri, basal ganglia, subiculum: perirhinal cortex and prefrontal cortex]**

Figure 4 shows up-down and top-down processing / thinking, action, behaviour and day-to-day functioning/interaction with long-term memory formation/rehearsal and consolidation towards higher executive functioning/imagery/encoding into and retrieval of memories from the structures in the LTSA.

Figure 4 illustrates how SIFT corresponds with the emotional processing, encoding and long-term storage of information, which promotes the establishment of individually based belief structures for future encoding, action and interpretation of the world we live in, create and adapt to.

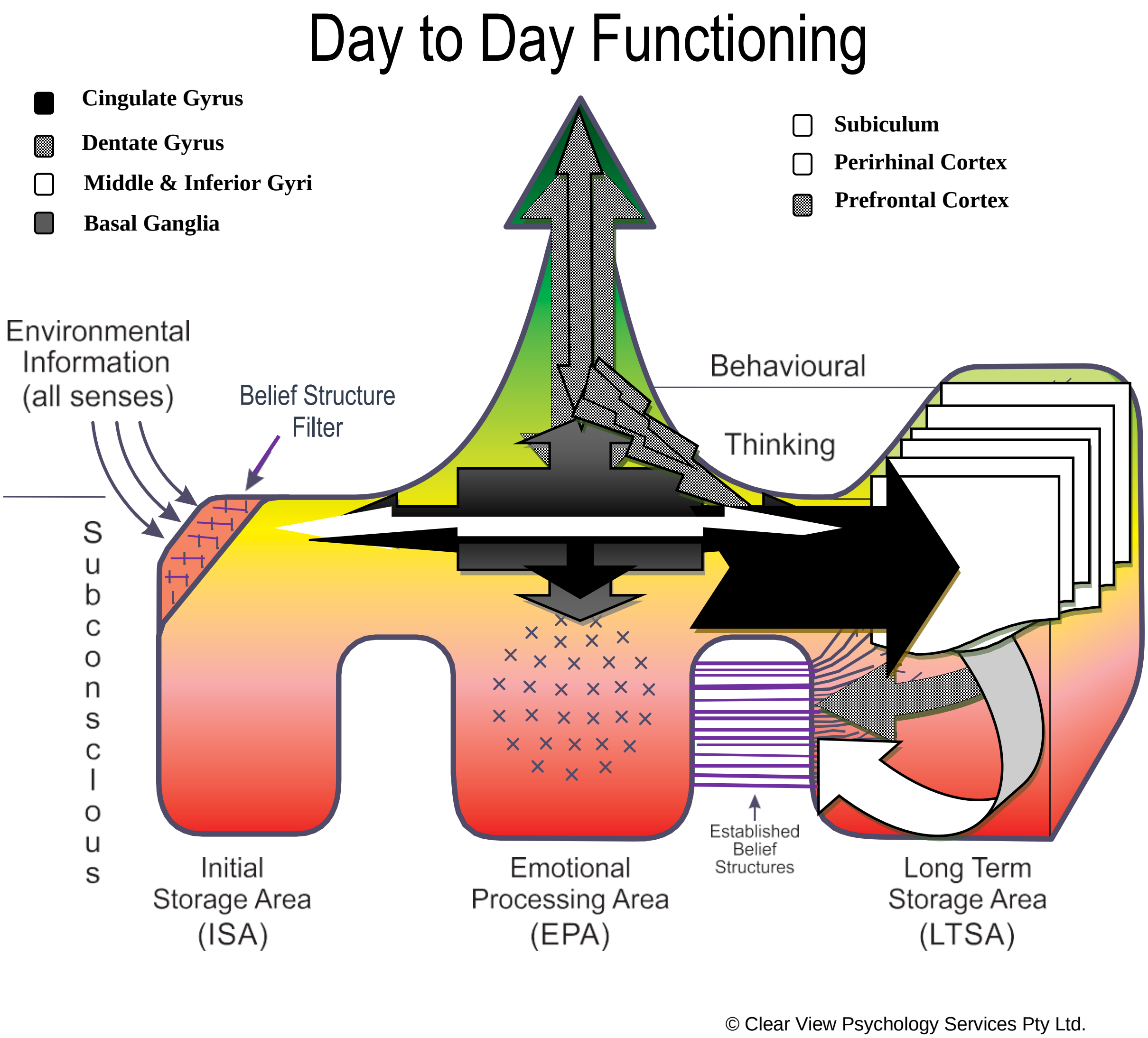



**Figure 4**: **SIFT Base Model corresponding with how the cingulate gyrus, dentate gyrus, middle and inferior temporal gyri, basal ganglia, subiculum, perirhinal cortex and prefrontal cortex function in the brain**

**Brain structures that correspond between SIFT's EPA and LTSA.**

The **cingulate gyrus** helps regulate emotions and pain. It is thought to directly drive the body's conscious response to unpleasant experiences. It is involved in fear and the prediction (avoidance) of negative consequences, which helps orient the body away from negative stimuli. Learning to avoid and protect from negative consequences is an important feature of memory. The cingulate gyrus has been associated with pain processing, emotion memory and self-regulation.

The **dentate gyrus** is connected to the hippocampal formation which has three highly interconnected regions; the dentate gyrus, CA3 and CA1. The dentate gyrus is one of the very few regions of the brain where adult neurogenesis (development of new neurons) has been found. It is known to play an important role translating complex codes from cortical areas into simpler codes that can be used by the hippocampus to form new memories (Carter, 2009).

The dentate gyrus has been associated with memory formation and having a role in memory recall. Improved neurodevelopment in children has been associated with exercise during pregnancy (Clapp, 1996).

The **middle and inferior temporal gyri** are involved in a number of cognitive processes, including semantic memory processing, language processes (**middle**), visual perception (**inferior**) and the integration of information from different senses. These structures have been implicated in recognising and interpreting information about faces. They are part of the ventral visual pathway, which identifies 'what' things are. The **inferior** participates in some forms of mental imagery (Schaeffer et al, 2009).

Figure 4 highlights how the Base SIFT model (Figure 1), effectively depicts where the basal ganglia, subiculum, perirhinal cortex and prefrontal cortex interact to enable higher executive function and memory encoding, which consolidate more established belief structures. These belief structures influence future emotional processing, thinking and behavioural patterns for everyday functioning and survival if warranted with trauma.

**Brain structures that correspond with the EPA for higher executive functioning and LTSA memory structures.**

The **basal ganglia** comprise a group of structures that regulate the initiation of movement, balance, eye movements and posture. They are strongly connected with motor areas of the brain and link the thalamus with the motor cortex. They are also involved in cognitive and emotional behaviours, which play a major role in reward, reinforcement, addictive behaviours and habit formation. Researchers (Strathis et al, 2007) suggest these structures may also contribute to the neuropathology of depression, particularly associated with the limbic system. They are associated with movement regulation, skill learning, habit formation and reward systems reinforcing behavioural patterns.

The **subiculum** is the main output region of the hippocampus which is important to learning and memory. It also plays a role in spatial navigation, mnemonic (symbol) processing and regulating the body's response to stress inhibiting the HPA axis.

The **perirhinal cortex** structure plays an important role in object recognition and storing information (memories) about objects. It is strongly connected to other brain structures such as the amygdala, basal ganglia and frontal cortex. These extensive connections allow the perirhinal cortex to specialise in associating objects with sensory information and potential consequences (e.g. reward). Researchers found that stimulating the perirhinal cortex elicited vivid visual memories (Barbeau et al, 2005). They also found through EEG scans that the greater hippocampus, primary visual cortex and other limbic system structures were activated with such stimulation.

The **prefrontal cortex** is thought to play an important role in higher brain and executive functioning. Specifically, this operates in relation to planning, problem solving, reasoning and judgement (Arden & Linford, 2009; Carter, 2009).

## A summary of SIFT's capacity to describe brain functions

Overall, SIFT describes an emotional information processing framework that is flexible and understandable by a client. SIFT has been developed to be dynamic, which allows a client to understand the dynamics of various stages of emotional impact, pain or traumatic processing according to neuroscience. SIFT can condense or expand its function easily during unpredictable therapeutic processes in the course of psychological recovery.

SIFT demonstrates multiple interactions between an initial acceptance or impact of emotional information (all senses) and immediate responses, consolidating information, capacity to think, behavioural shifts/adaptation to change, learning, long term adaption and day-to-day functioning.

SIFT allows the clinician to best understand and describe to the client how initially selected environmental information is prepared and stored for further emotional processing in a more central subconscious structure, which facilitates immediate, reinforcing, motivationally rewarding and encoding systems for long term memory structures.

It can be shown how the SIFT Base model (Figure 1) has several structures, which show how sensory information is emotionally processed. The SIFT Base model allows the clinician to describe what a person typically experiences during normal everyday emotional functioning through to the extremes of a life-threatening traumatic impact. SIFT enables the clinician to highlight how a client filters and rejects or accepts environmental information using all of her or his senses simultaneously to best navigate and adjust to their world.

In summary, Figures 2,3 and 4 describe how the Initial Storage Area [ISA] Filter (thalamus) relays information from sensory inputs into the ISA (entorhinal cortex), then onto the Emotional Processing Area [EPA][thalamus interaction; hippocampus; hypothalamus (if necessary in danger) and amygdala] and eventually into the Long-Term Storage Area [LTSA](via processing of the cingulate gyrus, dentate gyrus, middle and inferior temporal gyri, basal ganglia, subiculum; perirhinal cortex and prefrontal cortex**)** of the SIFT structure. In turn, the ISA Filter (thalamus) enables external environmental stimuli via the senses and the internal interplay of memories, knowledge, expectations and experiences, which form the basis of a person's individual established belief structures.

**Conclusion:**

The Structured Image Framework Theory (SIFT) has been conceptually designed in order that the counselling clinician can facilitate long-term shifts in a client's interpreted environment and stored memories that will promote positive behavioural growth. SIFT enables the clinician and the client to understand the processes involved in adapting to everything from everyday emotional processing to highly distressing incidents that are complex, overwhelming and disorganised in nature. The strength of SIFT is that it effectively corresponds with known functions of how the brain operates. This correspondence provides a sound scientific basis for facilitating, challenging and approaching difficult psychopathology and, in turn, promoting greater adaptive positive development to combat future adversity.

The SIFT model aims to describe how information is filtered, evaluated and organised for emotional processing from established personal beliefs for future storage. Future research and publications will further detail specifically how SIFT can expand to illustrate to a client how traumatic exposure and pain radically alters the operation of the SIFT model, because of the potentially life-threatening emotional impact and forced personal belief structure shifts when surviving. The SIFT model further allows the traumatised and pain suffering person to understand how they can re-establish day-to-day functioning following trauma and severely debilitating pain. This in turn can enable long-term emotional processing, challenge unpredictable intruding triggering and promote stabilised personal adaptive growth.

This paper has aimed to introduce a new broad and inclusive neuropsychotherapeutic construct to facilitate better treatment outcomes for the client attempting to recover. SIFT enables both the client and therapist to understand and facilitate emotional disturbance processing, using whatever therapeutic orientation they choose, while being able to effectively describe how the brain operates under duress. The SIFT model is designed to enable the clinician to work within short and long-term interventions that can highlight the impressive dynamics of how the brain functions. Overall, SIFT has a simple, concise and expansive conceptual framework so an individual at various stages of emotional processing can understand and explore how they are currently progressing towards long-term recovery.

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