

A Word from the Editor

Silence is Golden! Or is it?

Noise is ever-present in today's society. The ability to cope with noise of all types is personal and necessary in today's world. Some people have a low tolerance to certain noises whilst others need the comfort of noise to help them perform. It is surprising how many students have said that, for their best results, they need the Television on when they are doing their homework.

In this issue, we have published articles on, 'The Trauma of Noise'. These articles cover aspects of the noises which are part of our daily/working lives. One article is the winner of our competition and the author will receive the \$50.00 voucher. All articles reflect the opinions of the authors. Unfortunately, there were no entries from outside the organization, hence, the authors were all members of the Trauma Centre. The competition was judged by an independent reviewer who has been on both sides of the review process, as an author and as a reviewer.

As with all competitions, there can be only one winner.

Congratulations to the winner and thank you to all who entered the competition.

This issue of 'Inside Trauma' is my final one as Editor; it concludes three years of editing the Newsletter. I have enjoyed the experience of being involved in the process of deciding which topics were to be covered, of spending time spent with the authors of the articles and I have had the opportunity to hear and explore a wide variety of opinions. I have some regrets about leaving but know that the time is right for me to hand over. My good wishes go to the new editor and editorial committee and I wish the Trauma Centre organization and 'Inside Trauma' continued success.

Mary Casey - Clinical and Educational Supervisor of Trauma Centre Australia

Inside Trauma Newsletter

Winter 2013 Edition

Inside Trauma is published Trauma Centre Australia Suite 211, Princess Towers 1 Princess St, Kew, VIC, 3101, Australia

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The Silent Treatment

Silence is a rare commodity in today's busy world. We are bombarded with sounds and noise from the moment the alarm wakes us up in the morning until we turn the light out at night and sometimes not even then. Not only can noise increase our blood pressure and heart rate, disturb our sleep and challenge our endocrine system it can also lead to stress response, mood disturbances and anxiety. These symptoms mirror those that can be experienced following a traumatic event.

Noise is processed subconsciously triggering the flight or fight response. This occurs even if the noise is tuned out. It is this

involuntary response that leads to stress and anxiety. The degree to which a person is affected is dependent upon the individuals' social



aspects and psychological stressors. This response arises from the instinctual need for silence to survive. Silence allows prey animals to hear predators and predators to hear their prey. It is a needed backdrop for the songs and calls of animals seeking a mate. Obviously people no longer have this visceral need for silence to survive but as an antidote for the ills created by the noise of the world silence is indeed golden.

Whole industries have developed around helping people to achieve silence and quieten their minds, the main tool being meditation. Other simpler ways such as camping and no technology weekends where cell phones, computers, TVs and gaming consoles are turned off are also popular. Finding a secret, quiet place that can be retreated to in times of excessive noise is also of benefit. Utilizing the silence is important too or the moment is wasted. It is important to be fully present in the moment, mindful of what is going on in and around you, without judgement. Practise meditation or visualisation, use affirmations or mantras, write in a journal, hold a pet or just let your breathing calm and relax your mind and body. The benefits of silence can include; decreases in psychological stress, anxiety, sleep disturbances and overall improvement in brain functioning, memory and perception.

For survivors of Trauma however, silence is not without its dangers. Unguarded moments of stillness can bring memories

Older editions of Inside Trauma are available through the <u>Archive</u>

"Noise annoys an oyster, But a noisy noise annoys an oyster more".

R.P. Weston and Bert
 Lee, from the song "A
 Noise Annoys an Oyster"
 (1921)

The empty vessel makes the loudest sound

- William Shakespeare



to the fore, creating panic and flashbacks. Under the guidance of a skilled practitioner, ideally with training in the field of Trauma, silence in the form of meditation and yoga can be utilised as part of the healing process. The primary benefits of both disciplines are the teaching of self regulation of emotional and physiological states. Yoga has the added bonus of allowing people to move from one posture to another while maintaining their control. This means that if a particular pose triggers any uncomfortable responses the participant knows that it will end and they can move on, reinforcing their control and their ability to manage themselves (Schmidt & Miller, 2004; van der Kolk, 2009).

Silence it would seem is not just a luxury we all yearn for, but a necessity in today's noisy world. By seeking out a quiet space or experience we are actively healing the damage done simply by living in today's noisy environment.

Debbie Packer
Trainee Counsellor



What is white noise?

White noise is a signal, process or sound that has a flat power spectral density. There may be a vast range of frequencies however

each range has a uniformed frequency spectrum. You may be more familiar with white noise as an inconspicuous background noise such as a running shower, fish tank or fan. Pure digitally generated white noise is used to warrant a soothing, calming sound and has an adequate spectrum to partially disguise ear noise. Pure white noise does not stimulate strong emotional responses.

The use of white noise is often created and mimicked in work place organisations to minimise obtrusive sounds. Deviations of white noise are commonly used by parents to comfort crying babies prior to sleep. Many individuals also find white noise beneficial listening either with or without accompanying soft

That's one thing I hate!
All the noise, noise, noise,

- The Grinch in "How the Grinch Stole Christmas!" (1966)

My wife says I'm making a noise like a stranded whale.

I think I have a major snoring problem.

- Rex Hunt



music via their listening preference of stereo, Ipod or clock radio. Classic habituation therapy suggests avoidance of accompanying low music due to possible associations generating emotional reactions.

Sleep dysfunction is a common symptom amongst individuals with acute stress disorder and post traumatic stress disorder (PTSD). The application of prescriptive white noise for sleep-aid presents advantages over other medications due to the safety and cost factors of white noise. Individuals suffering from PTSD and acute stress disorder can potentially benefit from white noise as a startle-prevention technique. White noise has the

ability to effectively mask obtrusive noises such as barking dogs, car alarms and strong winds.



Does white noise contain hypnotic properties which effective induce sleep? A

controlled experiment conducted for a research paper, found evidence of 80% of the sample size expose to white noise fell within a 5 minute period. It could be suggested that white noise can increase sleep quality and duration, decrease number of awakenings, ease one back to sleep and deepen sleep depth. It is recommended that further conclusive research is conducted in relation to white noise and sleep.

Another interesting paper highlighted evidence that there is a decrease in norepinephrine concentration in the auditory pathways of rats after white noise exposure. The application of white noise could act as a hyper-arousal reduction approach for those with PTSD and stress-mediated disorders.

A common behavioural disturbance experienced by nursing home residents is verbal agitation. An interesting study was completed on environmental white noise as an individualised intervention with results indicating a 23% reduction in verbal agitation.

The increase and severity of noise pollution in today's society poses as a threat to health and well-being. Obtrusive noise is imposed through widespread growth of mass commercial production and transportation traffic. These adverse effects impact our social, working and residential environment.

Although more conclusive studies need to be carried out on the

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PUZZLE

The Rules

How many words of 4 letters or more can you make from these 9 letter? In making a word each letter may be used only once and the centre letter must be included. There must be at least one 9-letter word. No slang, foreign words, plurals, hyphen or apostrophes. Solution found on the last page.

S	А	L
Е	I	Е
Т	G	L

Yourwords			



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effectiveness of white noise, research has shown that there are benefits to white noise exposure in relation to sleep dysfunctions, PTSD and agitation.

Josephine Peachey
Trainee Counsellor

Impact on Health and Wellbeing Due to Excessive Noise

Intrusive noise can have a negative impact on our health and well-being by distracting and disrupting our regular functioning. Excessively loud noise can cause changes in blood pressure as well as digestive and sleep patterns, all signs of stress on the human body.

Subsequently, noise speeds up the autonomic nervous system. The severity of trauma suffered when exposed to a given noise depends on the level of toxicity associated with a particular sound. Louder and sharper sounds more readily shooting the autonomic nervous system into high arousal functioning are dependent on the decibel level of which any given individual is exposed.

Noise-induced trauma can be said to occur when noise exposure causes severe distress over time that some significant degree of functional, physical, social or emotional debilitation sets in.

Long breaks of silence between outbursts give the autonomic nervous system time to recover and maintain regular homeostasis.

Intrusive noise is becoming a threat to our environmental health with its potential psychological, biological and social affects. Additionally, noise can interfere with spoken



communication, negative social behaviour and annoyance

reactions becoming an unfortunate fact, contributing to our quality of life.

Emotional disruption and distress is associated with homeostasis affecting balance and regulation of brain and body. Specifically related to our survival instincts and behaviour are messages generated by the sensory organs of the head and neck, smell, vision, taste, hearing and vestibular balance. The sensory organs are close to the brain encompassing an early warning system for setting off flight or fight behaviour to guarantee survival.

A diverse group of changes can happen to the body in stress and trauma to many organs, endocrine and immune-system functions of the body that reflects exposure to elevated levels of the stress hormone cortisol. The burden of our cumulative life trauma is reflected in our physical bodies and posture as we age. Driven there by our unresolved traumatic procedural memory, the emergence of memories, sensations or emotions associated with the trauma can be internal or external. Trauma, the corruption of memory in time.

Trudy George Trainee Counsellor

Everyday noise trauma

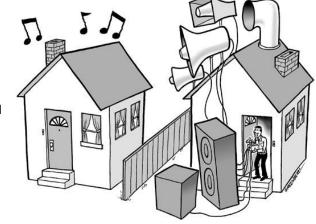
It is far too common that at times we feel so frustrated by our noisy neighbours, or the sounds of a barking dog in the middle of the night. The stress and anxiety that relates to this can make someone feeling very frustrated and useless. A lot has been discussed about the effects of noise and the impact on younger generations. It is known that younger generations prefer their music loud. You only have to stand beside a teenager while they are on their headphones to understand this. Though, having music excessively high lead can lead to temporary hearing loss and ringing in the ear after a sudden noise trauma, such as a night of clubbing or the barrage of noise when listening to music from an iPod. There is growing evidence that noise related trauma may lead to mental and cardiovascular health issues from hearing impairment, hypertension to stress and annoyance. Unwanted noise may lead people to a feeling of helplessness and aggressiveness. But it is not just from the use of excessively loud music. There

may be trauma from the barking dog whilst we are trying to sleep, or the disruption of sleep due to a late night phone call or SMS. Anyone awoken by the ringing of a phone soon after being in a deep sleep can relate to this. The pounding of the heart and feeling startled; our fight-flight response. Perhaps even feelings of dread that the only news received late in the night are bad ones. This can unconsciously lead to a higher prevalence of stress and anxiety while we are trying to sleep and rebuild our body for next day's activities. This trauma may have negative effects on our day to day lives and can be quite significant. We may feel agitated due to being fatigued and may be an underlying cause of stress and depression. This disturbance to sleep may lead to immediate, next day and long term effects on

mental health.

We should be aware of the noises around us in order to limit noise-trauma.

Techniques and



strategies that may aid in limiting disruptive noise is the use of white noise to drown out unwanted noise and having telephones switched off and not beside us on our bed side table whilst we are sleeping. Other techniques are meditation, and relaxation techniques. For example, concentrating on our breathing, letting out a deep breath, and dropping your chest followed by exhaling deeply. This may be all that it is required to reduce stress levels due to noise trauma.

Elizabeth Lourenco Trainee Counsellor