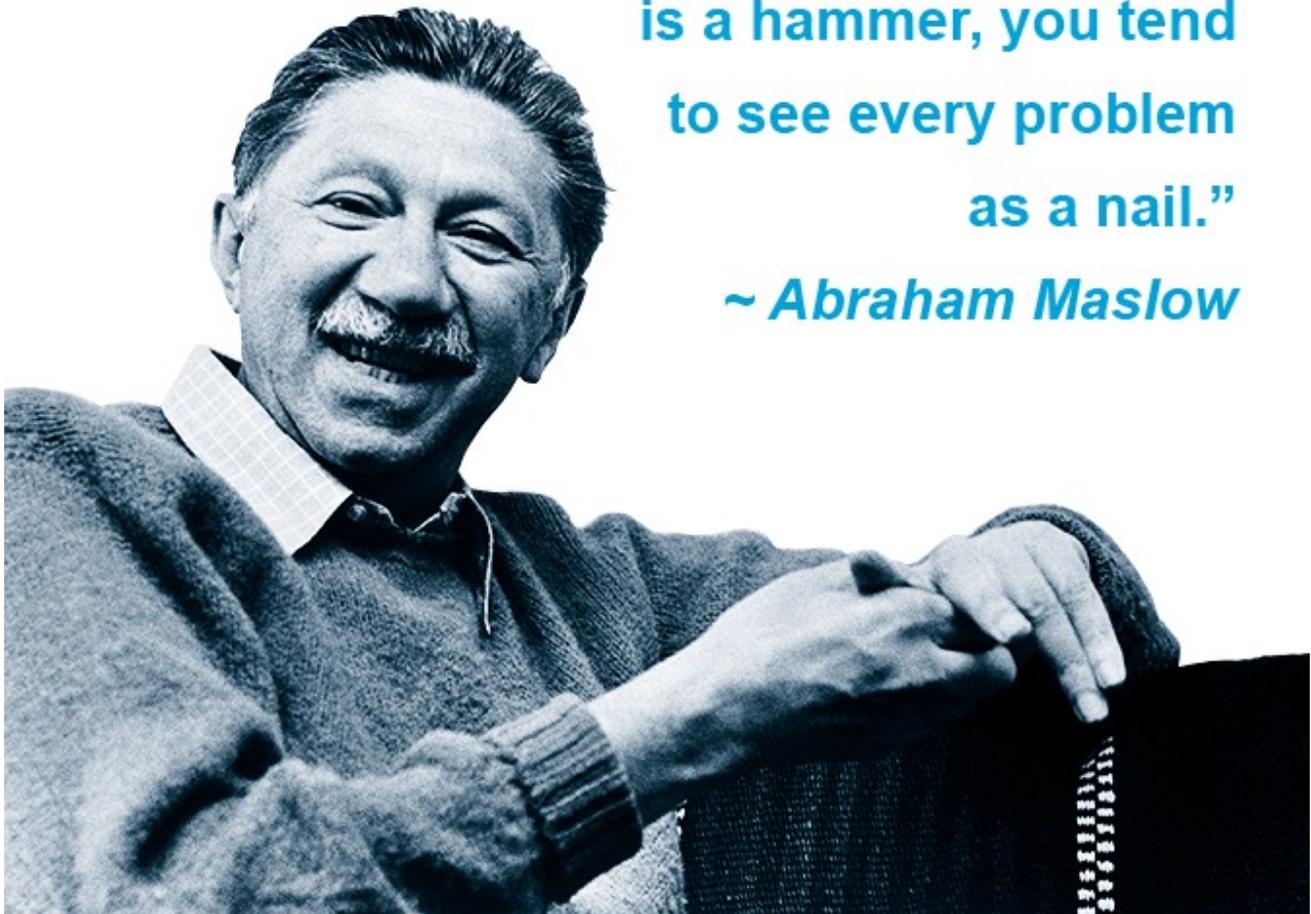


INTERVALS

THE CPCA QUARTERLY

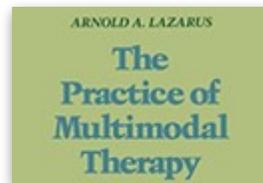
“If the only tool you have
is a hammer, you tend
to see every problem
as a nail.”
~ Abraham Maslow



DOING FOR OTHERS
SELFLESSNESS AND
SELF ESTEEM 2



EPIGENETIC
INHERITANCE FROM
THE HOLOCAUST 7



ONE TRICK PONY OR
MULTIMODAL
THERAPIST? 10



MEDITATION
INTERVIEW WITH
SARA LAZAR 14

DOING FOR OTHERS

→ *Forward by the Editor...*

On the morning of December 25th I received a phone call from my eldest granddaughter, now seven years old;

“Thank you for the Lego, Grandpa.”

“You’re welcome. Are you having a good Christmas?”

“Yeah.”

“Tell me something that’s making it good.”

“We’re all going to serve Christmas dinner to lots of people. My job is to make sure everyone’s glasses are full of water.”

She was talking about an annual event held in her home town, organized by a secular group who serve Christmas dinner to all comers; the poor, the homeless, the lonely, and even those who just wish to share the holiday with others.

My son and daughter-in-law are doing it right. They are “small-h” humanists who learned the value of making a difference in this world through their experiences in the world-wide Scouting and Guiding movement. They learned throughout their formative years that performing random acts of kindness for strangers is its own reward.

They give back to their community and are environmentally active to help take care of the world and are passing this along to their own children.

Aside from making the world a better place, there are personal emotional benefits for children and teens who do for others, just ask Dr. Laura Padilla-walker ...

continued on page 3

INTERVALS

is published each season and is distributed electronically free of charge to Canadian Professional Counsellors Association members and interested members of the public.

Publisher

Canadian Professional
Counsellors Association

Editor/Layout

Aaron D McClelland

Contributors

Helen Thomson
Brigid Schulte
Aaron D McClelland

Advertising Rates:

1/2 column - \$30.00
1 column - \$55.00
1/2 page - \$80.00
Full Page - \$140.00

Submissions

Submissions or letters to the Editor can be sent to info@cpca-rpc.ca or mailed to;

**Canadian Professional
Counsellors Association**
#203, 3306 - 32nd Avenue
Vernon, BC V1T 2M6
Canada 1.888.945.2722





This study helps us to understand that young people who help those with whom they do not have a relationship report feeling better about themselves over time

BYU School of Family Life

professor Dr. Laura Padilla-Walker, in a longitudinal study she coauthored with a former student Xinyuan Fu, Central University of Finance and Economics, China, in the *Journal of Adolescence*, found that adolescents who exhibited prosocial behaviour - such as helping, sharing and comforting - toward strangers had higher self-esteem a year later. The same was not true for those in the study who exhibited prosocial behaviour solely to friends and family.

"This study helps us to understand that young people who help those with whom they do not have a relationship report feeling better about themselves over time," Padilla-Walker said. *"Given the importance of self-esteem during the teen years, this is an important finding. It suggests there might be something about helping strangers that impacts one's moral identity or perceptions of self in a more significant way than helping friends or family members, although these are beneficial behaviours as well."*

Padilla-Walker has authored multiple studies looking at prosocial behaviour. While she's found that teens who exhibit these positive behaviours stay out of trouble and have better familial relationships, this was her

first time tying it to self-esteem.

In the study, researchers looked at 681 adolescents, 11-14 years old, in two U.S. cities. They tracked them for four different time points, starting in 2008 through 2011. The participants responded to 10 statements such as *"I feel useless at times"* or *"I am satisfied with myself"* to assess self-esteem. Prosocial behaviour was measured by self-reports, looking at various aspects of kindness and generosity, such as *"I help people I don't know, even if it's not easy for me"* or *"I go out of my way to cheer up my friends"* or *"I really enjoy doing small favours for my family."*

"A unique feature of this study is that it explores helping behaviours toward multiple different targets," Padilla-Walker said. *"Not all helping is created equal, and we're finding that prosocial behaviour toward strangers is protective in a variety of ways that is unique from other types of helping. Another important finding is that the link between prosocial behaviour and self-esteem is over a one-year time period and present across all three age lags in our study. Though not an overly large effect, this*

continued on page 4



For teens who sometimes have a tendency to focus on themselves, parents can help by providing opportunities for their children to help and serve others who are less fortunate

suggests a stable link between helping and feeling better about oneself across the early adolescent years."

For many adolescents, this time of life can be confusing for them. In a state of such self-exploration and self-identification, Padilla-Walker suggests that helping your kids find confidence, self-respect and self-worth can be of monumental importance.

"For teens who sometimes have a tendency to focus on themselves, parents can help by providing opportunities for their children to help and serve others who are less fortunate," Padilla-Walker said. "It is best if teens can directly see the benefit of their help on others. This can increase gratitude in young people and help them to focus less on their own problems. It is also a way to help them meet new friends or spend time with family. A family tradition of helping those who are less fortunate throughout the year or during the holidays is a great way to instil in children a desire to serve and a greater sense of self-worth." ◀

101 WAYS TO F*CK UP YOUR KID

#17: Shame & Guilt

“Nothing is more wretched than the mind of a man conscious of guilt.”

~ Titus Maccius Plautus

Instilling lasting shame and guilt in a child is not only emotional abuse, but if successful, can cause mental disorders and brain damage.

As parents, our most important responsibility is to nurture our children, not only meeting their physical needs but their emotional ones as well. Learning from our past transgressions or poor choices is a good motivator to change our behaviour. However, shame and guilt is not a practice of learning, it is emotional baggage that we carry that impedes our growth and has a large negative impact on our self-esteem and social interactions.

At times parents employ shame and guilt without even knowing that they are doing so, often in the form of a “feel-bad-game”; a three year old refuses to give a parent a kiss or hug, so the parent pretends to cry or pout. This causes the child to take on a sense of responsibility for their parent’s emotional state and feel shame to have caused that parent to feel bad. It also

teaches the child that they have no choice whom they hug or kiss because it will hurt the other person if they don’t.

Just let that sink in for a moment; is teaching your daughter that she has no right to resist intimate physical contact with another person the lesson you want her to learn?

Shame and guilt instilled in childhood can cause us to be immobilized in the present for an action in the past. Far too often, parents use shame or guilt to correct behaviours - and it often appears to work in the short term, however it lingers in the mind of a child and may manifest itself throughout their life span.

Growing up, one young woman learned to measure her worth by the grades she received in school; *“If I came home with a report card containing A and B grades, my mother would say ‘I love you’. But if my report card contained C or D grades, she would tell me she was disappointed in me.”* This young woman now rejects praise for herself as a person, and can only accept praise for her academic

continued on page 6



Just let that sink in for a moment; is teaching your daughter that she has no right to resist intimate physical contact with another person the lesson you want her to learn?



“If I came home with a report card containing A and B grades, my mother would say ‘I love you’. But if my report card contained C or D grades, she would tell me she was disappointed in me.”

accomplishments. Her inner voice continually tells her she is ‘worth less’ than other people, that she is ‘stupid’ and ‘unloveable’.

Shame and guilt not only impacts children emotionally, it can have a negative impact on brain development.

In a 12 year study conducted by Joan Luby, MD and her team at Washington University School of Medicine - Psychiatry, researchers looked at a part of the brain called the anterior insula, which regulates perception, self-awareness, and emotion. Smaller anterior insulas have been linked to anxiety disorders, depression, other mood disorders, and schizophrenia.

Researchers took brain scans of 145 school-aged children and asked their caregivers whether their kids exhibited any symptoms of excessive guilt, such as apologizing repeatedly for minor misbehaviour or feeling guilty about things that had happened in the past. The researchers found that feelings of extreme guilt correlated with smaller anterior insulas.

“In the kids who had high levels of guilt, even the kids who weren't necessarily depressed, they had smaller anterior insula volume, and that smaller anterior insula

volume is predictive of later occurrence of depression,” said Luby, *“This research suggests that early childhood experiences impact the way the brain develops.”*

Michelle New, PsyD, an associate professor at George Washington University Medical School in Washington, DC, praised Luby’s research for helping pinpoint brain anatomy that place shame and guilt-ridden children at high risk of developing mental disorders later in life.

“This research is really new and exciting because you can look at changes in the brain, and it shows that early intervention is really important. Dismissing early symptomatology is dangerous.” New said, going on to explain that mental disorders are often latent in children between the ages of four and 12, so being able to identify high risk children through a brain scan can help parents and therapists take preventative measures early in development.

A vital lesson all social beings must learn is how their behaviour impacts others, but being shamed or weighted down by guilt for their actions can echo through an entire life span. ◀

BY AARON D MCCLELLAND

EPIGENETIC INHERITANCE



The gene changes in the children could only be attributed to Holocaust exposure in the parents

Genetic changes stemming from the trauma suffered by Holocaust survivors are capable of being passed on to their children, the clearest sign yet that one person's life experience can affect subsequent generations.

The conclusion from a research team at New York's Mount Sinai hospital led by Rachel Yehuda stems from the genetic study of 32 Jewish men and women who had either been interned in a Nazi concentration camp, witnessed or experienced torture or who had had to hide during the second world war.

They also analyzed the genes of their children, who are known to have increased likelihood of stress disorders, and compared the results with Jewish families who were living outside of Europe during the war. *"The gene changes in the children could only be attributed to Holocaust exposure in the parents."* said Yehuda.

Her team's work is the clearest example in humans of the transmission of trauma to a child via what is called "epigenetic inheritance" - the idea that environmental influences such as smoking,

diet and stress can affect the genes of your children and possibly even grandchildren.

The idea is controversial, as scientific convention states that genes contained in DNA are the only way to transmit biological information between generations. However, our genes are modified by the environment all the time, through chemical tags that attach themselves to our DNA, switching genes on and off. Recent studies suggest that some of these tags might somehow be passed through generations, meaning our environment could have and impact on our children's health.

Other studies have proposed a more tentative connection between one generation's experience and the next. For example, girls born to Dutch women who were pregnant during a severe famine at the end of the second world war had an above-average risk of developing schizophrenia. Likewise, another study has showed that men who smoked before puberty fathered heavier sons than those who smoked after.

The team were specifically

continued on page 8



They found epigenetic tags on the very same part of this gene in both the Holocaust survivors and their offspring, the same correlation was not found in any of the control group and their children

interested in one region of a gene associated with the regulation of stress hormones, which is known to be affected by trauma. *“It makes sense to look at this gene,”* said Yehuda. *“If there’s a transmitted effect of trauma, it would be in a stress-related gene that shapes the way we cope with our environment.”*

They found epigenetic tags on the very same part of this gene in both the Holocaust survivors and their offspring, the same correlation was not found in any of the control group and their children.

Through further genetic analysis, the team ruled out the possibility that the epigenetic changes were a result of trauma that the children had experienced themselves.

“To our knowledge, this provides the first demonstration of transmission of pre-conception stress effects resulting in epigenetic changes in both the exposed parents and their offspring in humans.” said Yehuda, whose work was published in Biological Psychiatry.

It’s still not clear how these tags might be passed from parent to child. Genetic information in sperm and eggs is not supposed to be affected by the environment - any epigenetic tags on DNA

had been thought to be wiped clean soon after fertilization occurs.

However, research by Azim Surani at Cambridge University and colleagues, has recently shown that some epigenetic tags escape the cleaning process at fertilization, slipping through the net. It’s not clear whether the gene changes found in the study would permanently affect the children’s health, nor do the results upend any of our theories of evolution.

Whether the gene in question is switched on or off could have a tremendous impact on how much stress hormone is made and how we cope with stress, said Yehuda. *“It’s a lot to wrap our heads around. It’s certainly an opportunity to learn a lot of important things about how we adapt to our environment and how we might pass on environmental resilience.”*

The impact of Holocaust survival on the next generation has been investigated for years - the challenge has been to show intergenerational effects are not just transmitted by social influences from the parents or regular genetic inheritance, said Marcus Pembrey, emeritus professor of pediatric genetics at University College London.

continued on page 9



... girls born to Dutch women who were pregnant during a severe famine at the end of the second world war had an above-average risk of developing schizophrenia

“Yehuda’s paper makes some useful progress. What we’re getting here is the very beginnings of a understanding of how one generation responds to the experiences of the previous generation. It’s fine-tuning the way your genes respond to the world.”

CAN YOU INHERIT A MEMORY OF TRAUMA?

Researchers have already shown that certain fears might be inherited through generations, at least in animals.

Scientists at Emory University in Atlanta trained male mice to fear the smell of cherry blossom by pairing the smell with a small electric shock. Eventually the mice shuddered at the smell even when it was delivered on its own.

Despite never having encountered the smell of cherry blossom, the offspring of these mice had the same fearful response to the smell - shuddering when they came in contact with it. So too did some of their own offspring.

On the other hand, offspring of mice that had been conditioned to fear another smell, or mice who’d had no such conditioning had no fear of cherry blossom.

The fearful mice produced sperm which had fewer

epigenetic tags on the gene responsible for producing receptors that sense cherry blossom. The pups themselves had an increased number of cherry blossom smell receptors in their brain, although how this led to them associating the smell with fear is still a mystery. ◀

BY HELEN THOMSON

ONE TRICK PONY OR MULTIMODAL THERAPIST?



Lazarus understood that humans were not driven by behaviour alone, therefore behavioural therapy was limited in its ability to be applied to all cases

Soon after creating **Behavioural Therapy** in 1966 along with his mentor Joseph Wolpe, Arnold Lazarus realized its limitations.

Lazarus - a South African graduate of Stanford University - understood that humans are not driven by behaviour alone, therefore behavioural therapy is limited in its ability to be applied to all cases. Defining humans as *“biological beings that think, feel, act, sense, imagine, and interact”*, Lazarus realized that a truly effective psychological treatment should address each of these modalities concurrently.

In 1976 Lazarus introduced the world to Multimodal Therapy (MMT) with broad-spectrum assessment and treatment options to align with the seven modalities that combined make us who we are, and where-in we can discover the sources of our difficulties and correct them. Lazarus defined these seven modalities by the acronym BASIC-ID:

BEHAVIOR

Where-in is manifest inappropriate acts, habits, gestures, or the lack of appropriate behaviour

AFFECT

Negative emotions, or unfelt positive emotions

SENSATIONS

Negative body sensations or physiological symptoms such as pain, tension, sweat, nausea, rapid heartbeat, etc

IMAGERY

The existence of negative cognitive images or mental pictures, nightmares, day dreams

COGNITION

Negative automatic thoughts, attitudes, beliefs

INTERPERSONAL RELATIONSHIPS

The ability of a person to develop and maintain healthy, supportive relationships while avoiding non-supportive and toxic ones

DRUGS/BIOLOGY

An individual's physical health, drug and alcohol use, and the impact of other lifestyle choices

Taking these seven modalities, Lazarus created the Life History Questionnaire (LHQ) - a comprehensive assessment tool that a practiced clinician can use to discover

continued on page 11

B ehavior
A ffect
S ensation
I magery
C ognition

I nterpersonal
D rugs/Biological

The guiding principal of MMT treatment is that a clinician can employ therapeutic interventions that they are educated and practiced in and that have proven clinical efficacy - 'fad therapies' need not apply

connections between past & present, plus linkages between the modalities that lie at the root of our presenting problems. The LHQ becomes a blueprint for the creation of an Individualized Treatment Plan - a plan that calls for simultaneous interventions. More on that later.

In the early days of MMT, Lazarus sent a query to a number of his colleagues who adhered to their particular single treatment modality. Lazarus included a brief description of a young male who was exhibiting suicidal ideation and depressive symptoms, and asked each for an evaluation and proposed treatment plan. The family systems therapist placed the cause of the young man's problems on a dysfunctional family of origin and suggested a course of psychotherapy; the behaviour therapist pointed to flaws in the young man's lifestyle and laid out a summary of behaviour changes the young man should make; the gestalt therapist cited 'obvious' unfinished business in the young man's past that could be addressed in therapy; the list went on. The results showed that each specialist found only what he looked for and nothing more.

The guiding principal of MMT treatment is that a clinician

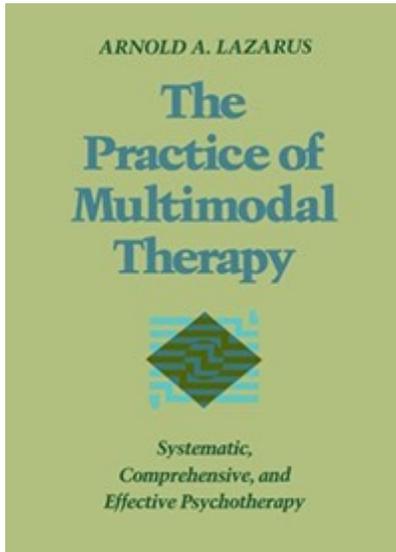
can employ therapeutic interventions that they are educated and practiced in and that have proven clinical efficacy - 'fad therapies' need not apply.

Because one size does not fit all, MMT has proven successful over the past 40 years by tailoring treatment to fit the individual rather than using a singular therapeutic modality. MMT's greatest strength is it can employ a number of treatment approaches to specifically target each modality impacted by the presenting problem of the client.

Studies, such as Hyman, Pavlik, Taylor, et al 2007 and more recent research by Dr Michael Mrazek at the University of California at Santa Barbara - indicate that making multiple simultaneous changes results in much higher success rates than tackling the desired changes one at a time. Though daunting at first glance, multiple simultaneous changes dovetail together to create global support for the individual. This approach is MMT's mainstay.

Multimodal therapists examine how the presenting problem impacts - (or is impacted by) - each of the seven modalities and create a

continued on page 12



We now have peer reviewed evidence that global change is the most successful methodology to approach a presenting problem

IMAGERY

When negative images invade, they will again think of three positive images to counter the negative, thereby creating new neural pathways and retraining their brain - and journal it each time. In Tx the client will explore the roots of these negative images with the therapist using Gestalt or other approaches to reprocess them.

COGNITION

They will enrol in one evening college course with one class per week that will move them toward their education/career goals and stimulate their brain. In Tx, the therapist will challenge dystonic cognitions by requiring the client to provide evidence, then use the client's own inventory to provide counter-evidence.

INTERPERSONAL RELATIONSHIPS

They will avoid their friends at the local pub, join a hiking club, take guitar lessons, and go out for coffee with classmates at least once per week. Using their journal, the client will rank order their friends on the basis of their support for their changed lifestyle, and in a Person Centred session will explore their thoughts in Tx.

DRUGS & BIOLOGY

They will ease their cravings for cigarettes by using a low dose nicotine gum or lozenges. They will eat a healthy, vegetable based meal at least once per day.

In the example above, each change dovetails with the others to create a self-supporting treatment plan that will help this client move toward their goals, reduce their anxiety, alleviate their depression, and live a healthier lifestyle.

We now have peer reviewed evidence that global change is the most successful methodology to approach a presenting problem and for the past four decades Multimodal therapists have led the way.

Thanks, Arnold. ◀

BY AARON D MCCLELLAND

INTERVIEW WITH SARA LAZAR



The yoga teacher made all sorts of claims, that yoga would increase your compassion and open your heart. And I'd think, 'Yeah, yeah, yeah, I'm here to stretch'

Meditation not only reduces stress, here's how it changes your brain;

Sara Lazar, a neuroscientist at Massachusetts General Hospital and Harvard Medical School, was one of the first scientists to take the anecdotal claims about the benefits of meditation and mindfulness and test them in brain scans. What she found surprised her - that meditating can literally change your brain.

WHY DID YOU START LOOKING AT MEDITATION AND MINDFULNESS AND THE BRAIN?

Lazar: A friend and I were training for the Boston marathon. I had some running injuries, so I saw a physical therapist who told me to stop running and just stretch. So I started practicing yoga as a form of physical therapy. I started realizing that it was very powerful, that it had some real benefits, so I just got interested in how it worked.

The yoga teacher made all sorts of claims, that yoga would increase your compassion and open your heart. And I'd think, 'Yeah, yeah, yeah, I'm here to stretch.' But I started noticing that I was calmer. I was better able to handle more difficult

situations. I was more compassionate and open hearted, and able to see things from others' points of view.

I thought, maybe it was just the placebo response. But then I did a literature search of the science, and saw evidence that meditation had been associated with decreased stress, decreased depression, anxiety, pain and insomnia, and an increased quality of life.

At that point, I was doing my PhD in molecular biology. So I just switched and started doing this research as a post-doc.

HOW DID YOU DO THE RESEARCH?

Lazar: The first study looked at long term meditators vs a control group. We found long-term meditators have an increased amount of grey matter in the insula and sensory regions, the auditory and sensory cortex. Which makes sense. When you're mindful, you're paying attention to your breathing, to sounds, to the present moment experience, and shutting cognition down. It stands to reason your senses would be enhanced. We also found they had more grey

continued on page 15



The amygdala, the fight or flight part of the brain which is important for anxiety, fear and stress in general. That area got smaller in the group that went through the mindfulness-based stress reduction program.

matter in the frontal cortex, which is associated with working memory and executive decision making.

It's well-documented that our cortex shrinks as we get older – it's harder to figure things out and remember things. But in this one region of the prefrontal cortex, 50-year-old meditators had the same amount of grey matter as 25-year-olds.

So the first question was, well, maybe the people with more grey matter in the study had more grey matter before they started meditating. So we did a second study.

We took people who'd never meditated before, and put one group through an eight-week mindfulness - based stress reduction program.

WHAT DID YOU FIND?

Lazar: We found differences in brain volume after eight weeks in five different regions in the brains of the two groups. In the group that learned meditation, we found thickening in four regions:

1. The primary difference, we found in the posterior cingulate, which is involved in mind wandering, and self relevance.
2. The left hippocampus, which assists in learning, cognition, memory and emotional regulation.

3. The temporo parietal junction, or TPJ, which is associated with perspective taking, empathy and compassion.

4. An area of the brain stem called the Pons, where a lot of regulatory neurotransmitters are produced.

The amygdala, the fight or flight part of the brain which is important for anxiety, fear and stress in general. That area got smaller in the group that went through the mindfulness-based stress reduction program.

The change in the amygdala was also correlated to a reduction in stress levels.

SO HOW LONG DOES SOMEONE HAVE TO MEDITATE BEFORE THEY BEGIN TO SEE CHANGES IN THEIR BRAIN?

Lazar: Our data shows changes in the brain after just eight weeks.

In a mindfulness-based stress reduction program, our subjects took a weekly class. They were given a recording and told to practice 40 minutes a day at home. And that's it.

SO, 40 MINUTES A DAY?

Lazar: Well, it was highly variable in the study. Some people practiced 40 minutes pretty much every day. Some

continued on page 16



But, just like exercise, it can't cure everything. So the idea is, it's useful as an adjunct therapy. It's not a standalone.

people practiced less. Some only a couple times a week.

In my study, the average was 27 minutes a day. Or about a half hour a day.

There isn't good data yet about how much someone needs to practice in order to benefit.

Meditation teachers will tell you, though there's absolutely no scientific basis to this, but anecdotal comments from students suggest that 10 minutes a day could have some subjective benefit. We need to test it out.

We're just starting a study that will hopefully allow us to assess what the functional significance of these changes are. Studies by other scientists have shown that meditation can help enhance attention and emotion regulation skills. But most were not neuroimaging studies. So now we're hoping to bring that behavioural and neuroimaging science together.

GIVEN WHAT WE KNOW FROM THE SCIENCE, WHAT WOULD YOU ENCOURAGE READERS TO DO?

Lazar: Mindfulness is just like exercise. It's a form of mental exercise, really. And just as exercise increases health, helps us handle stress better and promotes longevity, meditation

purports to confer some of those same benefits.

But, just like exercise, it can't cure everything. So the idea is, it's useful as an adjunct therapy. It's not a standalone. It's been tried with many, many other disorders, and the results vary tremendously – it impacts some symptoms, but not all. The results are sometimes modest. And it doesn't work for everybody.

It's still early days for trying to figure out what it can or can't do.

WHAT DIFFERENCE HAS IT MADE IN YOUR LIFE?

Lazar: I've been doing this for 20 years now, so it's had a very profound influence on my life. It's very grounding. It's reduced stress. It helps me think more clearly. It's great for interpersonal interactions. I have more empathy and compassion for people.

WHAT'S YOUR OWN PRACTICE?

Lazar: Highly variable. Some days 40 minutes. Some days five minutes. Some days, not at all. It's a lot like exercise. Exercising three times a week is great. But if all you can do is just a little bit every day, that's a good thing, too. I'm sure if I practiced more, I'd benefit more. I have no idea if I'm getting brain changes or not. It's just that this is what works for me right now. ◀

BY BRIGID SCHULTE

PSYCH NEWS

4000 STEPS TO BRAIN HEALTH



Recent research led by the University of California, Los Angeles shows that taking a short walk each day can help to keep the brain healthy, supporting the overall resilience of cognitive functioning.

Could a walk in the park help to maintain cognitive health in old age?

As we grow older, memory problems can begin to set in. These could be a natural part of aging and a minor annoyance, but in some cases, the issues may indicate mild cognitive impairment and could even develop into dementia.

Regardless of how mild or severe these memory problems may be, they are definitely distressing and can affect an individual's quality of life.

New research from the Semel Institute for Neuroscience and Human Behavior at the University of California, Los Angeles suggests that there is

a relatively easy way of keeping your brain in top shape as you grow older: take a moderately long walk every day.

This could boost your attention, the efficiency with which you process information, and other cognitive skills, say first study author Prabha Siddarth and colleagues.

The research findings were recently published in the *Journal of Alzheimer's Disease*.

GAMING DISORDER



The World Health Organization is adding an unexpected disorder to its list of mental health conditions in 2018. Next year, people who play an excessive amount of video games could find themselves diagnosed with "gaming disorder."

WHO's beta draft of its upcoming 11th update of International Classification of Diseases characterizes gaming disorder as "a pattern of persistent or recurrent gaming behaviour ('digital

gaming' or 'video-gaming'), which may be online (*i.e., over the internet*) or offline, manifested by:

1. impaired control over gaming (*e.g., onset, frequency, intensity, duration, termination, context*);
2. increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities; and
3. continuation or escalation of gaming despite the occurrence of negative consequences."

The inclusion of gaming disorder in the ICD-11 means health care workers and doctors can now diagnose someone with the condition.

The description of the condition continues: "*The behaviour pattern is of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning. The pattern of gaming behaviour may be continuous or episodic and recurrent. The gaming behaviour and other features are normally evident over a period of at least 12 months*

in order for a diagnosis to be assigned, although the required duration may be shortened if all diagnostic requirements are met and symptoms are severe."

Not everyone who likes to play video games has gaming disorder - plenty of people play video games without getting a diagnosis. Daphne Bavelier, a professor at the University of Geneva said, depending on the game, and how long and often you play it, video games can be a safe way of improving hand-eye coordination, enhancing problem-solving abilities, relieving stress, connecting people, and living out fantasies, Forbes reported.

Gaming becomes a problem only when it causes *"impairment in personal, family, social, educational, occupational or other important areas of functioning."* When you stop controlling the game and it starts controlling you - that's when WHO's definition of gaming disorder applies.

Video games have become increasingly popular, with more people of all ages playing a variety of games. Because of this, video game addiction has also become a problem. The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) published in 2013

defined internet gaming disorder as a *"condition for further study."* This doesn't classify it as an official disorder, rather one the American Psychiatric Association says requires additional research. According to the DSM-5, the disorder is most common in male adolescents 12 to 20 years old.

Additionally, a 2009 study found about 8 percent of people from 8 to 18 years old *"exhibited pathological patterns of play."* So, while people should continue to enjoy their downtime unwinding with the latest game, the medical community wants to make the public aware, too much of a good thing can be bad. ◀

BAD DREAMS



Emerging research on dreams suggests repeated bad dreams may reflect psychological frustrations associated with failure to adapt to challenging situations.

Netta Weinstein of the University of Cardiff, is the lead author of an article, *"Linking Psychological Need Experiences to Daily and*

Recurring Dreams", published in the journal Motivation and Emotion.

She believes unmet daily psychological needs for autonomy, relatedness, and feeling competent can lead to bad dreams. Moreover, the frustrations can cause the dream to be recurring and for people to analyze their dreams negatively.

Dreams and their interpretation have been investigated since the days of Jung and Freud. However, the research done by Weinstein's team is the first to explore whether people's daily frustration or fulfilment of psychological needs plays out in their dreams.

The researchers conducted two studies. In the first, 200 people were asked to reflect on their most common recurring dream. The second study analyzed the entries that 110 people made over a period of three days in "dream diaries".

This was done to explore whether experiences related to psychological needs in waking life are related to the deeper level of processing that dreams provide, and that so-called *"bad"* dreams might be *"left-overs"* of poorly or even unprocessed daily experiences.

“Waking-life psychological need experiences are indeed reflected in our dreams,” says Weinstein.

The results from both studies show that frustrations and emotions associated with specific psychological needs influence the themes that will occur in people’s dreams.

Participants whose so-called psychological needs were not met, either more enduringly or on a day-to-day basis, felt more frustrated. They reported having more negative dream themes such as frightening dreams, or ones in which sad or angry emotions surfaced.

When asked to interpret their own dreams, they tended to do so using more negative words. Participants whose psychological needs were met were more likely to describe their dreams positively.

“Negative dream emotions may directly result from distressing dream events, and might represent the psyche’s attempt to process and make sense of particularly psychologically challenging waking experiences,” explains Weinstein.

People who were frustrated with their daily situation tended to have recurring dreams in which they were falling, failing or being

attacked. According to Weinstein, recurring dreams may be more sensitive to distressing psychological experiences that a person still needs to process.

“Researchers and theorists have argued that recurring dreams challenge people to process the most pressing problems in their lives, and these may be thought to result from their failure to adapt to challenging experiences.

“As such, dream content may be more affected by enduring need-based experiences,” says Weinstein. ◀