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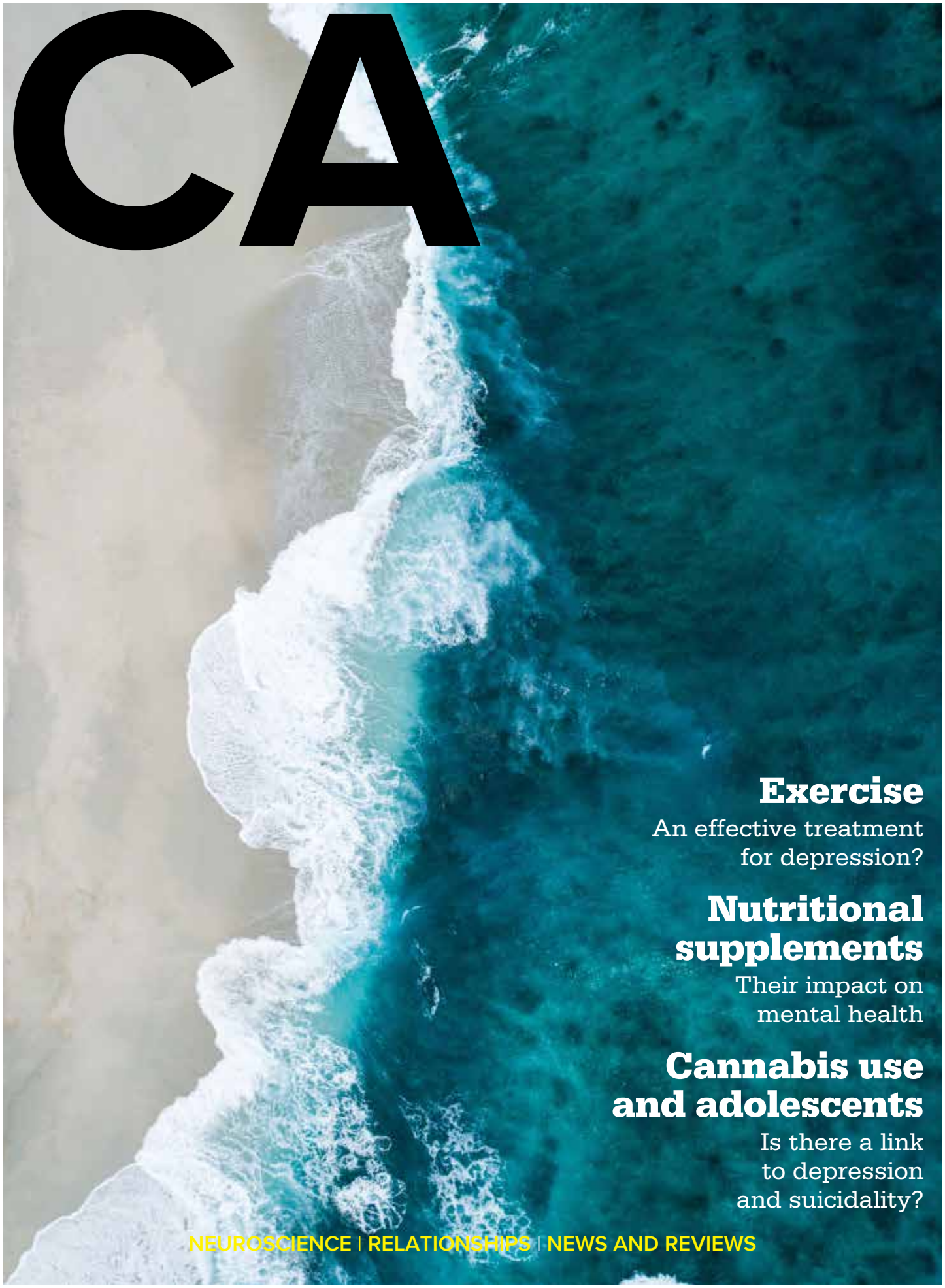

Exercise
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Their impact on mental health

Cannabis use and adolescents
Is there a link to depression and suicidality?

NEUROSCIENCE | RELATIONSHIPS | NEWS AND REVIEWS

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Letters to the editor should be clearly marked and be a maximum of 250 words. Submissions and letters may be addressed to:
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aca@theaca.net.au

See page 63 for peer-reviewed article submission guidelines.

Editorial

Timeless energy opens APRCCC

The ACA team is now emerging from the post-conference recovery period, and we wish to thank everyone for helping to make our sixth Asia Pacific Rim Confederation of Counsellors Conference (APRCCC) in Brisbane an overwhelming success.

The official opening featured a moving performance by the Yerongpan Aboriginal Dancers and, fittingly, we witnessed a traditional smoking ceremony – an ancient, symbolic cleansing of negative spirit energy.

This was followed by a powerful 'welcome to country' by the Yuggera custodian.

The ceremonial opening, which also included a didgeridoo solo, left delegates in awe of the young talent and visual storytelling prowess of Brisbane's Yuggera language people.

Delegates had travelled from the USA, Canada, Hong Kong, Singapore, Malaysia, China, Philippines, New Zealand, Papua and New Guinea, Russia, the UK and Ireland, as well as from across Australia, to participate in this important counselling and psychotherapy event.

Our conference comprised keynote speakers, forums, paper presentations, workshops and social events. We were also pleased with the success of a couple of experiments, including the international and domestic forums facilitated by the CEO of the American Counseling Association, Richard Yep, and the CEO of the ACA, Dr Philip Armstrong. We received positive feedback and will carry the forums forward to future events.

All of the speakers were outstanding with their presentations and workshops. We received a lot of feedback that delegates were spoilt for choice! Over the two days, there were three keynote addresses, two forums, 21 paper presentations and 69 workshops – a total of 95 different activities. To add to the diversity, 10 masterclasses (attended by almost 200 delegates) preceded the conference on the Friday.

It goes without saying that a successful conference doesn't happen without the tireless enthusiasm and support of volunteers, and a big thank you to everyone who assisted Karen Noe and me with checking-in delegates, introducing and thanking speakers, guiding delegates to sessions, and keeping us grounded when times were hectic and challenging. Most of our volunteers are students who valued the opportunity to attend and network with high-calibre speakers and delegates in the world of counselling and psychotherapy.

We received some interesting results from the use of the Whova conference app. Delegates told us they appreciated the regular announcements they received leading up to the conference – 61 in total. Data analytics show that 91 per cent of the announcements were opened. This is a great result that indicates that the communication, for most delegates, was at the right level.

Also, judging by the 1735 messages on the Event Community Board, delegates valued the opportunity to network prior to the conference. Delegates made good use of the ability to view each other's profiles and send messages. There were 6217 profile views and 1610 messages sent or received between delegates. Some 216 photos were also shared on the Whova app.

Importantly, sponsors received great exposure too with 39,130 sponsor impressions displayed on the sponsor banner at the bottom of the Whova conference app home page.

Ready for more?

Next up is our first National Regional Conference planned for 19 to 21 June 2020, at Bridges, located at the Cobram Barooga Golf Club at Cobram Barooga on the NSW–Victoria border. We are also planning a mini conference in Perth for August 2020 (date to be confirmed) and the ACA National Conference in Darwin from 18 to 20 September 2020. We are now inviting abstracts for all conferences.

We're also looking for more sponsors to make these conferences just as energising as the APRCCC event. Sponsorship information is available from Elliott Ainley (elliott@theaca.net.au).

Looking forward to seeing you all again next year.

Danielle Anderson
ACA office manager and conference organiser

Below – Yerongpan Aboriginal Dancers perform at the APRCCC gala dinner


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01. (From left) Professor Heather Trepal (ACA America president) and Professor Catherine Sun (HKPCA president)
02. Dr Philip Armstrong (CEO ACA) and Professor Catherine Sun
03. Professor Catherine Tang
04. Yerongpan Aboriginal Dancers
05. (From left) Dr Shawn Spurgeon, Professor Heather Trepal, Professor Catherine Sun and Simon Clarke (ACA president)
06. Elliott Ainley (ACA industry liaison officer)
07. (From left) Elliott Ainley and Dr Ned Golubovic (University of San Diego)
08. (Clockwise from top left) Cindy Cranswick, Professor Shannon J. Hodges, Peter Edward, Suzanne Jenkins and Cheryl Edward
PHOTOS Maxwell Ainley

Book Review

The body life skills program: 3 practical skills for lasting behaviour change
By Tanya Curtis
Review by Prathiba Subramaniam

As teachers, counsellors or parents in the 1980s, we learnt that problematic behaviours were strongly linked to our thoughts. Cognitive Behavioural Therapy (CBT) was taught as an effective intervention attesting its efficacy with behavioural change. In the 1990s, we learnt the important role emotions played in behaviours and we started seeing interventions such as anger management groups.

In the last couple of decades, brain science has been teaching us that our body and brain are neurologically wired to meet a hierarchy of needs, and this is behind our behaviour patterns. We are now learning to integrate body work into therapeutic approaches for behaviour change such as mindfulness-based CBT, relational-attachment therapy and sensorimotor therapy.

Tanya Curtis, in *The body life skills program*, presents a different view of problematic behaviour patterns. From her decades of experience as behaviour specialist in schools and clinics, she strongly believes that problematic behaviours are not problematic but serve a purpose in one's life. This belief is key to her approach to change – making time to understand the purpose of the problematic behaviour, a process that intuitively leads into solutions.

In this practical book, Curtis explains the three-step process she has developed to help understand and re-label problematic behaviour. She explains, with interactive tools, the way she approaches understanding behaviours through body's expressive tools and then integrates it with the brain expressions (words, feelings, emotions).

One will also find case scenarios to learn how these tools can be successfully used.

Those embarking in the field of behaviour science and education, and/or avid readers in self-help, will find this book immensely valuable.

I will recommend this book to those who have a good baseline of self-awareness and are in emotionally safe relationships. Professionals who have gained some experience in behaviour change might feel left out, craving to know the success of the tools when faced with the complexities of time, resources and history of trauma.

Decembeard

1 to 31 December 2019

Decembeard Australia encourages men to grow a beard in December to raise awareness for bowel cancer. The disease affects 1 in 10 Aussie men, making it Australia's second biggest cancer killer.

World Cancer Day

4 February 2020

World Cancer Day is the one singular initiative under which the entire world can unite together in the fight against the global cancer epidemic. It takes place every year on 4 February. World Cancer Day aims to save millions of preventable deaths each year by raising awareness and education about cancer and pressing governments and individuals across the world to take action against the disease. For more information visit www.uicc.org/what-we-do/convening/world-cancer-day.

Febfast

1 to 29 February 2020

"Pause for a cause". Powered by Youth Support + Advocacy Service (YSAS), febfast is the great Australian pause from alcohol, sugar or something of choice for the month of February, in support of disadvantaged young people aged 12 to 25 across the country. Participants give up alcohol, sugar or something of their choice, register to take on the challenge and raise vital funds to support disadvantaged young Australians. The money you raise funds youth workers who dedicate their time to connect young people in with the support, programs and services they require to overcome adversity and realise opportunity. Upon registering, febfast help participants stay on track throughout the month and also offer a hand to raise as much as possible from friends, family and colleagues for its partner charities. Find out more by visiting www.febfast.org.au/about.

Ovarian Cancer Awareness Month

1 to 29 February 2020

Ovarian Cancer Awareness Month is held each year in Australia to raise awareness of the signs and symptoms of ovarian cancer, to share the stories of women affected by the disease, to highlight the risk factors for ovarian cancer and to educate Australians on ovarian cancer diagnosis and treatment. Ovarian cancer is the deadliest cancer for women and, unfortunately, this has not changed in 30 years. Every day in Australia, four women are diagnosed with ovarian cancer and three will die from the disease. Ovarian Cancer Awareness Month is about making a stand – it's time for action. Find out more by visiting https://ovariancancer.net.au/ovarian-cancer-awareness-month.

Teal Ribbon Day

26 February 2020

Wednesday 26 February 2020 is Teal Ribbon Day – a day to support Australians living with ovarian cancer, honour those we have lost and raise awareness of this deadly disease to change the story for future generations.

ACA Conferences

19–21 June 2020; mid-2020; 18–20 September 2020

ACA will soon be calling for abstracts for our first National Regional Conference at Bridges located at the Cobram Barooga Golf Club at Cobram Barooga. Situated on the mighty Murray River on the NSW side of the border, Cobram Barooga is less than a three-hour drive from Melbourne and a short drive from Albury Airport. The conference will be held from 19 to 21 June 2020. We are also planning a mini-conference in Perth during August 2019. The dates and venue will be confirmed before the end of 2019. The ACA national conference will take place from 18 to 20 September 2020 in Darwin, which will include the ACA Inc. Annual General Meeting on the Friday.

EXERCISE AND DEPRESSION

Exercise and increased physical activity are effective in preventing and treating depression.

Source: news-medical.net
Reviewed by James Ives, M.Psych

Exercise training and increased physical activity are effective for both the prevention and the treatment of depression, a research review concluded in the August issue of *Current Sports Medicine Reports* – the official journal of the American College of Sports Medicine.

In the article 'Exercise is medicine', lead authors Dr Felipe Barretto Schuch, PhD (Universidade Federal de Santa Maria, Brazil) and Dr Brendon Stubbs, PhD (King's College, London) write, "The evidence of the use of physical activity and exercise for the management of depression is substantial and growing fast." However, "despite this substantial evidence, the incorporation of exercise as a key component in treatment is often inconstant and often given a low priority."

Studies support exercise for depression

Depression is a major health problem worldwide, with an enormous impact on mental and physical health for individuals and high costs for society. Current treatments focus on antidepressant medications and psychotherapy, each of which can help people but also have important limitations. For example, only about 50 per cent of people taking antidepressants will have a clinically significant response, and not all people will respond to psychotherapy.

"There is growing recognition that lifestyle behaviours, such as physical activity and exercise, partially contribute to reducing the risk of developing depression and can be useful strategies for treating depression, lessening depressive symptoms, improving quality of life, and improving health outcomes," Dr Schuch and Dr Stubbs write. They provide an updated overview of the growing evidence on the benefits of exercise for depression.

Across countries and cultures, studies consistently link higher levels of physical activity with lower depressive symptoms. However, these cross-sectional studies do not answer a key question: can starting an exercise program or increasing physical activity reduce the risk of developing depression or do they reduce depressive symptoms?

Dr Schuch, Dr Stubbs and their colleagues analysed pooled data on 49 prospective studies, including nearly 267,000 participants. This metaanalysis found that physical activity reduces the odds of developing depression by 17 per cent, after adjustment for other factors. The protective effect was significant in all countries and across patient subgroups.

Physical activity is also an effective treatment for depression – some studies have shown that a single exercise session can reduce symptoms in patients with major depressive disorder. The authors performed another metaanalysis of 25 randomised trials in which nearly 1500 people with depression were assigned to exercise training or comparison groups. The results suggested exercise had a "very large and significant antidepressant effect".

But exercise may not be equally effective for all patients. A wide range of biological, clinical, psychological and social factors affect how well depression responds to exercise therapy, which

Photo: Alexander Mils/Unsplash

A wide range of biological, clinical, psychological and social factors affect how well depression responds to exercise therapy.

may be helpful in matching people to the right treatment.

Research that aims to identify how the antidepressant response to exercise works is ongoing. Potential mechanisms involving exercise-induced changes to inflammation, oxidative stress and neuronal regeneration (particularly in the hippocampus) have been proposed. Yet, research investigating why and how exercise reduces symptoms is in its early stages and the findings are not conclusive.

In any group of patients, starting and sustaining an exercise program can be challenging. Some reports have suggested that the key to successful exercise therapy for depression is 'autonomous motivation' – that physical activity should be as enjoyable as possible, leading people to exercise for its own sake. Supervision by health and fitness professionals or social support from friends and family may also increase the chance of success.

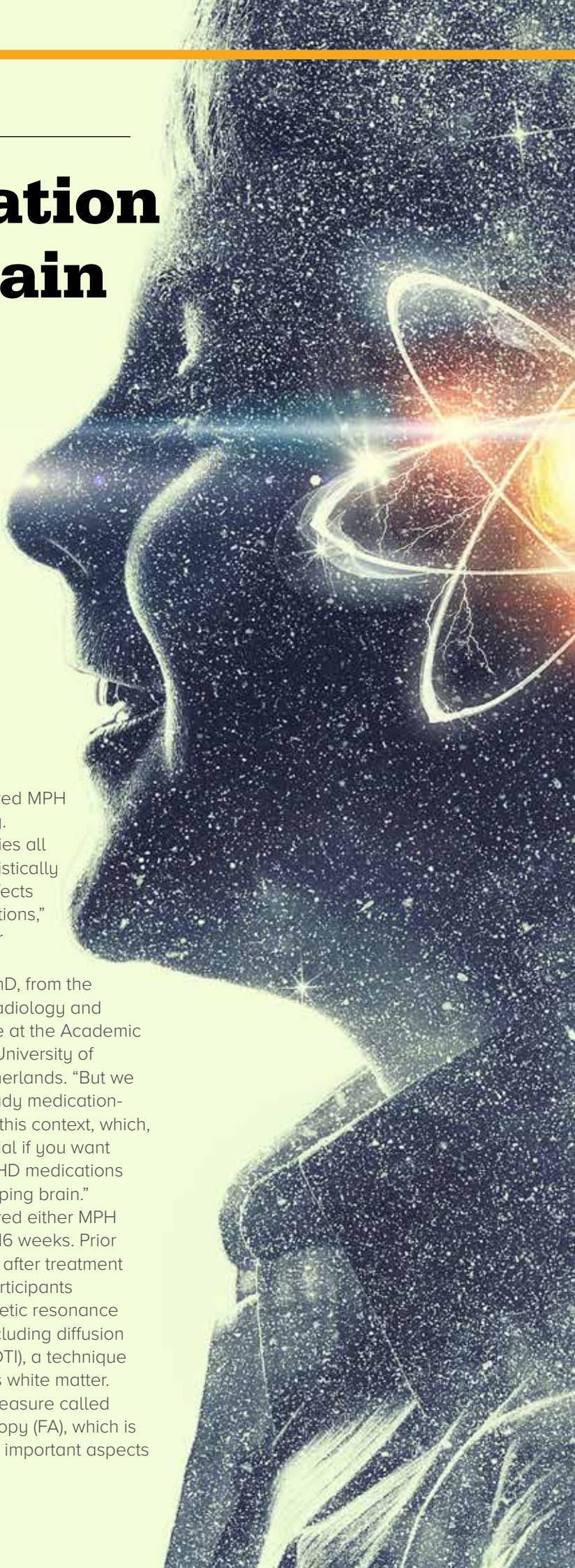
Even though the evidence strongly supports the benefits of exercise, it still is not routinely included in clinical recommendations for the prevention and treatment of depression.

Dr Schuch, Dr Stubbs and their colleagues concluded, "Addressing this issue and the current reliance on the two-pronged approach of talking therapies and medication is important in going forward." ■

Reference

Schuch, FB; Stubbs, B (2019). 'The role of exercise in preventing and treating depression', *Current Sports Medicine Report*, Lippincott portfolio, Wolters Kluwer Health.

ADHD medication may affect brain development in children



Source: Radiological Society of North America (RSNA)

Summary
Methylphenidate, a drug given to help treat attention deficit hyperactivity disorder (ADHD), affects specific tracts in white matter in young boys. The effects are dependant on age, as the changes were not observed in adults who use the treatment. Researchers say the drug should only be given to children if they are significantly affected by ADHD in their daily lives.

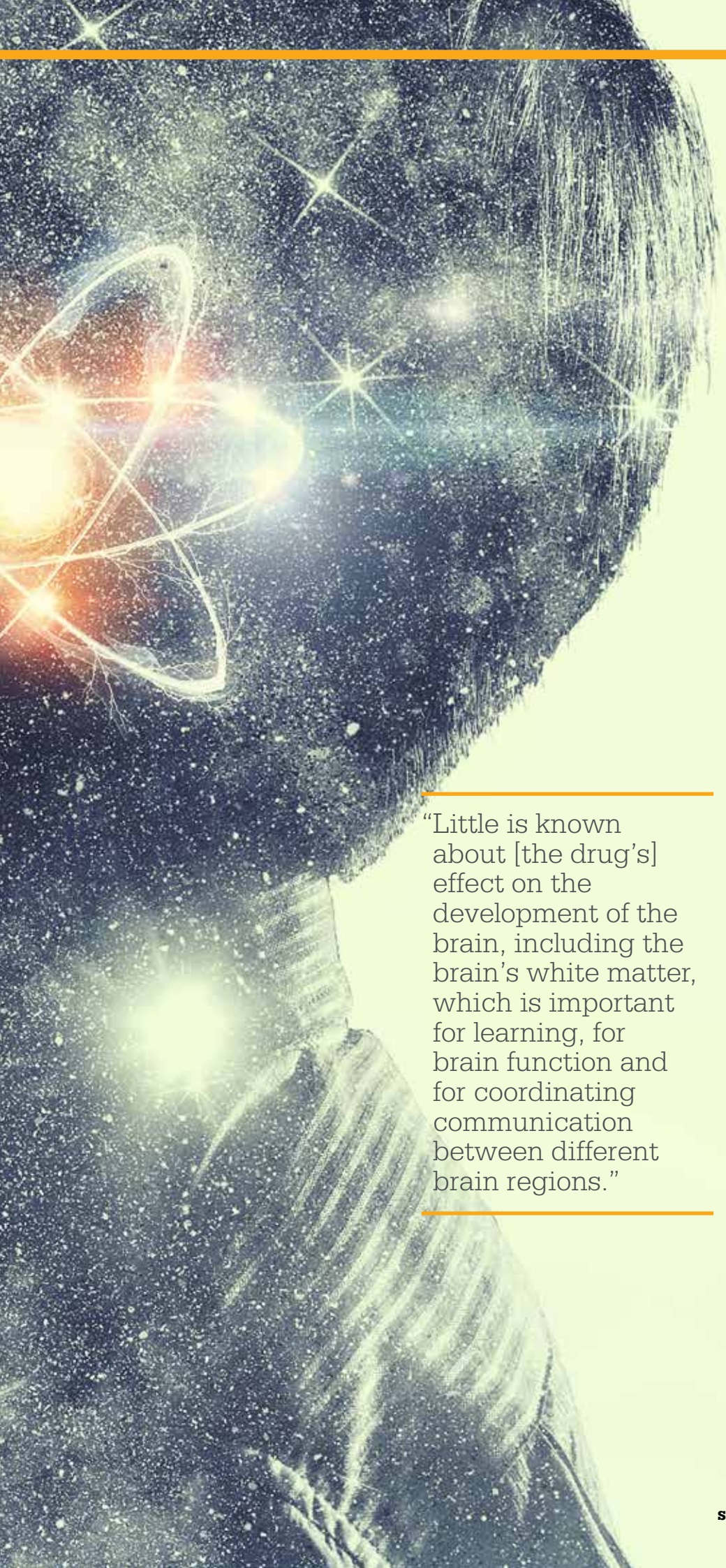
A drug used to treat ADHD appears to affect the development of the brain's signal-carrying white matter in children with the disorder, according to a study published in the journal *Radiology*. The same effects were not found in adults with ADHD.

Methylphenidate (MPH), sold under trade names including Ritalin and Concerta, is a commonly prescribed treatment for ADHD that is effective in up to 80 per cent of patients. However, little is known about its effect on the development of the brain, including the brain's white matter, which is important for learning, for brain function and for coordinating communication between different brain regions.

To find out more about MPH's effects on white matter development, Dutch researchers performed a study of 50 boys and 49 young adult men diagnosed with ADHD. All patients were medication-naïve – that is, they had never received MPH prior to the study.

"Previous studies all have tried to statistically control for the effects of ADHD medications," says study senior author Liesbeth Reneman, MD, PhD, from the Department of Radiology and Nuclear Medicine at the Academic Medical Center, University of Amsterdam, Netherlands. "But we are the first to study medication-naïve patients in this context, which, of course, is crucial if you want to know how ADHD medications affect the developing brain."

Patients received either MPH or a placebo for 16 weeks. Prior to and one week after treatment cessation, the participants underwent magnetic resonance imaging (MRI), including diffusion tensor imaging (DTI), a technique that helps assess white matter. DTI provides a measure called fractional anisotropy (FA), which is thought to reflect important aspects



of white matter such as nerve fibre density, size and myelination – the process of coating nerve fibres to protect the nerve and help it carry signals more efficiently.

In boys with ADHD, four months of treatment with MPH was associated with increased white matter FA. The effects were age-dependent, as they were not observed in adults treated with MPH.

"The results show that ADHD medications can have different effects on the development of brain structure in children versus adults," Dr Reneman says.

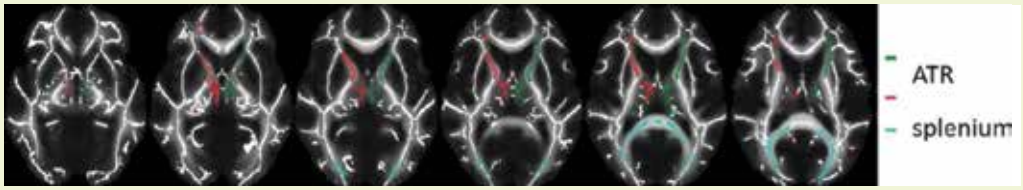
"In adult men with ADHD, and both boys and adult men receiving the placebo, changes in FA measures were not present, suggesting that the effects of methylphenidate on brain white matter are modulated by age."

Dr Reneman and colleagues are studying the long-term implications of these findings on ADHD behaviour, which have yet to be established. Many ADHD patients are on medications for years, so the long-term effects of MPH treatment represent a vital area of research. In the meantime, the researchers want to see tighter regulations for prescribing ADHD medications, since MPH is being prescribed not only to increasing numbers of children, but also at younger ages.

"What our data already underscores is that the use of ADHD medications in children must be carefully considered until more is known about the long-term consequences of prescribing methylphenidate at a young age," Dr Reneman says. "The drug should only be prescribed to children who actually have ADHD and are significantly affected by it."

According to the Center for Disease Control and Prevention, based on parent reporting, approximately 5.2 per cent of American children between the ages of two and 17 take ADHD medication.

> "Little is known about [the drug's] effect on the development of the brain, including the brain's white matter, which is important for learning, for brain function and for coordinating communication between different brain regions."



Images of regions of interest (coloured lines) in the white matter skeleton representation. Data from left and right anterior thalamic radiation (ATR) were averaged. Source: RNSA

About this research

Background

Methylphenidate (MPH) is highly effective in treating attention deficit hyperactivity disorder (ADHD). However, not much is known about its effect on the development of human brain white matter (WM).

Purpose

To determine whether MPH modulates WM microstructure in an age-dependent fashion in a randomised double-blind placebo-controlled trial (Effects of Psychotropic Medication on Brain Development–Methylphenidate, or ePOD-MPH) among ADHD referral centres between 13 October 2011 and 15 June 2015, by using diffusion-tensor imaging (DTI).

Materials and methods

In this prospective study (NTR3103 and NL34509.000.10), 50 stimulant treatment-naïve boys and 49 young adult men diagnosed with ADHD (all types) according to *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition criteria were randomised to undergo treatment with MPH or placebo for 16 weeks. Before and one week after treatment cessation, study participants underwent MRI, including DTI. The outcome measure was change in fractional anisotropy (FA), which was assessed in three regions of interest (ROIs), as well as in a voxel-based analysis in brain WM. Data were analysed by using intention-to-treat linear mixed models for ROI analysis and a permutation-based method for voxel-based analysis with family-wise error correction.

Results

Fifty boys (n = 25 MPH group, n = 25 placebo group; age range, 10–12 years) and 48 men (n = 24 MPH group, n = 24 placebo group; age range, 23–40 years) were included. ROI analysis of FA yielded no main effect of time in any of the conditions. However, voxel-based analysis revealed significant ($P < .05$) time-by-medication-by-age interaction effects in several association tracts of the left hemisphere, as well as in the lateral aspect of the truncus of the corpus callosum, due to greater increase in FA (standardised effect size, 5.25) in MPH-treated boys. Similar changes were not present in boys receiving a placebo, or in adult men.

Conclusion

Four months of treatment with methylphenidate affects specific tracts in brain white matter in boys with ADHD. These effects seem to be age dependent, because they were not observed in adults treated with methylphenidate. ■

Resource

Bouziane, C; Filatova, OG; Schrantee, A; Caan, M; Vos, FM; Liesbeth Reneman, L. (2019). 'White matter by diffusion MRI following methylphenidate treatment: a randomized control trial in males with attention-deficit/hyperactivity disorder', *Radiology*, doi:10.1148/radiol.2019182528

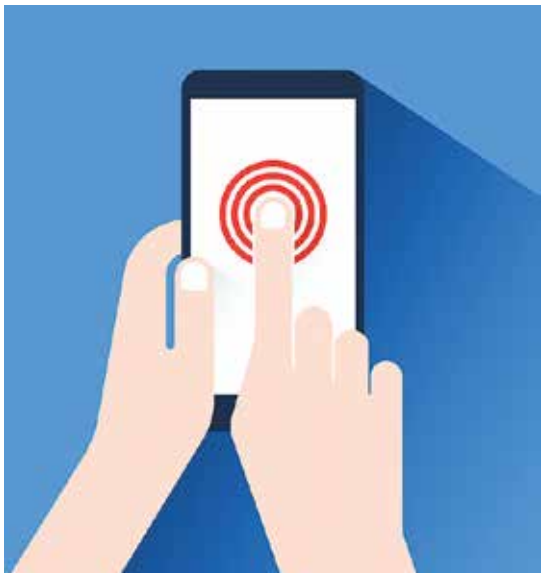
Scanning documents using the iPhone

Angela Lewis

This is currently my favourite new discovery – using your Apple iPhone to scan documents! As I don't have an Android I can't help those of you who you the operating system, but if you like the sound of this tip you could do some research on your Android unit for a similar function. So, here we go – how to easily scan documents, which can then be sent to an email address or messaged to another person.

1. On your iPhone, tap the Notes app and create a new note.
2. Tap the plus (+) symbol you can see above the keyboard.
3. From the choices on offer, select Scan Document.
4. Line up the document area to be scanned and when done press the shutter button on your phone.
5. Tap Save when done and it is saved in a note.
6. You can either leave it there in Notes, or if you want to send it onwards, tap the Share button in the top right of the window and select the desires application to receive the scan. For example, tap Message, Mail or Facebook icons to share it to these apps.

Tip: you can also make the scanned document a PDF by tapping the Share button in the upper right corner and scrolling through until you see Create PDF. Once done click the Share icon (now in the bottom left corner of the screen) and select the app to receive the PDF. All done – and all through the phone!



Free mental health apps

Angela Lewis

Remember, while there a lot of apps out there, good apps should always have a privacy policy. A solid privacy policy should provide information regarding what happens to the personal details you enter into the apps. Be wise, be forewarned and read the fine print! Here are a few to take a look at, but as is always the case, please do your own due diligence.

Mood Coach

Available for iOS (Apple) only, this app was designed by the US Department of Veteran's Affairs, specifically for veterans and service members, but it can also be useful for and others to learn and practice behavioural Activation, a popular cognitive behaviour therapy (CBT). It is billed as helping to set goals and schedule positive activities, and it also includes information on depression.

Mindshift CBT

Available for both iOS and Android and developed by Anxiety Canada, this app provides CBT-based tools to help the user take charge, specifically, of anxiety. It includes guided meditations, coping cards and help with journaling and goal setting.

HeadGear

Available for both iOS and Android, this app was co-developed in Australia by the Black Dog Institute and the University of Sydney. The focus of this app is on men's mental health and it works to guide users through a 30-day mental fitness challenge using behavioural activation and mindfulness techniques.

MoodMission

Another Australian offering for both iOS and Android, this has been created by two psychologists with support from both Monash and Swinburne universities. It works on the basis of the user telling the app how they are feeling and it then matches those feelings to a tailored list of five simple, quick, effective, evidence-based 'Missions' (think actions) to improve mood. According to the creators, all Missions are taken from scientific research, made accessible to you through the app, so you can learn exactly how what you're doing is helping.

As is always the case, all website addresses and user instructions supplied were correct at time of submission and neither the ACA nor Dr Angela Lewis receives any payment or gratuity for publication of any website addresses presented here.

Photo: 123rf

"Information from parents reporting on their children's eating habits was collected at eight points during the ages of one and nine and then linked with eating disorder outcomes at age 16."

TEENAGE EATING DISORDERS LINKED TO EARLY CHILDHOOD EATING HABITS

Children who are picky eaters are at an increased risk of developing anorexia during their teen years. Those who overeat as children are at higher risk of binge eating disorders. Persistent undereating during childhood increased the risk of developing anorexia in teen years by six per cent for girls. **Source: University College London**

Overeating, undereating and 'fussiness' in early childhood can be linked to anorexia and binge eating in adolescence, and the risk is greater for girls, finds a new University College London (UCL)-led study. The research, published recently in the Royal College of Psychiatrists' *British Journal of Psychiatry*, is the most comprehensive study to date to look at the association between childhood eating habits and adolescent eating disorders and diagnoses.

Researchers analysed data from 4760 participants from the Avon Longitudinal Study of Parents and Children (Children of the 90s), a population-based longitudinal cohort of parents and their children born in the south-west of England in 1991 and 1992.

Information from parents reporting on their children's eating habits was collected at eight points during the ages of one and nine and then linked with eating disorder outcomes at age 16.

The results show that children with increasing levels of overeating throughout childhood have a six-percentage point increased risk (from 10 to 16 per cent) of engaging in binge eating compared to children with low overeating.

First author Dr Moritz Herle (UCL Great Ormond Street Institute of Child Health, UCL Institute of Epidemiology & Health Care) says, "From a large robust cohort we were able to identify patterns of eating behaviours at an early age that may be potential markers of later eating disorders.

"Our results suggest that children who show high and persistent levels of fussy eating might be at an increased risk of developing anorexia nervosa, and children who overeat persistently are at a higher risk of binge eating in their teenage years."

The team also found that persistent undereating during childhood was associated with a six-percentage point increased risk (from two to eight per cent) of anorexia in adolescents, but only in girls. Children who were fussy eaters throughout childhood had a two-percentage point risk increase for anorexia (from one to three per cent), compared to children who were not fussy eaters.

Lead author Dr Nadia Micali (UCL Great Ormond Street Institute of Child Health) adds, "Our study helps us to understand who might be at risk of eating disorders and extends what we know from previous studies and from clinical observations.

"Eating disorders are highly complex and influenced by interactions of biological, behavioural, and environmental factors, and this study helps to identify some of the behavioural mechanisms behind these associations."

Dr Agnes Ayton, chair of the eating disorders faculty at the Royal College of Psychiatrists, says, "This study shows that early identification and targeted intervention for disordered childhood eating may reduce the future risk of eating disorders.

"However, more research is needed to disentangle the biological, behavioural and environmental risk factors, in order to improve health outcomes for children and teenagers."

Funding

The study was funded by the Medical Research Council and the Medical Research Foundation. ALSPAC is supported by the Medical Research Council, Wellcome and the University of Bristol.

About the research

Background

Eating behaviours in childhood are considered as risk factors for eating disorder behaviours and diagnoses in adolescence. However, few longitudinal studies have examined this association.

Aims

We investigated associations between childhood eating behaviours during the first 10 years of life and eating disorder behaviours (binge eating, purging, fasting and excessive exercise) and diagnoses (anorexia nervosa, binge eating disorder, purging disorder and bulimia nervosa) at 16 years.

Method

Data on 4760 participants from the Avon Longitudinal Study of Parents and Children were included. Longitudinal trajectories of parent-rated childhood eating behaviours (8 time points, 1.3–9 years) were derived by latent class growth analyses. Eating disorder diagnoses were derived from self-reported, parent-reported and objectively measured anthropometric data at age 16 years. We estimated associations between childhood eating behaviours and eating disorder behaviours and diagnoses, using multivariable logistic regression models.

Results

Childhood overeating was associated with increased risk of adolescent binge eating (risk difference, 7%; 95% CI 2 to 12) and binge eating disorder (risk difference, 1%; 95% CI 0.2 to 3). Persistent undereating was associated with higher anorexia nervosa risk in adolescent girls only (risk difference, 6%; 95% CI, 0 to 12). Persistent fussy eating was associated with greater anorexia nervosa risk (risk difference, 2%; 95% CI 0 to 4).

Conclusions

Our results suggest continuities of eating behaviours into eating disorders from early life to adolescence. It remains to be determined whether childhood eating behaviours are an early manifestation of a specific phenotype or whether the mechanisms underlying this continuity are more complex. Findings have the potential to inform preventative strategies for eating disorders.

Declaration of interest

C.M.B. reports a conflict of interest with Shire (grant recipient, Scientific Advisory Board member) and Pearson and Walker (author, royalty recipient). All other authors have indicated they have no conflicts of interest to disclose. ■

Resource

Nadia Micali et al. (2019). 'A longitudinal study of eating behaviours in childhood and later eating disorder behaviours and diagnoses', *British Journal of Psychiatry*. doi:10.1192/bjp.2019.174

Trauma Education

presented by **Dr Leah Giarratano**

Leah is a doctoral-level clinical psychologist and author with 24 years of clinical and teaching expertise in CBT and traumatology

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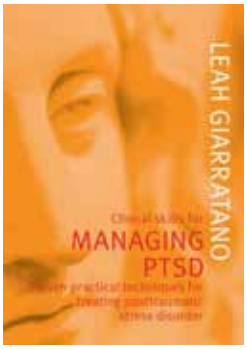

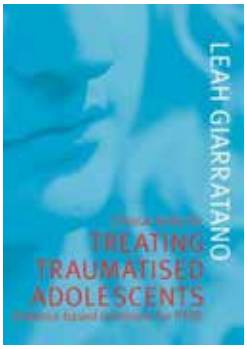

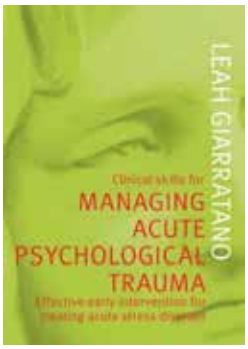

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Illustration: 123rf

Marijuana may boost risks associated with drinking alcohol

People who simultaneously use marijuana and alcohol report higher levels of sensation-seeking behaviours and greater perceptions of close friends' than those who use alcohol alone. Using marijuana and alcohol together was also associated with a higher frequency of drinking.

Source: Penn State University

As the legalisation of medical marijuana and marijuana use are both on the rise in the United States, people are not necessarily using alcohol less and may be unaware of the risks of combining alcohol and marijuana, according to researchers.

A new study from Penn State University found that compared to people who only drank alcohol, those who used alcohol and marijuana simultaneously were more likely to drink heavier and more often. They were also more likely to experience alcohol-related problems — like impulsive actions they later regretted.

"The results suggest that individuals who simultaneously use alcohol and marijuana are at a disproportionately higher risk for heavy, frequent and problematic substance use," says Ashley Linden-Carmichael, assistant research professor at the Edna Bennett Pierce Prevention Research Center at Penn State.

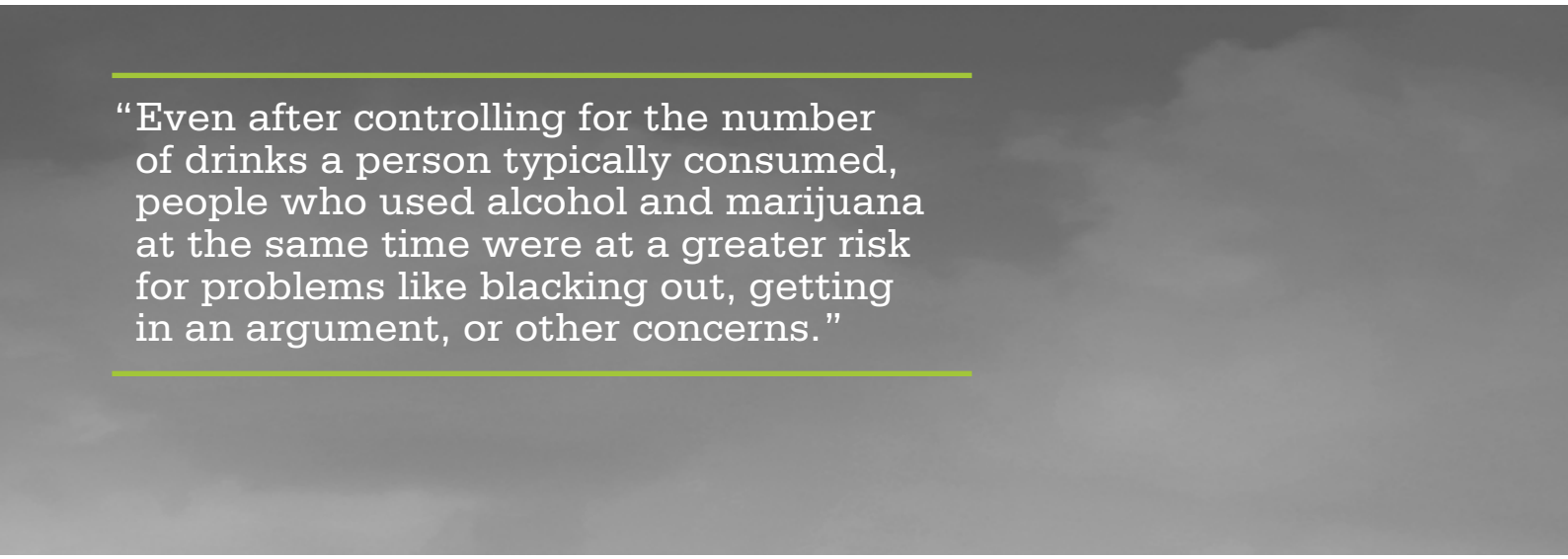
The researchers said the findings — recently published in the journal *Substance Use and Misuse* — also suggest that prevention and intervention programs should take into account not just alcohol, but also whether people are using additional substances as well.

"Right now, a lot of campus programs focus on whether students are drinking, and while sometimes they are asked about other substances, it's not necessarily whether they're using these substances simultaneously," Linden-Carmichael says.

"I think we do need to be asking about whether they're drinking in combination with other drugs and educating students about how that exacerbates their risk."

According to the researchers, marijuana use is at an all-time high among young adults in the US, possibly leading to people using marijuana and alcohol simultaneously.

"The problem with simultaneous use is that it can affect people



> "Even after controlling for the number of drinks a person typically consumed, people who used alcohol and marijuana at the same time were at a greater risk for problems like blacking out, getting in an argument, or other concerns."

cognitively and perceptually, and also have an impact on motor impairment," Linden-Carmichael says. "There is a burgeoning area of research that is examining why people are using marijuana and alcohol together and what those effects are."

In the study, Linden-Carmichael says, she and the other researchers were interested in learning more about how people use marijuana and alcohol together. They also wanted to explore whether personality traits — like the tendency to pursue new and exciting experiences, or "sensation seeking" — were associated with higher odds of using alcohol and marijuana at the same time.

The researchers recruited 1017 participants from 49 states in the US between the ages of 18 and 25 for the study. The participants provided information about how often they used alcohol, marijuana, and the two substances simultaneously. They also filled out questionnaires that measured their experiences with alcohol-related problems, whether they had a sensation-seeking personality, and how they perceived the drinking habits of their friends.

Linden-Carmichael says that across the board, individuals who used alcohol and marijuana simultaneously were at a greater risk than individuals using alcohol alone.

"Even after controlling for the number of drinks a person typically consumed, people who used alcohol and marijuana at the same time were at a greater risk for problems like blacking out, getting in an argument, or other concerns," Linden-Carmichael says. "Additionally, 70 per cent of those who engaged in simultaneous use reported using at least weekly."

The researchers found that among people who used alcohol and marijuana simultaneously, those who used more frequently were more likely to drink more alcohol, more often, and for longer periods of time. They were also associated with using more marijuana more often.

Additionally, they found that people who used alcohol and marijuana together were more likely to have higher levels of sensation-seeking characteristics and think their friends were drinking larger amounts of alcohol.

Amy L. Stamates, Old Dominion University, and Cathy Lau-Barraco, Old Dominion University, also participated in this work.

Funding

The National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism helped support this research.

About the research

Background

Simultaneous alcohol and marijuana (SAM) use, or using alcohol and marijuana in such a way that their effects overlap, is associated with negative health and behavioural outcomes.

Objectives

Our study sought to fill gaps in our knowledge about this emerging public health concern by comparing SAM users and alcohol-only users on individual-level factors and substance use outcomes as well as examining associations of SAM use frequency, within users.

Methods

Participants were recruited through online postings. Our analytic sample consisted of 1017 young adults (18–25 years) who reported past-month alcohol use. Most were male (67.8%), Caucasian (71.5%), and had attended at least some college (74.8%).

Results
Past-year SAM users reported higher levels of sensation-seeking and greater perceptions of their close friends' drinking behaviour in comparison to alcohol-only users. SAM users reported heavier and more frequent alcohol use than alcohol-only users. Within past-year SAM users, 70% reported SAM use at least weekly. More frequent SAM use was associated with all alcohol use outcomes (for example, weekly quantity, frequency, alcohol-related problems) and marijuana use outcomes (for example, quantity, frequency, peak use) and higher drinking norms.

Conclusions/importance
It is clear that SAM users are a vulnerable sub-population of young adult drinkers. SAM users are differentiated from alcohol-only users in terms of their personality characteristics and perceptions of peer groups' drinking. SAM users and more frequent users are also at heightened risk for substance use outcomes. Prevention and intervention efforts targeting high-risk drinking may benefit from also assessing whether drinkers simultaneously use alcohol and marijuana. ■

Resource

Linden-Carmichael, A; Stamates, A; Lau-Barraco, C (2019). 'Simultaneous use of alcohol and marijuana: patterns and individual differences', *Substance Use and Misuse*. doi:10.1080/10826084.2019.1638407

Glial cells are critical in brain's response to social stress

The behaviour of oligodendrocytes plays a critical role in determining whether we tolerate or succumb to stress.
Source: City University of New York

Exposure to violence, social conflict and other stressors increase the risk for psychiatric conditions such as depression and post-traumatic stress disorder. However, not everyone who experiences significant stress will develop such a response, and the cellular and molecular basis for an individual's underlying resilience or susceptibility to stressful events has remained poorly understood.

A newly published paper in the journal *eLife* from researchers at the Advanced Science Research Center (ASRC) at The Graduate Center, City University of New York (CUNY) suggests that the behaviour of oligodendrocytes — the glial cells that produce the myelin sheath that protects nerve fibres — plays a critical role in determining whether we succumb to or tolerate stress.

"Through our study, we were able to identify brain-region-specific differences in the number of mature oligodendrocytes and in the content of myelin between two groups of mice who were categorised based on their resilience or susceptibility to an identical social-defeat stressor," says Jia Liu, a research associate professor with the ASRC's Neuroscience Initiative and the paper's corresponding author.

"After repeated exposure to an aggressive mouse, some animals, called 'susceptible', avoided any sort of social interaction with their peers, while others remained resilient and continued to be socially engaged."

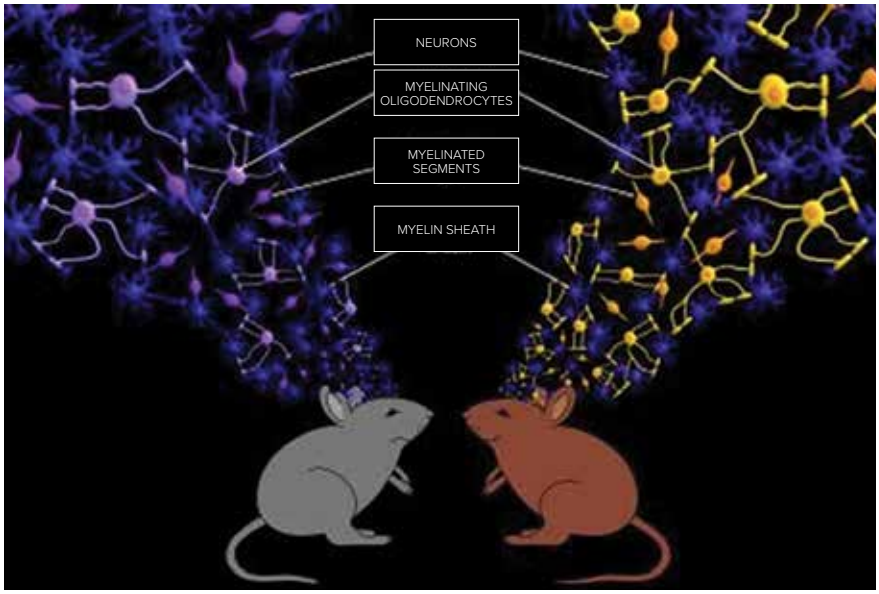
In follow-up brain tissue analysis, the research team detected fewer mature oligodendrocytes and irregular myelin coverage in the medial prefrontal cortex — a brain region that plays a critical role in emotional and cognitive processing — in the susceptible mice. In contrast, healthy numbers of oligodendrocytes and myelin were detected in resilient mice.

Methodology

For the study, researchers exposed test mice to an aggressor for five minutes daily over 10 days. Following this period, the mice were placed in the presence of an unfamiliar mouse and categorised either as 'susceptible' if they showed signs of social withdrawal or 'resilient' if they still showed interest in socialising with the new mouse — a social behaviour that is typically detected in normal mice.

Reseachers next sought to determine if there were myelination differences between susceptible and resilient mice. They looked at two areas of the brain that are known to play a critical role in determining the individual's response to stress. In one of those areas — the medial prefrontal cortex — they found that the myelinated segments of nerve fibre in susceptible mice were shorter in length and thinner than typical.

Illustration: 123rf



LEFT: The mouse on the left (grey) displays signs of depressive behaviour in response to negative social encounters, while the mouse on the right (brown) retains an overall healthy behaviour, despite being exposed to the same adverse situation. The divergent behavioural responses were attributed to differences in the oligodendrocyte lineage cells in specialised brain regions. The analysis of the brain of the susceptible mice revealed fewer myelinating oligodendrocytes (purple) and shorter myelinated segments on neurons (blue), while the brain of the resilient mice revealed the presence of a larger number of myelinating oligodendrocytes and longer myelinated segments (orange). Source: Carter Van Eitreim

They did not find this condition in the resilient or control mice groups. They also investigated the state of each mouse group's glial cells, and discovered that in susceptible mice fewer of these cells had differentiated into myelin-producing oligodendrocytes.

In a final experiment, researchers found that induced damage to the myelin in the medial prefrontal cortex caused altered social behaviour in mice, but the behaviour returned to normal when new myelin was formed.

"Dr Liu's research has highlighted the importance of stressful social events in changing the epigenetic code of oligodendrocyte progenitors, which may account for the increased susceptibility to developing chronic psychiatric disorders in some individuals," says Patrizia Casaccia, founding director of the ASRC Neuroscience Initiative.

"Her data suggest that oligodendrocyte progenitor differentiation can be affected by emotional and psychological events, and this provides a new concept for preventing and treating depression. Current treatments target neuronal function, but Dr Liu's work identifies potential new therapy targets as it suggests glial cell dysfunction could be a cause of stress-related mental disorders."

Funding

This study was supported by the National Institute of Neurological Disorders and Stroke, the National Cancer Institute, the National Institute on Minority Health and Health Disparities, and The City University of New York.

About this research

Exposure to stress increases the risk of developing mood disorders. While a subset of individuals displays vulnerability to stress, others remain resilient, but the molecular basis for these behavioural differences is not well understood. Using a model of chronic social defeat stress, we identified region-specific differences in myelination between mice that displayed social avoidance behaviour ('susceptible') and those who escaped the deleterious effect to stress ('resilient'). Myelin protein content in the nucleus accumbens was reduced in all mice exposed to stress, whereas decreased myelin thickness and internodal length were detected only in the medial prefrontal cortex (mPFC) of susceptible mice, with fewer mature oligodendrocytes and decreased heterochromatic histone marks. Focal demyelination in the mPFC was sufficient to decrease social preference, which was restored following new myelin formation. Together these data highlight the functional role of mPFC myelination as a critical determinant of the avoidance response to traumatic social experiences. ■

Resource

Bonnefil, V; Dietz, K; Amatruda, M; Wentling, M; Aubry, AV; Dupree, JL; Temple, G; Park, H; Burghardt, NS; Casaccia, P; Liu, J (2019). 'Region-specific myelin differences define behavioural consequences of chronis social defeat stress in mice', *eLife*. doi:10.7554/eLife.40855

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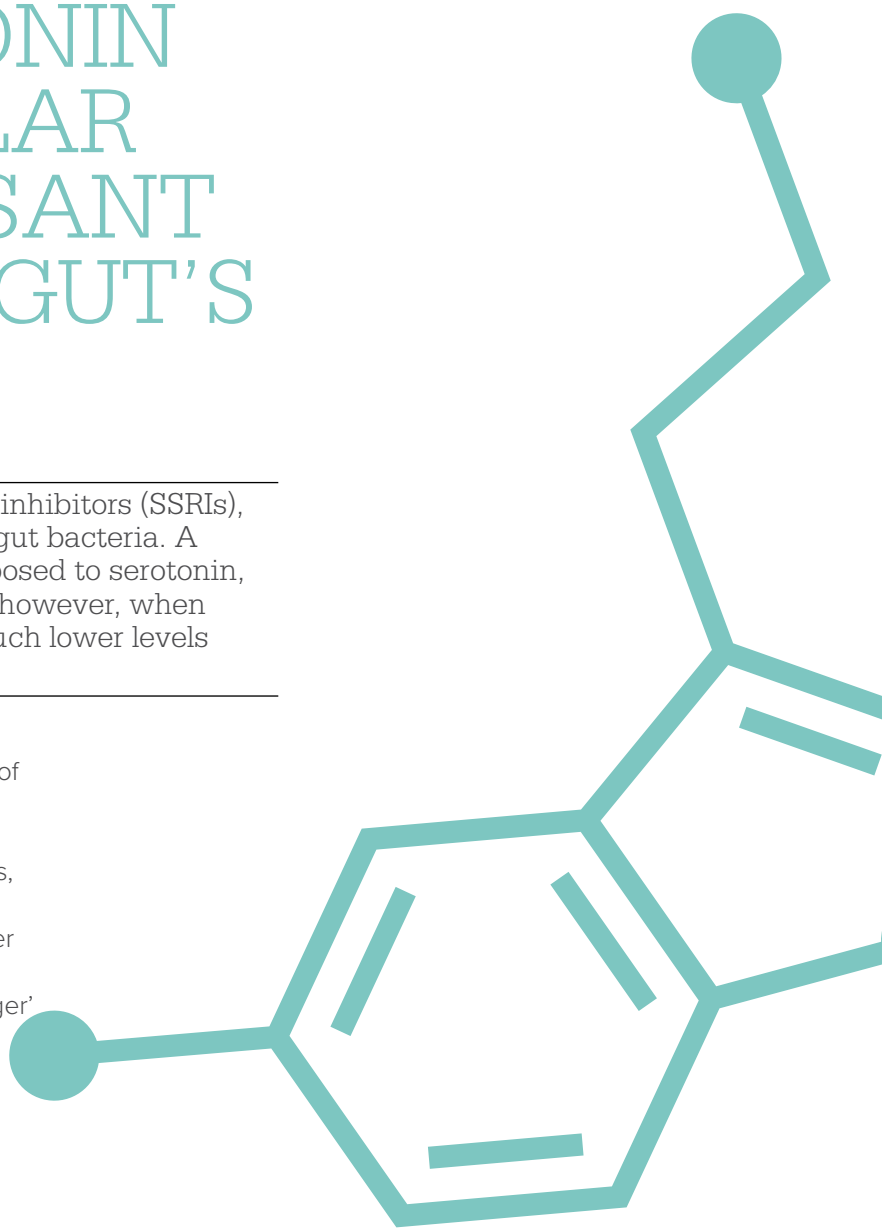
HOW SEROTONIN AND A POPULAR ANTIDEPRESSANT AFFECT THE GUT'S MICROBIOTA

Serotonin and selective serotonin reuptake inhibitors (SSRIs), such as Prozac, can have a major effect on gut bacteria. A new study using mice found that when exposed to serotonin, specific gut bacteria grew to higher levels; however, when exposed to SSRIs the bacterium grew to much lower levels
Source: UCLA



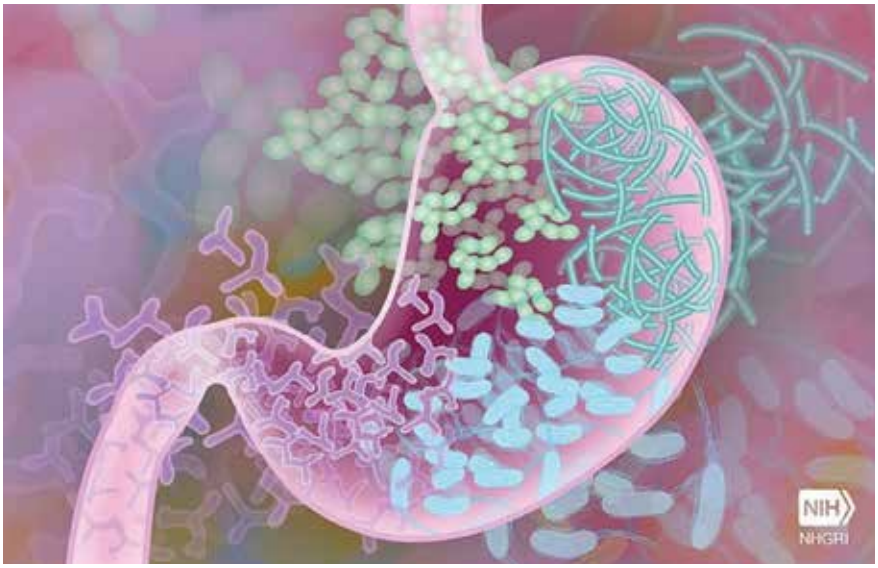
A new study in mice, led by University of California (UCLA) biologists, strongly suggests that serotonin and drugs that target it, such as antidepressants, can have a major effect on the gut's microbiota — the 100 trillion or so bacteria and other microbes that live in the human body's intestines. Serotonin, a neurotransmitter or 'chemical messenger' that sends messages among cells, serves many functions in the human body, including playing a role in emotions and happiness. An estimated 90 per cent of the body's serotonin is produced in the gut, where it influences gut immunity.

The team, led by senior author Elaine Hsiao and lead author and postdoctoral fellow Thomas Fung, identified a specific gut bacterium that can detect and transport serotonin into bacterial cells. When mice were given the antidepressant fluoxetine, or Prozac, the biologists found this reduced the transport of serotonin into their cells. This bacterium, about which little is known, is called *Turicibacter sanguinis*. The study has published recently in the journal *Nature Microbiology*. "Our previous work showed that particular gut bacteria help the gut produce serotonin. In this study, we were interested in finding out why they might do so," Hsiao says.

Hsiao is a UCLA assistant professor of integrative biology and physiology, microbiology, immunology and molecular genetics at the UCLA College, and of digestive diseases in the David Geffen School of Medicine at UCLA.

Hsiao and her research group reported in the journal *Cell* in 2015 that, in mice, a specific mixture of bacteria consisting mainly of *Turicibacter sanguinis* and *Clostridia* produces molecules that signal to gut cells to increase production of serotonin. When Hsiao's team raised mice without the bacteria, more than 50 per cent of their gut serotonin was absent. The researchers then added the bacteria mixture of mainly *Turicibacter* and *s*, and their serotonin increased to a normal level.

That study made the team question why bacteria signal to our gut cells to make serotonin. Do microbes use serotonin, and if so, for what?



RIGHT: In a separate experiment, researchers added the antidepressant fluoxetine, which normally blocks the mammalian serotonin transporter, to a tube containing *Turicibacter sanguinis*. They found the bacterium transported significantly less serotonin.

In this new study, the researchers added serotonin to the drinking water of some mice and raised others with a mutation (created by altering a specific serotonin transporter gene) that increased the levels of serotonin in their guts. After studying the microbiota of the mice, the researchers discovered that the bacteria *Turicibacter* and *Clostridia* increased significantly when there was more serotonin in the gut.

If these bacteria increase in the presence of serotonin, perhaps they have some cellular machinery to detect serotonin, the researchers speculated. Together with study co-author Lucy Forrest and her team at the National Institutes of Health's National Institute of Neurological Disorders and Stroke, the researchers found a protein in multiple species of *Turicibacter* that has some structural similarity to a protein that transports serotonin in mammals. When they grew *Turicibacter sanguinis* in the lab, they found that the bacterium imports serotonin into the cell.

In another experiment, the researchers added the antidepressant fluoxetine, which normally blocks the mammalian serotonin transporter, to a tube containing *Turicibacter sanguinis*. They found the bacterium transported significantly less serotonin.

The team also found that exposing *Turicibacter sanguinis* to serotonin or fluoxetine influenced how well the bacterium could thrive in the gastrointestinal tract. In the presence of serotonin, the bacterium grew to high levels in mice, but when exposed to fluoxetine, the bacterium grew to only low levels in the rodents.

"Previous studies from our lab and others showed that specific bacteria promote serotonin levels in the gut," Fung says. "Our new study tells us that certain gut bacteria can respond to serotonin and drugs that influence serotonin, like antidepressants. This is a unique form of communication between bacteria and our own cells through molecules traditionally recognised as neurotransmitters."

The team's research on *Turicibacter* aligns with a growing number of studies reporting that antidepressants can alter the gut microbiota.

"For the future," Hsiao says, "we want to learn whether microbial interactions with antidepressants have consequences for health and disease." She has written a blog post for the journal about the new research.

Other study co-authors are Helen Vuong, Geoffrey Pronovost, Cristopher Luna, Anastasia Vavilina, Julianne McGinn and Tomiko Rendon, all of UCLA; and Antoniya Aleksandrova and Noah Riley, members of Forrest's team.

Funding

The research was supported by funding from the National Institutes of Health's Director's Early Independence Award, Klingenstein-Simons Fellowship Award, and David and Lucile Packard Foundation's Packard Fellowship for Science and Engineering.

Editor's note

This article clearly demonstrates why counsellors need to take a comprehensive history of their clients including medication. There is a lot of research that clearly shows the importance of the gut–brain axis and how poor nutrition with an unhealthy lifestyle negatively impacts on mental health issues such as depression. If a client suffering from depression is seeing a counsellor and the client has been put on antidepressants it may be a good idea for the counsellor to educate the client and look at their diet and how they can improve gut bacteria. This is all part of the counselling process.

Resource

Fung, TC; Vuong, HE; Luna, C; Pronovost, GN; Aleksandrova, AA; Riley, NG; Vavilina, A; McGinn J; Rendon, T; Forrest, LR; Hsiao, EY (2019). 'Intestinal serotonin and fluoxetine exposure modulate bacterial colonization in the gut', *Nature Microbiology* doi: 10.1038/s41564-019-0540-4

DIETARY SUPPLEMENTS AND THE PSYCHE

Investigating the impact of nutritional supplements on mental health
Source: University of Manchester

I have heard that 'food is good for your mood'. Now, a new study on mental health and nutrient supplementation has taken a leap forward by establishing the gold standard for which nutrients are proven to assist in the management of a range of mental health disorders.

There is established analysis into the relationship between poor diet and mental illness, and there is now a vast body of research examining the benefit of nutrient supplementation for people with mental disorders.

To unpack this research, an international team of scientists at Western Sydney University, led by researchers at the University of Manchester and NICM Health Research Institute, examined the 'best of the best' available evidence. The aim was to provide a clear overview of the benefit of specific nutrient supplements – including dosage, target symptoms, safety and tolerability – across different mental disorders.

The world's largest review of top-tier evidence, published online in *World Psychiatry*, examined 33 meta-analyses of randomised control trials (RCTs) and data from 10,951 people with mental health disorders including depression, stress and anxiety disorders,

bipolar disorder, personality disorders, schizophrenia and attention deficit hyperactivity disorder (ADHD).

Although the majority of nutritional supplements assessed did not significantly improve mental health, the researchers found strong evidence that certain supplements are an effective additional treatment for some mental disorders, supportive of conventional treatment.

All nutrient supplements were found to be safe when recommended dosages and prescriptive instructions were adhered to, and there was no evidence of serious adverse effects or contraindications with psychiatric medications.

The researchers found strong evidence that certain supplements are an effective additional treatment for some mental disorders, supportive of conventional treatment.

Summary of results

- The strongest evidence was found for omega-3 supplements (a polyunsaturated fatty acid) as an add-on treatment for major depression – reducing symptoms of depression beyond the effects of antidepressants alone.
- There was some evidence to suggest that omega-3 supplements may also have small benefits for ADHD.
- There was emerging evidence for the amino acid N-acetylcysteine as a useful adjunctive treatment in mood disorders and schizophrenia.
- Special types of folate supplements may be effective as add-on treatments for major depression and schizophrenia; however, folic acid was ineffective.
- There was no strong evidence for omega-3 for schizophrenia or other mental health conditions.
- There is currently a lack of compelling evidence supporting the use of vitamins (such as E, C or D) and minerals (zinc or magnesium) for any mental disorder.

Lead author of the study, Dr Joseph Firth, honorary research fellow at the University of Manchester and senior research fellow at NICM Health Research Institute, says the findings should be used to produce more evidence-based guidance on the usage of nutrient-based treatments for various mental health conditions.

"While there has been a longstanding interest in the use of nutrient supplements in the treatment of mental illness, the topic is often quite polarising, and surrounded by either over-hyped claims or undue cynicism," Dr Firth says.

In this most recent research, we have brought together the data from dozens of clinical trials conducted all over the world, from over 10,000 individuals treated for mental illness. This mass of data has allowed us to investigate the benefits and safety of various different nutrients for mental health conditions – on a larger scale than what has ever been possible before.

Senior author on the study, NICM Health Research Institute's Professor Jerome Sarris, says as the role of nutrition in mental health is becoming increasingly acknowledged, it is vital that an evidence-based approach be adopted.

"Future research should aim to determine which individuals might benefit most from evidence-based supplements and to better understand the underlying mechanisms so we can adopt a targeted approach to supplement use in mental health treatment," Professor Sarris says.

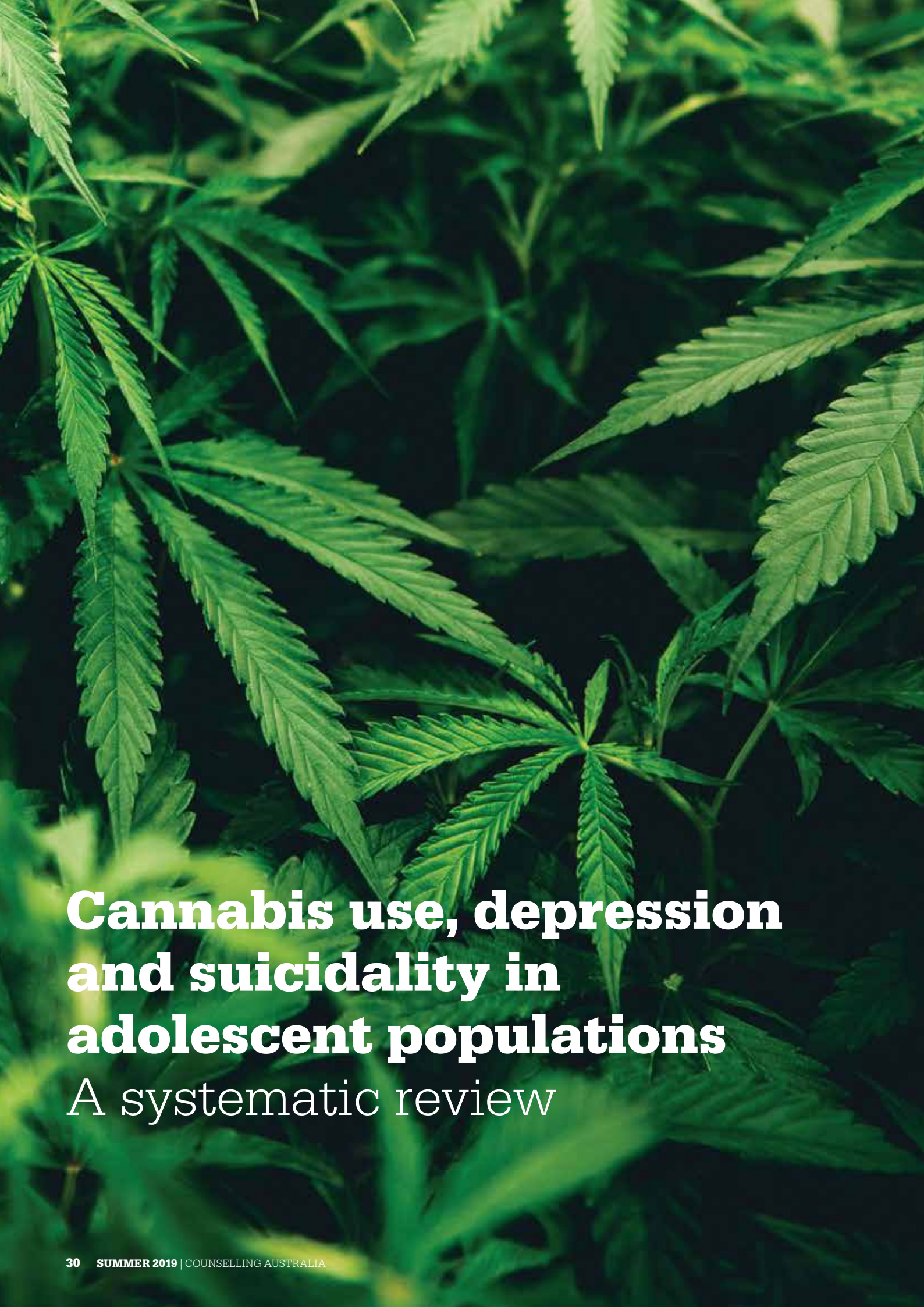
"The role of the gut microbiome in mental health is a rapidly emerging field of research; however, more research is needed into the role of 'psychobiotics' in mental health treatment."

The review involved researchers from Western Sydney University, King's College London, the University of Manchester, the University of Queensland, Orygen National Centre of Excellence in Youth Mental Health, the University of Melbourne, the University of Toronto and KU Leuven.

The research paper can be accessed in the October issue of *World Psychiatry* and online at http://doi.org/10.1002/wps.20672. ■

Resource

'The efficacy and safety of nutrient supplements in the treatment of mental disorders: a meta-review of meta-analyses of randomized controlled trials', *World Psychiatry*, https://onlinelibrary.wiley.com/doi/full/10.1002/wps.20672



Cannabis use, depression and suicidality in adolescent populations

A systematic review

By Eva McFarland, Master of Counselling, Graduate Diploma in Counselling, Bachelor of Arts Social and Development Psychology, and Cognitive Neuroscience and Health Psychology

Abstract

Objectives: The aim of this systematic review is to present contemporary research documenting the relationship between cannabis use, depression and suicidality in an adolescent population.

Study design: Peer-reviewed articles published in English in the last six years that assessed cannabis use, depression and suicidality were reviewed. Articles were excluded if they were not full texts, assessed treatment efficacy or did not report results for either cannabis use separate from substance use or for depression separate from other mental health issues. Study quality was assessed and study characteristics extracted.

Data sources: A search of seven databases was conducted for relevant publications on 15 April 2019. Reference lists of relevant articles were hand-searched for additional studies, and 1979 studies were initially identified, of which nine were eligible for inclusion in this review.

Data synthesis: All studies reported on cannabis use, depression and suicidality. Four studies noted links between depression and suicidal ideation, and three between depression and suicide attempt. Three studies suggested cannabis use predicts suicidal ideation, though another two reported otherwise. One study proposed a link between cannabis and attempted suicide, though two studies reported non-significant results. Two studies demonstrated a link between cannabis use and depression. One study reported that comorbid depression and cannabis use was the strongest predictor of suicide attempt, and a further study suggested sleep as a predicting factor of adolescent depression, cannabis use and suicidality.

Conclusions: This systematic review confirmed significant positive relationships between cannabis use and both suicidal ideation and attempt, cannabis use and depression, and depression and both suicidal ideation and attempt, along with the significant positive relationship between comorbid depression and cannabis use, and suicide attempt. This study additionally uncovered potential confounding factors pertinent to further research, including a dose-response relationship regarding cannabis use, and the influence of sleep as predictive of depression, cannabis use and suicidality in adolescent populations. Additionally, results of confound were suggested between suicidal ideation and suicide attempt, potentially signifying alternate extraneous factors relevant to these mental health phenomena.

Mental health and substance abuse difficulties frequently present in the form of an interdependent, mutually reciprocal relationship, and this can especially be articulated when considering adolescent populations. In Australia, the leading cause of death in 2017 for youth aged from five to 17 years was suicide, a statistic that has increased by 10.1 per cent since 2016 (Australian Bureau of Statistics, 2018). According to a plethora of modern research, depression has been linked with suicidal ideation and suicide attempts, referred to collectively henceforth as suicidality, and it has been suggested that 40 to 80 per cent of youth meet the diagnostic criteria for comorbid depression and suicidality (Rasic et al., 2013). When the most current statistical trends are considered, it is noted that of all suicides committed by youth aged from five to 24 years in Australia, 34.3 per cent of these deaths are directly related to mood disorders inclusive of depression (Australian Bureau of Statistics, 2018). Moreover, when the same cohort is considered, 25.9 per cent of suicides are considered a direct repercussion of mental or behavioural issues resultant from alcohol or drug abuse (Australian Bureau of Statistics, 2018). This trend is supported by existing contemporary research, which has documented the associations between poor mental health and substance abuse. Current literature has historically focused on the cause–effect relationship between depression and cannabis use, depression and suicidality, or cannabis use and suicidality, while controlling for the additional variable as a confounding consideration. However, the complex interplay between depression, cannabis use and suicidality in an at-risk population such as adolescents warrants further research, and while preliminary research has begun to investigate these links (Gart & Kelly, 2015; Lynskey et al., 2004; Pedersen, 2008), there remains a significant gap in the contemporary pool of literature.

The purpose of this systematic review is to present contemporary research pertaining to the relationship between cannabis use, depression and suicidality in an adolescent population.

METHODS

Search strategy

A search of seven databases was conducted (Biological Science Collection, Ebook Central, ERIC, ProQuest Central, PsycARTICLES, PsycINFO, Social Science Premium Collection) on 15 April 2019, in order to garner for review the most current literature pertaining to the relationship between cannabis use, depression and suicidality in adolescent populations. The following key terms were used to search for pertinent articles: ‘marijuana’, ‘cannabis’, ‘teenage’, ‘adolescent’, ‘depression’, ‘suicidality’, ‘suicidal’ and ‘suicide’. The search was restricted to peer-reviewed articles published between the years 2013 and 2019. Articles were then briefly examined based on title and abstract to identify those that qualified for further examination, after which the bibliographies of relevant studies were hand-searched for additional pertinent research.

Inclusion criteria

Studies of a longitudinal and cross-sectional nature were included on the basis that they were published in English in a peer-reviewed journal, and full texts were available for review. Data extracted from the identified studies comprised of population features such as age, gender, substance use, mental health issues and suicidal behaviours, and study features including design, location, sample size, age of data and quality of research.

Exclusion criteria

Studies describing the experiences of a single individual in a case-study design were excluded from this review, as well as those which considered comorbid substance or mental health conditions but did not report results for cannabis use or depression separate from these conditions. Studies that assessed the treatment outcomes for individuals suffering depression, cannabis use or suicidality were also excluded.

Assessment of study quality

Assessment of study quality was conducted using a modified version of the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Analytical Cross Sectional Studies (Joanna Briggs Institute, 2016). As this checklist was designed for use with cross-sectional studies only, it was modified for use across both longitudinal and cross-sectional studies, by removing three of

the eight questions, and adding an additional question from the Evidence-Based Librarianship (EBL) Critical Appraisal Tool (Glynn, 2006) in order to assess study bias (see Appendix A). This method has been demonstrated as useful for assessing study quality previously (Nielsen et al., 2018). Studies were scored on a 0–6 rating system, with individual study quality ratings reported in the Summary of Included Studies (see Appendix B).

Results

An initial database search provided 1979 studies for review, after which 40 were extracted for further examination based on title and abstract, and a further five identified after a hand-search of bibliographies. Further consideration of these studies based on inclusion and exclusion criteria produced nine articles for inclusion in this systematic review. Included studies were rated as generally good quality; the average quality score for individual studies was 4.44 out of a possible 6.0, with an overall group average of 40 out of a possible 54.

Appendix C summarises the major characteristics of the nine included studies. These studies were conducted in predominantly Western countries representative of typically Caucasian racial and ethnic backgrounds, with the exception of one study conducted in Kuwait (Mazaba et al., 2017). The nine studies differed on the length of time considered for reporting of cannabis use; reporting on suicidal ideation, suicide attempt or both; and the method of assessing depression.

Cannabis use reporting

Three of the included studies asked participants to consider their cannabis use habits as they related to the past 30 days. In two of these studies, participants were asked to specify how many times they had used cannabis over the previous 30 days (Daly et al., 2015; Mandracchia et al., 2016), while one study asked participants to rate their cannabis use over the previous 30 days as one of the following options: "[1] no use; [2] 1–2 times; [3] 3–9 times; [4] 10–19 times; [5] 20–39 times; [6] 40 or more times" (Rasic et al., 2013).

An additional three studies queried participants on the details of their cannabis use over the past 12 months. One of these three asked participants how many times they smoked in the previous 12 months (Sampasa-Kanyinga et al., 2017), one grouped participants into daily smokers (3–7 days per week), casual smokers (1–2 days a week – less than monthly), and non-users (not in the preceding 12 months – not ever) (Waterreus et al., 2018a), and the remaining study did not specify the questions they posed for participants to answer in relation to their cannabis use habits over the previous 12 months (Chadi et al., 2019).

Further, one study questioned participants on their cannabis use in the preceding six months using a nine-point scale (Simons et al., 1998) ranging from 0 (no use) to 8 (more than once per day) (Chabrol et al., 2014). Another study utilised prison health system data to assess any cannabis use noted during prison stays,

and any reported cannabis use prior to incarceration (Gates et al., 2017). And the final study asked participants to rate their lifetime cannabis consumption on a scale from 1 (0 times) to 5 (20+ times) (Mazaba et al., 2017).

Suicidal ideation and suicide attempt reporting

Three of the incorporated studies assessed suicidal ideation only, without consideration of suicide attempts made by participants. One of these studies applied the 10-question Revised Suicide Ideation Scale (RSIS) (Rudd, 1989), with a five-point scale ranging from 0 (never) to 5 (always) (Chabrol et al., 2014). The remaining two studies invited participants to disclose whether they had ever seriously considered attempting suicide in the previous 12 months (Chadi et al., 2019; Mazaba et al., 2017).

Two of the studies encompassed in this review reported on suicide attempt only, exclusive of suicidal ideation. One utilised the prison records kept by medical staff in relation to any suicide attempts made by inmates during their incarceration (Gates et al., 2017), while the other asked participants if they had ever attempted to overdose or harm themselves in the previous 12 months, providing three possible answers which could be harnessed to classify 'yes' responders as either suicide attempters or self-harming non-suicide attempters (Waterreus et al., 2018a).

The final four studies considered participants in relation to both suicidal ideation and suicide attempts. Two studies utilised questions from the Youth Risk Behavior Surveillance System (YRBSS) (Kann et al., 1998) to query participants on any suicidal thoughts or attempts over the preceding 12 months (Mandracchia et al., 2016; Rasic et al., 2013). One of these two studies also included three yes-or-no questions developed by the researchers to additionally assess suicidal ideation (Mandracchia et al., 2016). A further study invited participants to answer three yes-or-no questions directly relating to suicidal ideation, along with one five-point question relating to the number of suicide attempts made by the individual, answered on a scale of 1 (0 attempts) to 5 (6+ attempts) (Daly et al., 2015). The final study employed two yes-or-no questions from the Centers for Disease Control and Prevention (CDC)'s Youth Risk Behavior Survey, which asked participants if they had ever considered suicide, and if they had ever attempted suicide (Sampasa-Kanyinga et al., 2017).

Depression assessment method

Two studies described utilising a depression scale tool embedded within their questionnaire in order to assess any depressive symptomatology of participants. Both employed the Center for Epidemiological Studies-Depression scale (CES-D) in order to assess participants for potential depression (Chabrol et al., 2014; Rasic et al., 2013).

One study asked participants a single yes-or-no question regarding whether they had experienced any feelings of hopelessness or sadness for more than two weeks over the prior 12-month period which had interfered with their usual activities, in order to assess them for potential depression (Daly et al., 2015).

An additional study employed psychiatrist and psychologist assessments in order to determine participants' formal depression diagnoses (Gates et al., 2017), and one utilised a psychosis screener of public and non-government mental health services to acquire participants who may have been identified as suffering from depression previously (Waterreus et al., 2018a). One study queried participants on a range of factors which could be utilised to predict the risk of depression, including loneliness, school truancy, food security, parental understanding, and experience of bullying and being attacked (Mazaba et al., 2017). Finally, three studies did not specify the method of assessing depression or depressive symptomatology within their study (Chadi et al., 2019; Mandracchia et al., 2016; Sampasa-Kanyinga et al., 2017).

Study findings

Three of these studies found that females were more likely to have or report suicidal ideations than their male counterparts (Mandracchia et al., 2016; Mazaba et al., 2017; Sampasa-Kanyinga et al., 2017), and one suggested that females were also more likely to report suicide attempts than males (Mandracchia et al., 2016). In opposition to this suggestion however, one study found that males were more likely to attempt suicide than females, while females experienced more mental health disorders than their male counterparts (Gates et al., 2017). However, it should be

noted that this study did not report on suicidal ideation, and over 90 per cent of the study sample were male, representing potential bias within these results.

Four studies reported findings of significant positive correlations between cannabis use and increased risk of suicidal ideation (Mandracchia et al., 2016; Mazaba et al., 2017; Rasic et al., 2013; Sampasa-Kanyinga et al., 2017). However, initial correlations between cannabis use and suicidal ideation were proven non-significant in one of these studies after accounting for confounding variables (Rasic et al., 2013). This finding was echoed in an additional study which reported initial correlations between cannabis use and increased suicidal ideation, though these results were proven non-significant after adjusting for personality traits as confounding variables (Chabrol et al., 2014).

In addition, three studies initially reported significant correlations between cannabis use and suicide attempts (Chadi et al., 2019; Rasic et al., 2013; Waterreus et al., 2018a). However, after controlling for confounding variables, two studies found that cannabis use was no longer significantly associated with suicide attempt (Rasic et al., 2013; Waterreus et al., 2018a). It should be noted that the sample sizes for both of these studies (n = 976) (Rasic et al., 2013) and (n = 1790) (Waterreus et al., 2018a) were relatively small when compared to the third study reporting on cannabis use and suicide attempt (n = 26,902) (Chadi et al., 2019), which maintained that cannabis use alone did in fact predict suicide attempt in their sampled population of 13 to 17 year old individuals.

Two studies suggested that cannabis use was significantly positively associated with depression (Chadi et al., 2019; Rasic et al., 2013). One of these studies noted a dose–response relationship between the amount of cannabis use and the length of time until onset of depression (that is, heavy cannabis use predicted more rapid onset of depressive symptomatology) (Rasic et al., 2013).

Four of the incorporated studies found significant positive correlations between depression or depression-factors, and suicidal ideation (Chabrol et al., 2014; Mandracchia et al., 2016; Mazaba et al., 2017; Sampasa-Kanyinga et al., 2017). Furthermore, three studies noted significant correlations between depression or depression-factors and suicide attempts (Mandracchia et al., 2016; Sampasa-Kanyinga et al., 2017; Waterreus et al., 2018b).

Additionally, one study noted that comorbid cannabis use and depression was significantly positively associated with the number of suicide attempts made, more so than any other observed comorbid conditions (Gates et al., 2017). However, it should be noted that this study was conducted within a prison setting, with predominantly male non-adolescent participants, and did not report on suicidal ideation.

Interestingly, one included study noted that shorter sleep duration in rural adolescent populations predicted depression scores, suicidal ideation and attempts, and cannabis use (Daly et al., 2015). This finding could suggest an additional factor at play in the relationship between cannabis use, depression and suicidality in adolescent populations.

Discussion

As may be garnered from the aforementioned results and the few articles published on the subject, the relationship between cannabis use, depression and both suicidal ideation and suicide attempts as they relate to adolescent populations is a field burgeoning in current research. This systematic review has not only suggested the significant positive correlation between cannabis use and suicidal ideation and attempt, cannabis use and depression, and depression and suicidal ideation and attempt. Indeed, this review has additionally commented on the comorbid condition of cannabis use and depression as effecting suicide attempt, suggested potential confounding factors such as dose–response relationship, and the effect of sleep on predicting depression, cannabis use, and suicidality in adolescent populations. Furthermore, these findings represent results of potential confound, namely the suggestion that suicidal ideation and suicide attempt may not be explicitly linked, but additionally influenced by extraneous factors. This would suggest that despite contemporary research, the exact etiology of depression, cannabis use and suicidality in adolescent populations is still somewhat unknown, and as such, further research should be undertaken in order to ascertain the exact nature of these factors.

These findings are particularly

pertinent when contemplating healthcare and education systems, regarding the manner in which they provide support and care for adolescents, especially those deemed at-risk within the community. It may also be suggested that policymakers should familiarise themselves with the research findings of a potentially symbiotic relationship between cannabis, depression and suicidality as they pertain to adolescent populations, especially when considering significantly contested issues relevant to postmodern Western society, such as the contemporary debate surrounding the legalisation of cannabis.

It should be noted, however, that limiting population sampling to schools, as was the predominant method of sampling across the incorporated studies, neglects to consider the effect of depression, cannabis use and suicidality on adolescent populations engaged in vocational training and learning programs, already engaged in the workforce, or not attending either educational or working activities. It could be suggested that adolescents not attending school, vocational education or work could be significantly more at risk of cannabis use, depression and suicidality, and as such, this population should be considered in further research.

Further research should additionally be conducted to explore the dose–response relationship reported between cannabis and depression, as well as the possibility that the strain of cannabis and the method of consumption may have a direct effect on depression and suicidality in these populations. Furthermore, several of the aforementioned studies reported on the relationship between cannabis use and suicide attempts, to the exception of suicidal ideation. However, a significant relationship between cannabis use and suicide attempts may reflect a state of lowered inhibitions or increased impulsivity due to acute cannabis use or intoxication, resulting in increased suicide attempts despite little to no increase in reported suicidal ideation. As such, further research should investigate both suicidal ideation and suicide attempts to ascertain the influence of the mechanisms of intoxication and reduced inhibition. Moreover, further research pertaining to the potential mediating or confounding factor of sleep duration in relation to cannabis use, depression and suicidality in adolescent populations should be conducted, specifically in non-rural adolescent populations, with the intention to determine the generalisability of these preliminary findings.

> The complex interplay between depression, cannabis use and suicidality in an at-risk population such as adolescents warrants further research.

Limitations

Several of the studies encompassed in this systematic review play host to significant limitations, which may have a potential biasing effect on findings. Specifically, all studies were conducted in the form of a questionnaire or survey, with the exception of one study that utilised prison medical records (Gates et al., 2017). This self-reporting method of quantitative data collection, while time-efficient, may lend itself to under-reporting and retrospective bias, thus biasing research results (O'Leary, 2017).

All but one of the studies was conducted outside of Australia, though the majority of the studies were performed in Western countries, with the exception of one conducted in Kuwait (Mazaba et al., 2017). However, there remains the question of whether cultural and societal differences between Australia and other Western countries play a role in the relationship between cannabis use, depression and suicidality, and thus whether the results from all Western studies are generalisable to an Australian adolescent population.

In addition, two of the studies identified participants who could be at risk of depression due to depression-factors, rather than assessing whether the individual actually suffered from any depressive symptomatology (Chabrol et al., 2014; Rasic et al., 2013). As such, the sample of individuals suggested as having depression may have been over-exaggerated, thus biasing any correlations with cannabis use and suicidality observed.

Additionally, all studies were cross-sectional in nature, with the exception of one (Rasic et al., 2013), thus rendering it difficult to comment on the cause–effect relationship between the variables that would be more feasible through a longitudinal analysis.

Limitations should also be noted as they pertain to the present systematic review. Specifically, commenting on the relationship between cannabis use, depression and suicidality in adolescent populations was made difficult by methodological issues, such as the small sample size of this review. However, the limited number of studies contained within this analysis accurately reflects the sum of research currently reporting on the relationship between cannabis use, depression and suicidality, thus advocating the need for further research. ■

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Appendix A
Checklist for analytical cross-sectional studies

	Y	N	Unclear	N/A
1. Were the criteria for inclusion in the sample clearly defined?	☐	☐	☐	☐
2. Were the study subjects and the setting described in detail?	☐	☐	☐	☐
3. Was the exposure measured in a valid and reliable way?	☐	☐	☐	☐
4. Were objective, standard criteria used for measurement of the condition?	☐	☐	☐	☐
5. Was appropriate statistical analysis used?	☐	☐	☐	☐
6. Is the choice of population bias-free?*	☐	☐	☐	☐

* = *Evidence-based Librarianship Critical Appraisal Tool Question*

Source: modified Joanna Briggs Institute Critical Appraisal

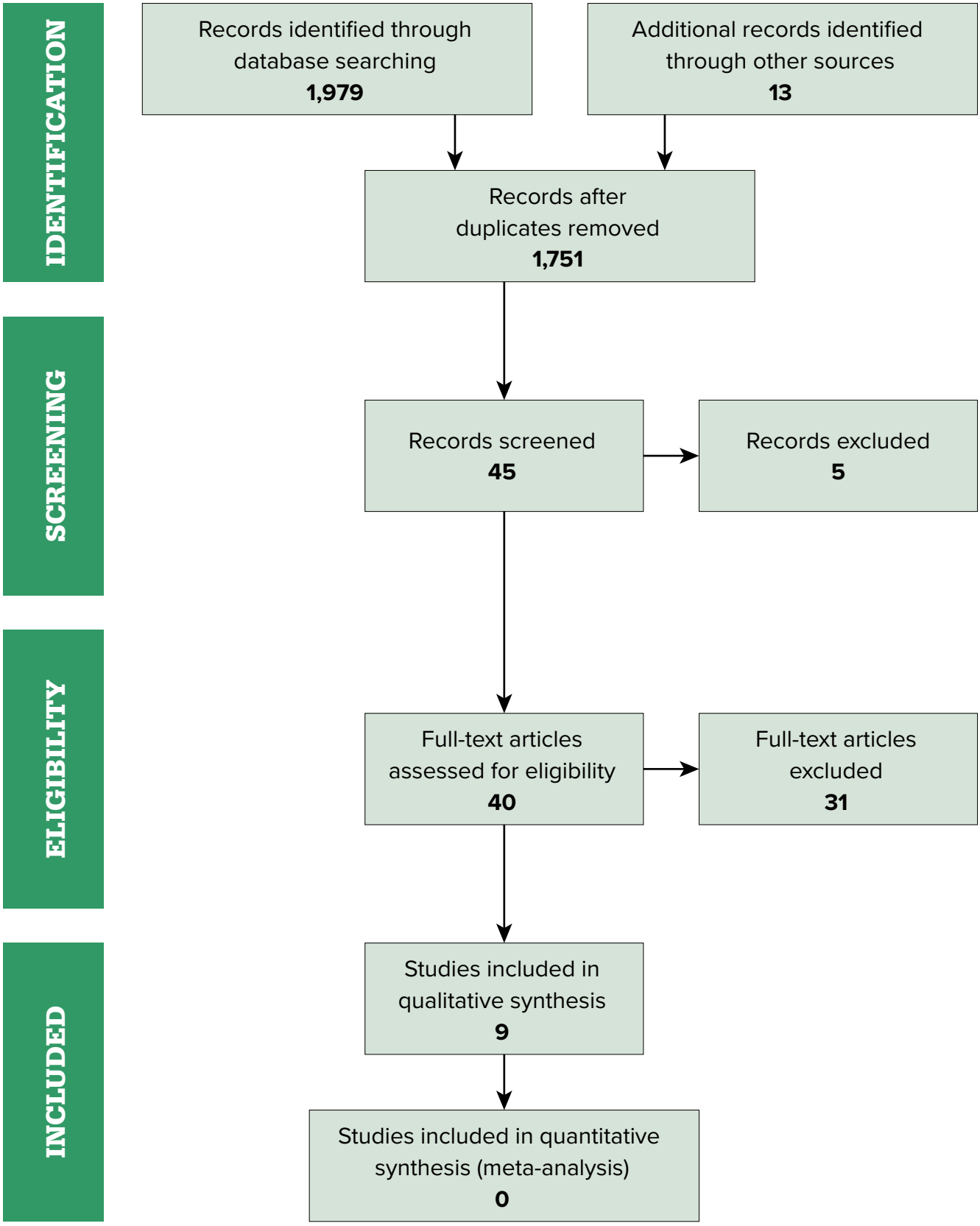
Appendix B
Summary of included studies

Study ID	Study Design	Study Location	Sample	Age (years)	Gender	Cannabis Use Reporting	SI* & SA** Reporting	Depression Assessment Method	Quality Rating
Daly et al., 2015	Cross-section	USA	987	13–15	Female = 51.9%	Last 30 days	SI & SA	Depression scale	5
Chadi at al., 2019	Cross-section	USA	26,902	13–17	Female = 49.99%	Last 12 months	SI only	N/S	3
Chabrol et al., 2014	Cross-section	France	972	Male m*** = 17.1 ± 1.2; Female m = 16.7 ± 1	Male = 61%	Last 6 months	SI only	Depression factors	4
Rasic et al., 2013	Longitude	Canada	976	14–15	Male = 49.4%	Last 30 days	SI & SA	Depression scale	5
Gates et al., 2017	Cross-section	USA	10,988	m = 37.5 ± 11.5	Male = 90.1%	Prior to/during imprisonment	SA only	Psychiatrist & psychologist diagnosis	5
Sampasa-Kanyinga et al., 2017	Cross-section	Canada	1,922	12–17	Female = 54%	Last 12 months	SI & SA	N/S	4
Mazaba et al., 2017	Cross-section	Kuwait	2,672	13–15	Male = 52.3%	Lifetime use	SI only	Factors predicting depression	4
Mandracchia et al., 2016	Cross-section	USA	1,795	12–18	Female = 51.6%	Last 30 days	SI & SA	N/S	4
Waterreus et al., 2018	Cross-section	Australia	1,790	18–64	N/S	Last 12 months	SA only	Psychosis screener	6

*SI = suicidal ideation; **SA = suicide attempt; m*** = Mean

Appendix C

Preferred reporting Items for systematic reviews and meta-analyses (PRISMA) diagram of study selection



(Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009)

SAFETY IN COUNSELLING

How to keep yourself safe with red-flag clients

By Kim Billington

Firstly, what are the red flags in counselling? As a supervisor, I am sometimes alarmed by unsafe working environments and practices, which could potentially set up counsellors for ethical misconduct. Counsellors working in established agencies usually have these things covered as part of their induction process.

I have written this article to, hopefully, reduce the risks for independent practitioners. The list below is not exhaustive, and has been purposefully written in the 'what not to do' format, in order to invite readers to picture the risks of each scenario.

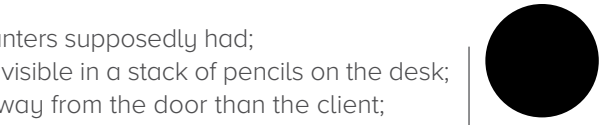
Factors that can invite danger for a counsellor include:

- working alone in a building;
- working without a duress alarm (available for around five dollars at most discount stores);
- having a limited 'client consent to counselling' contract/agreement, which does not clarify the terms of service provision, including the expectations of respectful behaviours, not attending under the influence of substances and non-aggressive conduct;
- not completing a full mental health history at intake – including the name of treating psychiatrist/psychologist, current medications and timeline of onset of previous crises and outcomes;
- not having on hand your local crisis assessment and treatment team (CATT) to provide immediate 24/7 help during a mental health crisis;
- accepting referrals for clients with mental health conditions outside your area of competency or training;
- delaying referring-on such clients;
- not being aware of signs of drug use, such as enlarged pupils, bloodshot or glassy eyes, increased energy and confidence, aggressive behaviour, trembling, twitches and paranoia;
- not providing clients with relevant 24/7 counselling services and asking them to put these details in their phones and, where needed, have a 'warm referral' conversation on loudspeaker with the agency such as
  - Lifeline: 13 11 14
  - Beyond Blue: 1300 22 4636
  - MensLine: 1300 78 99 78
  - Kids helpline: 1800 55 1800;
- not documenting the provision of these numbers;
- not screening and documenting mental health assessments such as a K10 or DASS 21, noting any areas where the client scores high, and not discussing the relevance of that score with the client, and making

of sexual encounters supposedly had;
- having scissors visible in a stack of pencils on the desk;
- sitting further away from the door than the client;
- not having a rehearsed safe rapid-exit plan for yourself, especially in response to sexual advances or threatening behaviours;
- not having a rehearsed verbal alert code with colleagues or reception (for example, "Mary, could you look for my red folder, please?");
- having your handbag or briefcase visible, or your laptop or computer screen open; and
- having your personal address accessible on sites such as the White Pages.

Ethical and professional considerations

I suggest to new counsellors that they imagine one day they are summonsed to appear and have case notes subpoenaed for a court of enquiry or Coroner's Court. It is important to review your required, ethical practices, including:
- ensure client understanding of the purpose, process and boundaries of the counselling relationship;
- clarify limits of counselling confidentiality and duty-of-care actions that might be necessary in response to safety of the client, or other persons;
- refresh your knowledge around mandatory reporting: https://aifs.gov.au/cfca/publications/mandatory-reporting-child-abuse-and-neglect;
- make suitable, timely referrals where the client's needs, presentation or requests for services are outside your training/ level of competency; and
- undertake regular supervision and debriefing to develop skills, monitor performance and sustain professional accountability. ■



About the author

Kim Billington is a counsellor, a consulting supervisor and a supervisor to master's counselling students at Monash University. She has a Master of Counselling from the Australian Catholic University and a Master of Narrative Therapy and Community Work from the University of Melbourne.

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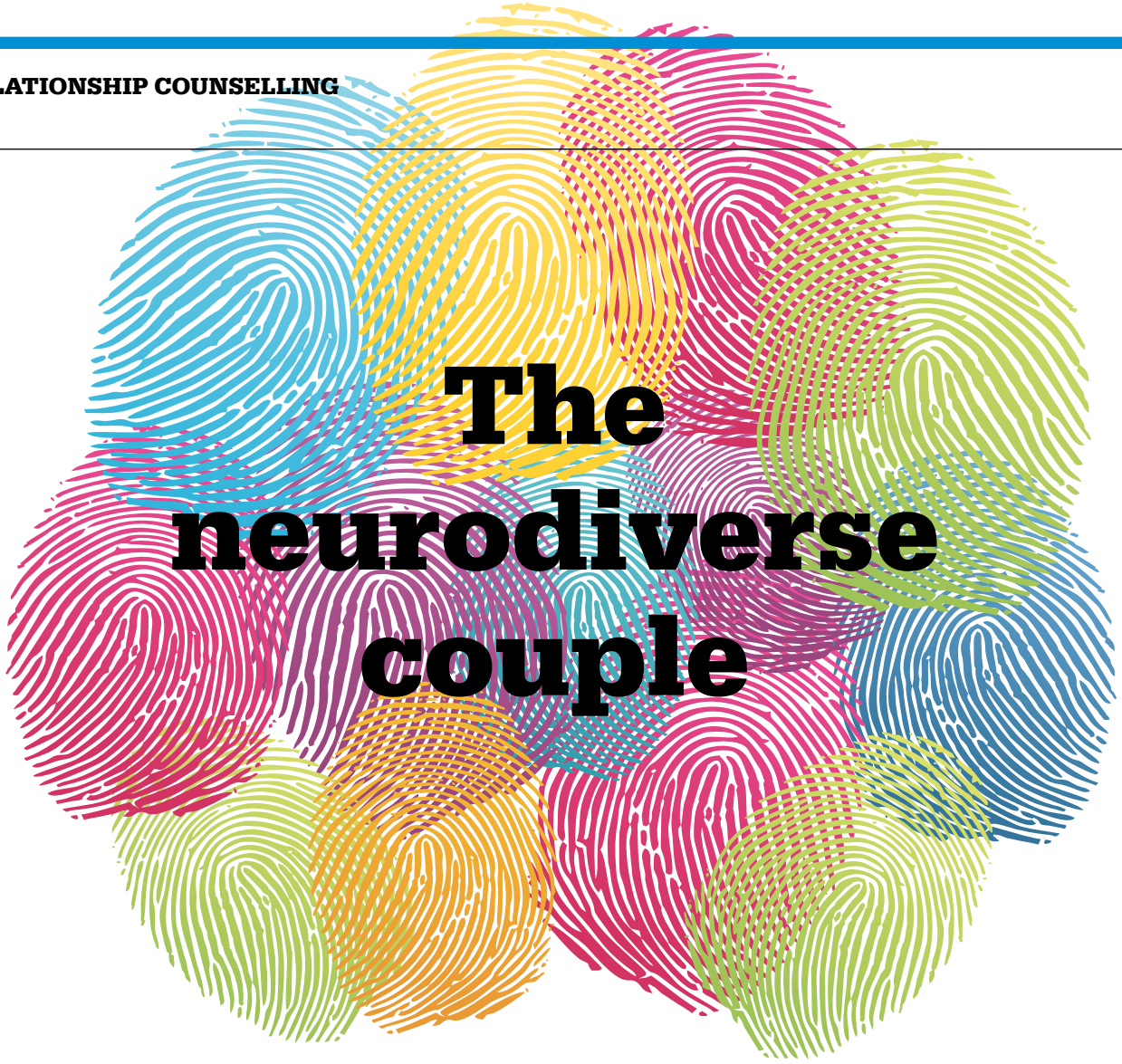
'ACA Code of Ethics and Practice Ver15', *Australian Counselling Association*, https://www.theaca.net.au/documents/ACA%20Code%20of%20Ethics%20and%20Practice%20Ver15.pdf

a referral for a trained clinician for a formal assessment;
- not documenting secondary consults about a client at risk;
- not discussing at-risk clients at monthly supervision;
- engaging in conversations, especially with male clients, where the client is discussing increasingly graphic, sexualised matters, such as descriptions of their fantasies or



The neurodiverse couple

Neurodiversity within couples counselling requires a deft and knowledgeable therapist who understands the dynamics of a neurodiverse relationship.

By Jill Kearns

The difficulties of a relationship counsellor specialising in neurodiverse couples was recently highlighted in ABC's story 'Autism in relationships: therapist inundated by number of couples seeking help' (Whitham, 2019). This impacted on me as a couples counsellor and, as my husband identifies with an autistic profile, I am part of a neurodiverse marriage.

Neurodiversity (ND) describes an emerging sociotype that considers wide differences in individual brain function and behavioural traits, and it is closely associated with autism/Asperger syndrome and other neurodivergent 'cousins' such as attention deficit hyperactivity disorder (ADHD), dyscalculia, dyslexia or dyspraxia, and a host of other neurological differences (Silberman, 2016). Somewhat controversially, Asperger syndrome now fits under autism in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-V)*. It is difficult to gauge the incidence rate across all ND subtypes, but one in 68 people are formally diagnosed as autistic in Australia (Australian Bureau of Statistics, 2015). Surprisingly, the male to female ratio in autism is reaching 2:1, although the autistic female is likely to have sophisticated camouflage strategies to fit into the neurotypical world (Cook & Garnett, 2018).

My husband and I have been a neurodiverse couple for 37 years, although we were unaware of the source of our difference for most of that time. We both run counselling services (careers for him and couples for me) and once we realised our neurological differences, the failure of our own couples therapy experiences became clear to us. Fundamentally, conventional couples counselling strategies can be counter-therapeutic and it is unwise to commence therapy without a comprehensive understanding of the neurological differences.

Counselling neurodiversity

Couples therapy that fails to comprehensively address neurodiversity not only "perpetuates their unhappiness, [but] it can even bring about the demise of the relationship" (Mendes, 2015, p. 146).

The autistic partner may come to you with a formal diagnosis, a self-diagnosis or may simply exhibit some traits that they are willing to consider as neurodiverse. To the counsellor, these couples often share a similar presentation. The neurotypical partner will often appear traumatised, distressed and emotional and their story is likely to have been dismissed many times by previous clinicians. The neurotypical partner often finds it hard to convince family and friends that they feel isolated and alone in a seemingly close relationship.

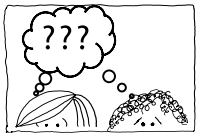
The presentation of the autistic partner may explain this, as they are likely to be calm and logical, and 'litigate' the alternate perspective effectively. They are likely to be confused by the partner's trauma and lacking the emotional or empathic responses expected (Mendes, 2015).

An alternate presentation of the couple may be that the autistic partner appears traumatised or volatile, or may shut down while the neurotypical partner acts as a nurturing personal assistant to help their neurodiverse partner get through the session. In this instance is it likely that the counselling session itself, rather the relationship, is the source of the stress.

The counsellor can be left feeling that the couple is speaking two different languages and an interpreter skilled in both vernaculars is required. For example, the neurotypical partner's emotional distress, stemming from a communication breakdown, may be interpreted by the autistic partner as anger. Indeed, difference (diversity) is the predominant feature of the relationship in which one partner needs solitude to recharge while the other needs social engagement; one loves the stimulation of an overseas holiday while the other dreads the associated change in routine, the uncertainty and the social complexity of the foreign land, along with the disturbingly new tastes and smells of the environment and cuisine. Similarly, one partner will relish large family gatherings while the other struggles with the socio-politics, the changes to routine and the time away from their beloved interests – in things such as Manga, trainspotting, open-source programming, Renaissance guitar, orchids, ornithology or any other 'ology'.

For the interpreting role to be effective, the neurological profile of the autistic person needs to be examined. For example, what may seem to be a lack of empathy can be an overload of emotional empathy and a deficit of cognitive empathy; what seems like anger can in actuality be heightened fear. In both of these examples, alexithymia is likely to be at play. It is not helpful to normalise the behaviours or fix the neurodiverse relationship. The couple needs help to reimagine what their relationship could look like rather than what it should look like.

In closing, I encourage the couples counsellor to be curious and motivated to learn how to engage with the neurodiverse couple. I hope this article has allowed the reader to reflect back on a particular couple and consider whether two different neural perspectives were at play. My husband and I, as a neurodiverse couple, empathise with this difficulty; we truly want such vulnerable couples (and families) to be nurtured and neural differences reconciled. ■



Thinking differently

About the author

Jill Kearns runs a private business in South Brisbane called Autism Coaching (autismcoaching.com.au). She specialises in coaching couples who are neurodiverse, where one of the partners identifies as having Aspergers/autism. Her career in autism began in 1996 when she worked as an advisory visiting teacher in Autism in the UK, and then had that same job in Queensland for 10 years. Kearns completed a Masters of Guidance and Counselling, writing her thesis on working with parents of autistic children. Jill is MACA (level 4) and a certified neurodiverse couples coach with Asperger/Autism Network (USA).

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THE IMPORTANT QUESTIONS

Four preliminary questions for relationship counselling

By Bill Jackson

As a 'generalist' counsellor I manage a range of clients, from children to seniors, individuals to families, and, of course, couples and couples counselling – which is a major focus in itself.

Working on the assumption that some couples will attend therapy once and not re-engage, I have developed an approach that I can leave with the couple, or, should they wish to continue counselling, that can form a template and direction for future sessions. To this end, I have developed a set of questions for relationship counselling.

While I may consider this session the first of several sessions, it may actually turn out to be the only counselling session in which this couple engage. With this in mind, I cannot afford the luxury of leaving 'until next time' things that perhaps I need to say today – there may not be a next time.

Setting the stage

I never launch into these questions too early in the process. I spend time listening to the couple's story, and this may take some time. This also has several advantages, particularly for me as the counsellor.

For example, while listening to the story, I am actually hearing (at least) two stories – one story narrated from two distinct perspectives. This provides helpful background to how the couple arrived at this point.

While this is unfolding I am also observing how this couple talk to, or at, each other; who speaks more, their communication methods, their language toward each other, their nonverbal communication. I find this most informative.

This will take as long as it needs; with cooperation it may take five minutes, with lack of cooperation it will take considerably longer. When I feel the time is right I will summarise. Depending on time, I may offer a brief summation or I may make some honest observations. I find couples generally don't baulk at this. The worst outcome is that they will find me unacceptable and never come back. However, if this is the case, they will discuss how much they disliked me and decide together that they want nothing further to do with me and, if they look carefully, they will see that they are communicating. I can live with that.

After the summary I inform the couple that I want to leave them with four questions that I would like them to answer.

It invites [the couple's] responsibility to take part in the process and not opt for a 'quick-fix' solution to their marriage issues.

The questions

1. Do I want to be in a relationship?

This question starts off fairly easily and does not return to the present relationship at all. While simple, it actually goes deeper into the couple's desire by asking, "Do I wish to live my life with someone else or on my own?" This question also has the capacity to raise some significant relationship issues. For example, honest reflection encourages each client to ask whether their respective and collective issues are about each other or something more basic – namely, "Would I rather be on my own?"

As such, are the problems they are having problems between them, or do they have to do more with an individual who would rather not be in a relationship? I believe this question is foundational and must be asked and answered prior to moving on.

If either party responds affirmatively to wanting to be alone, then a new tangent appears that must be addressed, but which is outside of the scope of this paper. If both clients answer positively to wanting to be in a relationship, then and only then can they progress on to the next question.

2. Do I want to be in a relationship with you?

This, to me, is the natural progression from the first question. Having established that each person wants to live life accompanied by a significant other, the next question inevitably has to be, "Is it with you? Do I want to live together as a couple with this person who is next to me now?"

Responding with a 'yes' to the first question in no way assures an affirmative answer to the second. It is simply an acknowledgement of a desire to live with another person (that is, be in relationship). I am now encouraging each person to determine whether the 'other' is the other person in the room. This needs to be asked.

Notice that both questions speak of 'I'. At this stage there is no mention, or even an assumption, of 'we'. 'We' language at this stage is premature. Of course, whether 'we' is relevant here is exactly what we are trying to determine.

If the answer here for both persons is 'yes', then we are now in a position to not only change our language from 'I' to 'we', but where the two clients can begin to ask the next questions together as a couple.

3. If so, how do we want our relationship to look?

Here I encourage the couple to imagine how they want their relationship to be and to be as specific as possible. I am heavily influenced by Insoo Kim Berg's "miracle question" scenario. In this work Berg and Dolan explain how, throughout the sleeping hours, a miracle happens and the problem that prompted you to talk to a cousellor is solved. So, when you wake up tomorrow morning, what might be the small change that will make you say to yourself, "Wow, something must have happened – the problem is gone."? (Berg & Dolan, 2001, p. 7)

We then try to flesh out what this 'post-problem' relationship looks like. Where will the couple be living, what will they each be doing, what does this life together look like? Then (and in my opinion, only then) are they ready to move on to question four.

4. What do we need to do to make this a reality?

This invites the couple to the stage of articulating and doing the actual work to achieve what they have dreamed. This is where it all comes together. It also seems unrealistic to broach this question prior to the first three questions. Too often counselling focuses on repairing before spending time on defining. How can a couple work on a relationship if they have not clearly defined and articulated what they want this relationship to be? I feel they cannot, and that if they do, they do so at their own peril.

Concluding thoughts

To an extent, this approach resonates with Zemke's four stages of appreciative enquiry – with some obvious differences (Zemke, 1999). Zemke moves from 'discovery', through to 'dreaming', 'design' and eventually 'delivery' (Zemke, 1999). Such a process invites couples to start at the very beginning and move forward from there. It invites couples to take responsibility for the process and not opt for a 'quick-fix' solution to their marriage issues. It also provides me, as their counsellor, with a better understanding of where they want to go. It provides me with a platform (Wile, 1993) and it also builds on a strength-based approach in that it invites couples to identify what works in their relationship and how it can be more fulfilling in the coming days. ■

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The parentified child

The role-reversal of child and parent can lead to the damaging occurrence of a 'parentified' child.

By Deborah Briggs

Parentification occurs when a parent is underfunctioning (at home and, likely, at work) and their child takes on a parental role. It is a form of family dysfunction and means that the child, due to the parent being unwilling or unable to carry out usual family and household duties, is forced to take on adult responsibilities for which they are ill equipped.

Parentification primarily arises due to child neglect, stemming from a parent with:

- a substance abuse problem;
- a serious mental health issue; or
- a family violence situation.

Children in this scenario – predominantly the eldest child, or older children – can take on a parent's role in one of two ways: physically or emotionally.

Physical

The physical or instrumental type involves the child taking over parental tasks in the household (such as cooking, cleaning, shopping, paying bills, and managing and looking after younger siblings).

This is distinctly different from teaching a child to do usual household chores and look after their younger siblings on occasion. The parent is forcing (through coercion, manipulation, or by default as they are unable to manage) the child into becoming a caretaker, dumping responsibilities on them, when the child is not developmentally ready for such tasks.

About the author

Deborah Briggs is a counsellor and educator in Queensland and has been a clinician for nearly two decades. She has worked with clients around issues of trauma, grief and loss, addictive behaviours, domestic and family violence, childhood trauma and suicide, and engages in couples and family counselling. She is integrative in her approach and enjoys working with clients to assist in improving their lives and relationships.
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Emotional

Emotional parentification, on the other hand, involves the child being forced to meet the parent's emotional needs, and it is the most destructive form of parentification. It is where the child must tend to the emotional needs of a parent (often one experiencing depression), and it sets the child up for a series of dysfunctions that can incapacitate them as they grow older. When emotionally parentified, a child is more likely to become a 'people pleaser' with low self-esteem, who will regularly sacrifice their own needs for those of others.

Both types of parentification leave the child with less opportunity to behave as a child and engage in typical childhood behaviours, and to develop in a mentally and emotionally healthy way. The child feels like a surrogate parent to their sibling/s and is robbed of any sense of a proper childhood, and can be seriously damaged as a result.

Children usually respond in one

of two ways to such pressure: with a 'compliant' response or a 'siege' response.

Compliant response

A compliant response is when the child's behaviour pattern is centred on caring emotionally for others – becoming hyper-vigilant about 'people-pleasing', being self-deprecating and rushing to keep the peace and soothe hurt feelings. These children seldom have their own needs met.

Siege response

The siege response is a way of rebelling against what is occurring, and can often continue into adulthood. In an adult it manifests as withdrawal and seeming insensitivity to others, avoiding being involved by others' demands, working hard at preventing others from manipulating them, and feeling that they do not meet the expectations of others.

Case study

One male client I worked with had been parentified, mostly physically, as a child when his father was institutionalised with a serious mental health issue and so was absent for a considerable amount of time. It left his mother at home, essentially as a single parent, on a large farm with seven children, of which the client was the eldest. Their mother did not function well with all the chores coupled with her own emotional fluctuations and incapacity to cope, and the client and his immediate younger brother became parentified as a result.

As an adult who is now in his middle years, the client's siege response became quickly evident. He is married with three children, and underfunctions in his own family in many ways. He does not contribute much to the household and he works two jobs, leaving his wife to carry out the majority of the physical chores, as well as nearly all of the parental responsibilities. As one of his jobs is part-time night-shift work, which he does by choice and not necessity, he comes home at odd hours and needs to sleep a lot during the day. His wife, who has her own childhood issues with an absent father following her parent's divorce, and who also works, has become overly responsible as a result.

Encouraging the client to see how he shies away from parenting and engaging with his family for prolonged periods, and that he withdraws and shuts out those closest to him, was no small thing. As every therapist knows, a client's willingness to be aware of behaviours and to work on changing to improve a situation is vital.

Additionally, the client's wife needed to face how she was overfunctioning in compensation for her husband's behaviour, and to work through her feelings of anger, resentment and abandonment. She could see that he avoided dealing with issues and left most things to her.

In therapy, we worked on ways she could approach him to maturely discuss her challenges and needs in an open and direct way. The aim was to negotiate to get him to 'share' more of the load (where possible) rather than by shaming or manipulating him. She said that prior to this it had felt like she had a fourth child.

As a result of parentification, children will likely grow up to either overfunction or underfunction in their lives, and this maladaptive behaviour is adopted under difficult circumstances. Unfortunately, the prevalence of parentification is increasing and there is a lack of literature on the topic. There is a plethora of information regarding childhood abuse and trauma, often from a psychodynamic, trauma-informed and cognitive behaviour therapy perspective, but there is little information on parentification, the trajectory of parentified children, and working with them therapeutically as adults. Working with childhood trauma and parentification is challenging for a therapist, and gaining insight about this is merely the first step. ■

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Illustration: 123rf

I wish school was every day

Therapeutic supports in primary school settings can benefit children who have had adverse childhood experiences.

By Justine Wake, Tania Balil and John Rohrig

Contemporary understanding of the effects of complex trauma on children and their ability to learn has been significant in recent years, with what seems to be a paradigm shift in Western education systems. Research relating to trauma from the fields of psychiatry, psychology and neurobiology support us to understand more comprehensively, how adverse childhood experiences (ACEs) – for example, physical, sexual and/or emotional abuse, serious neglect, family violence and so on – can have a serious impact on students' school behaviours, attendance and engagement and, as a consequence, on their educational and life outcomes (https://traumaawareschooling.com.au).

Alongside more traditional talking therapies, creative arts therapies and play therapy are often ideal modalities for working with children, young people and adults who have experienced childhood adversity and may be struggling with the impacts of complex trauma. This brief article discusses how a team of therapists working in a south-eastern Queensland primary school have employed these modalities.

Supporting literature

This school-based program has been developed over the past six years and is informed by the research and journal articles contained in the following comprehensive literature reviews. The first has been undertaken by Psychotherapy and Counselling Federation Australia (PACFA) and is titled *The effectiveness of expressive arts therapies*. The second, commissioned by NSW family and community services and Berry Street therapeutic services, is titled *Taking time: a literature review* and is background for a trauma-informed framework for supporting people with intellectual disability. (In this review, the term 'disability' is defined from within the framework of a social model that challenges more traditional definitions of disability.) These can be accessed via the following links:

- http://pacfa.org.au/wp-content/uploads/2012/10/expressiveartsreviewnov20131.pdf
- www.adhc.nsw.gov.au/data/assets/file/0005/340448/Taking_Time_Lit_Review.pdf

Dr Andrea Gilroy's book *Art therapy, research and evidence-based practice* (2006) also provides a very comprehensive review of the literature surrounding art therapy.

In addition to these resources, there is a small but growing body of literature relating specifically to creative arts therapy programs in schools. Unfortunately, many of the resources available are not specific to Australia. The overview of programs in US schools, 'Gain important education outcomes: implement a successful art therapy program within K-12 schools', distributed by the American Art

Through communication with families, stakeholder staff and external agencies, there is the opportunity to formulate a unified approach to supporting the best interests of the student.

Therapy Association, reviews and provides resources and links to a number of established programs (see references).

The article 'Empowering students through creativity: art therapy in Miami-Dade County Public Schools' (Isis et al., 2010) includes the following observation:

"Many families value art therapy as a tool for self-expression and reinforcement of academic performance. Parents, teachers and administrators are the main supporters for the art therapy program and have demanded the initiation and continuation of clinical art therapy services in the schools" (p. 61).

David L. Hussey (2003), in his article 'Music therapy with emotionally disturbed children', describes one of the primary reasons that creative arts therapies are effective interventions for children and young people in need of wellbeing and positive mental health programs. He says:

"An advantage of music therapy is that it is an inherently non-threatening and inviting medium. It offers a child a safe haven from which to explore feelings, behaviours and issues ranging from self-esteem to severe emotional dysregulation. Music therapy techniques can be designed to address more complex issues such as grief, abandonment or deeply conflicted emotions. As a medium, music therapy has enormous range and scope in targeting multiple clinical needs across the gamut of childhood developmental stages" (p. 37).

One of the further benefits of working within schools as a therapist is to offer an 'alongside' role to teaching – guidance and behaviour support staff who can provide support for students with complex needs, as well as providing psychoeducation about the importance of a trauma-informed approach to caring for these students. It is apparent across all services working with children, young people and families that contemporary social complexity is placing increased demand on existing systems, in particular the education system, and this will require a thoughtful and complex response.

"Research shows that starting earlier, at younger ages, with trauma-informed practices in schools, with community-wide supports, leads to better results … Adding new programs focused on students may not be enough to break the intergenerational cycle of ACEs. Breakthrough impacts … can only come from collective impacts of changes in adult caregivers, including teachers and parents, and in the communities where students live" (Longhi & Brown, 2016).

School-based creative arts therapies (CAT) program

In a Queensland state primary school, a creative arts therapy team works together with an executive team, the heads of special education, guidance officers and behaviour support staff to prioritise students in relation to their needs and to determine which interventions may be most suitable. The team is made up of qualified and experienced therapists with backgrounds in music therapy, art therapy and counselling. Sometimes students are seen for a period of time on their own with one therapist and may later be seen in a group. Some students may be initially seen for one reason and then re-referred later if their circumstances change or if there has been an acute incident in their environment (such as a placement breakdown, return of a parent from jail, or the loss of a family member).

Two primary reasons for referral to the program are:

1. History of complex trauma through war, displacement, time spent in a refugee camp, or an asylum-seeking journey
   a. Presentation: defiance, aggression, disruptive in class/playground, slow to learn, withdrawal, peer difficulties, selective mutism, running away, and so on
   b. Underlying emotional experiences driving the behaviours: fear, anger, grief, or an ongoing sense of unpredictability in their lives (in relation to housing, settlement, visas, overseas family's safety, and uncertainty about their own and their family's predicament).
2. History of complex trauma, often intergenerational, such as family violence, foster care experiences, disability, drug and alcohol issues, a parent living with a mental illness, a parent or parents overseas or in jail, or multiple exclusions from previous schools
   a. Presentation: disengaging from schooling, developmental issues, lack of emotional regulation,

peer problems, sexualised behaviours, self-harm, refusal to work, and so on

b. Underlying causes driving the behaviours: survival, lack of trust in the adult world, disrupted attachment, feeling unsafe, unpredictable environments, or a family history of mental illness.

Aim of the creative arts therapies program

The aim of the CAT program is to support students who are identified as needing extra support in the school day. The main focus of the program is to:

- provide *early intervention* to assist newly arrived students to settle into the school system when they are seen not to cope well with any aspect of the schooling experience (such as academic work, peer relationships, intrapersonal presentation, and known history of trauma);
- *maintain and develop social skills* such as listening, sharing, taking turns, speaking appropriately and respecting other's choices;
- provide *behaviour management* in areas such as self-regulation, group dynamics, relaxation, down time;
- allow *self-expression* through play, creative representations, singing or playing instruments;
- *build and maintain self-confidence* in making choices, representing emotional states in creative ways, performance in front of other students and during play; and
- provide *emotional support* to students who have experienced complex trauma (for example, experiencing multiple unresolved traumas before arriving in Australia; past or ongoing exposure to domestic violence; dealing with the stress of living in countries of war, refugee camps and/or detention centres; personal or collective losses; intergenerational disadvantage; or being in care).

Discussion

A school-based therapeutic support program of any kind can be fully integrated into a team approach to student wellbeing. Through communication with families, stakeholder staff and external agencies, there is the opportunity to formulate a unified approach to supporting the best interests of the student. This 'whole-school' approach aims to communicate to the child a sense of support, safety, constancy and belonging that is so vital in the healing of trauma and adverse experiences.

Another major benefit of having the school-based CAT program is that students can be referred and re-referred over the course of up to seven years, providing both a long-term and early intervention model, which can be difficult to offer in traditional health and private practice services.

Conclusions

This school-based program has become embedded in the culture of the school, and some teaching staff who were initially hesitant to refer students have, over time, come to understand the student support benefits the CAT team offers. These staff noticed that many students were returning to the classroom more able to learn. For the therapy team, this is one of the strongest testaments that the program is being useful not only for the students, but also for the teachers and the school community as a whole.

This program is one part of a concerted whole-school effort to support students living with the impact of high ACEs. It has contributed to ongoing adaptations in the school towards a trauma-sensitive approach that is ultimately of benefit to all children within the school environment. ■

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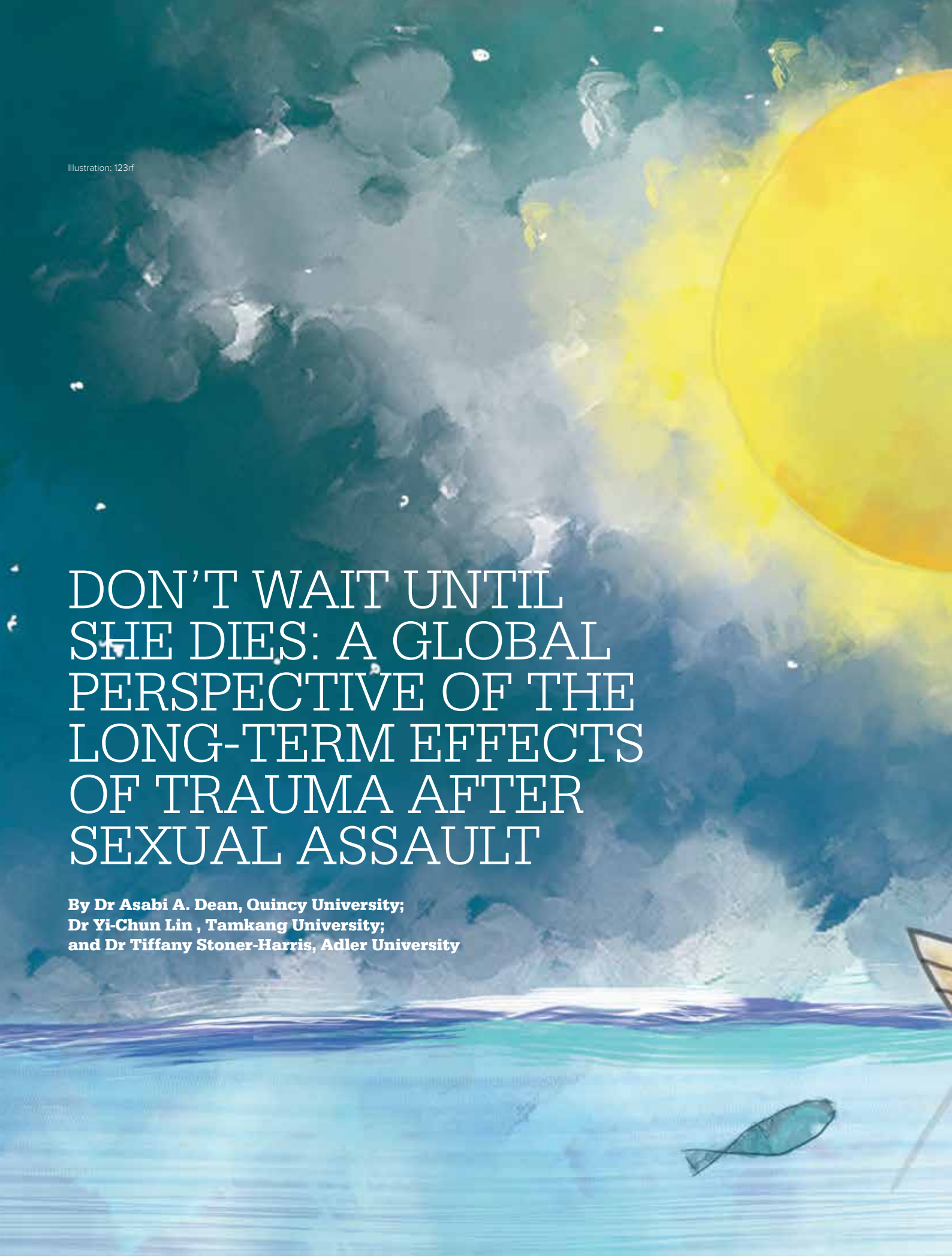

Illustration: 123rf

DON'T WAIT UNTIL SHE DIES: A GLOBAL PERSPECTIVE OF THE LONG-TERM EFFECTS OF TRAUMA AFTER SEXUAL ASSAULT

**By Dr Asabi A. Dean, Quincy University;
Dr Yi-Chun Lin , Tamkang University;
and Dr Tiffany Stoner-Harris, Adler University**

Introduction

Psychological and emotional trauma is pervasive, affecting innumerable people around the globe and every part of a victim's life. Reports show that on every continent and in every country there are residents who have experienced or been exposed to trauma.

Trauma is defined by the National Institute of Mental Health, in part, as the mind's response to serious injury (NIMH, 2017). Psychological trauma includes experiences of sexual violation, childhood abuse or neglect, and even indirect experiences such as watching or hearing about traumatic events. These categories of trauma are labelled as both direct and indirect trauma, or Type I or Type II trauma (Herman, 1997; Terr, 1991). Physical trauma is defined, in part, as the body's response to serious injury (NIMH, 2017); however, one can suffer psychological trauma as a post-stressor resulting from physical trauma.

It is important to know what trauma is, to know how victims can come to suffer from its symptoms and how trauma manifests in individuals across their lifespan. Understanding trauma across lifespan and across cultures will be pertinent in the treatment of some of the worst outcomes of trauma, including symptoms of numbing, dissociation and, ultimately, suicide (Herman, 1997).

Background and statistics

Statistics show that psychological trauma is a concern for both children and adults across the globe (Benjet et al., 2016). According to the World Mental Health (WMH) surveys, some of the highest trauma rates were reported from South Africa, while the lowest trauma rates were reported by Spain and Italy (Atwoli et al., 2015; Benjet et al., 2016). Survey results align with incidents of political and cultural uprising and unrest in these respective places around the globe. Additionally, countries rated as majority low socio-economic status (SES) were shown to have overall higher rates of trauma versus countries rated as majority higher SES. These numbers give us a startling look at the commonality of the experience of trauma around the world. The United States rated amongst the highest for prevalence of exposure to any traumatic event with 82.7 per cent of the population reporting experience, while Australia was not far behind with 76.2 per cent of its population reporting traumatic events exposure. China rated far behind both the US and Australia with one of the lowest rates (52.5 per cent) of exposure to traumatic events for its population (Benjet et al., 2016). However, survey question make-up and cultural openness to sharing may affect the rates of self-reported traumatic exposure.

Although it once was the case that being exposed to a traumatic event was an abnormal occurrence, this is no longer the reality. For example, individuals residing in conflict-ridden neighbourhoods or countries are more at risk of repeated exposure to traumatic events. Regardless of location, SES or proximity to others who have been

victimised, it is still more likely that one will be exposed either directly or indirectly to a traumatic event at some point in their lifetime. Given that studies consistently show that exposure to traumatic events raise post-traumatic stress disorder (PTSD) rates, regardless of region, it is interesting to note that only in South Africa do the numbers of those affected not differ according to SES. Generally, high-income areas have less-reported traumatic event exposure, while in South Africa all areas have a large portion of the population reporting traumatic event exposure. Finally, consistent exposure to trauma-causing events has been linked to eventual physical issues in the body as well. Given that exposure to traumatic events begets vulnerability to future psychological trauma, it behooves the family of exposed children to seek trauma-based treatment for the entire system.

Childhood abuse/neglect and sexual abuse

Childhood sexual abuse (CSA) occurs to females more often than males; however, we must acknowledge that CSA does happen to males – at least half as much as what is reported to happen to female children (Gipple et al., 2006). Still, given the evidence base of information on female victims, this paper focuses on the deleterious effects of psychological trauma on females and how those effects can continue into adulthood. The focus on trauma symptomology is significant given the symptoms that run the gamut, including dissociative symptoms, sexual promiscuity, deviance, relationship issues, maladaptive coping strategies and, quite possibly, suicide. As we look at proposing strategies for interrupting this vicious cycle, we must look to the root of psychological trauma. Gipple et al. (2006) posit that abuse does not exist in a vacuum. Therefore, child sexual abuse and its effects can very well be interrupted and/or prevented by identifying and providing appropriate services in situations of reported or suspected child abuse, child neglect or even in situations of child endangerment (Westby, 2007).

Definitions

The US Department of Health and Human Services (DHHS) defines child abuse and neglect as "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation" or that "which presents an imminent risk of serious harm" (Childwelfare.gov). Further, a child is defined as anyone under the age of 18 who is not an emancipated minor.

Emotional neglect includes a lack of either "positive emotional support" or of a safe, reliable and "emotionally available" adult (Gipple et al., 2006, p. 34).

The Rape, Abuse and Incest National Network (RAINN) defines child sexual abuse as "a form of child abuse that includes sexual activity with a minor" (RAINN.org). Additionally, RAINN stresses that contact with a child is not needed for abuse to occur and that child sexual abuse includes "any sexual conduct that is harmful to a child's mental, emotional or physical welfare" (RAINN.org).

Sexual violation of adults is considered sexual assault and RAINN defines sexual assault as "sexual contact or behaviour that occurs without explicit consent of the victim". The Center for Disease Control (CDC) posits that sexual violence includes these elements and considers sexual violence a "serious public health problem in the United States" (RAINN.org; cdc.gov).

It is important that these terms be defined for continuity and understanding. As previously stated, NIMH (2017) defines trauma, in part, as the "mind's response to serious injury" and physical trauma, in part, as "the body's response to serious injury". Additionally, the American Psychological Association (2013) defines trauma as "an emotional response to a terrible event like an accident, rape or natural disaster" (apa.org). We speak about exposure to trauma-causing events and therefore it is necessary to define trauma-causing events, which are "direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; witnessing an event that involves death, injury,

Given that exposure to traumatic events begets vulnerability to future psychological trauma, it behooves the family of exposed children to seek trauma-based treatment for the entire system.

or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or close associate" (DSM IV-TR, p. 463; CACREP, 2009, p. 62).

Psychological trauma is no longer an abnormal experience across a person's lifespan (Herman, 1997; Westby, 2007). However, psychological trauma affects each of us differently, depending on our proximity to the event or one's level of resilience prior to the traumatic event. Regardless, psychological trauma has both short-term and long-term effects and consequences that can culminate in a diagnosis or symptoms of complex post-traumatic stress disorder (C-PTSD) (Herman, 1997).

PTSD is found in the DSM-5 in the "trauma and stressor-related disorders" section (APA, 2013, p. 265). PTSD is described as "the development of characteristic symptoms following exposure to one or more traumatic events" (APA, 2013, p. 274). In her book, *Trauma and recovery*, Herman (1997) examines the history, etiology, prevalence and healing of trauma; she proposes that the current PTSD diagnosis be extended and/or appended by adding C-PTSD. We posit that the current trauma diagnosis of PTSD does not completely account for the complex symptoms persisting after experiencing psychological trauma (Herman, 1997).

The purpose of this paper is to highlight that, while sexual violation trauma occurs in significant numbers, overwhelmingly affects females and can result in severe post-traumatic symptoms, it does not have to be a death sentence for its survivors. Ultimately, there is hope and healing after suffering from any trauma, including trauma that involves sexual violation.

Case information

#MeToo movement global trend

The #MeToo movement, initially started by Tarana Burke in 2006 to help women and girls on colour to overcome sexual violence , gained momentum as a response to allegations appearing in the *New York Times* against Harvey Weinstein, an influential Hollywood film producer. More than 80 women came forward, spearheaded by Rose McGowan, to accuse him of sexual abuse between 2005

> Emotional neglect includes a lack of either "positive emotional support" or of a safe, reliable and "emotionally available" adult

and 17 (Zacharek, Dockterman & Edwards, 2017). While this sparked global awareness and a social media campaign highlighting the widespread prevalence of sexual assault and harassment against women in the entertainment industry, the need to better understand the role sexual assault plays in long-term trauma and suicide is important for the counselling practitioner.

In 2009, South Korean actor Jang Ja-yeon died by suicide. There was a brief public outcry when it was revealed that, from 2005 to 2009, she had suffered sexual abuse by more than 30 men, including executives of her agency, movie directors and newspaper representatives (Kim, 2014). According to her suicide letter, her ongoing sexual assault was used as a tool against her, as well as an incentive to other abusers. Prosecutors found in her diary details of forced sexual demands, especially during periods of her new releases (Carey, 2018).

According to McCurry (2009), seven Korean celebrities died by suicide between September 2008 and March 2009; this high rate of suicide was shown to positively correlate to South Korea's rising youth suicide rate. In 2009, its suicide rate was 31.0 per 100,000 people, much higher than the average rates (11.9 per 100,000 people) of other Organization for Economic Co-operation and Development (OECD) countries (Yoon, 2015). Following Jang Ja-yeon's death, 650,000 netizens created an online petition to ask President Lee Myung-bak to take serious action and investigate the circumstances of her death (McCurry, 2009). In the end, not enough evidence could be produced and no one was charged – and eventually the media lost interest and the public was led to believe that depression was the leading factor in her death.

Similarly, in Taiwan in 2017, writer Lin Yi-han, 26, died from suicide by hanging. As with Jang Ja-yeon, it was deemed a result of long-term depression, but more accurately it was a long-term effect after experiencing sexual assault trauma by her cram school teacher, Chen Kuo-hsing, 10 years earlier. Lin Yi-han wrote about her traumatic experience in her fiction novel *Fang Ssu-chi's first love paradise* (Lin, 2017). Soon after her death, her parents admitted that this story was actually based on their daughter's true experience, and they realised that the more significant impact of their daughter's long-term mental distress may have been the pain caused by the sexual assault incidents (Chen, Liu & Cheng, 2017). Lin had attempted suicide many times from age 16, dropped out of college, and had been put into the hospital due to major depressive disorder (MDD). The multiple traumatic experiences affected her mental health deeply; she revealed her symptoms in her book and in interviews, saying she often suffered from mental episodes that interrupted her school attendance and, for a long time, she identified herself as inferior to others. She even labelled her personal identity as mentally ill and felt that this was the life she was resigned to live (Chen, Liu & Cheng, 2017).

In Japan, the #MeToo movement began in 2015 after Shiori, a female journalist, spoke out accusing another high-profile journalist of inappropriate behaviour. The journalist was linked to the prime minister of Japan, thus creating controversy in the conservative society. Her courage to speak out and seek justice attracted more criticism than support from the majority of the public (Kyodo News, 2019). Some people even sent her hate mail accusing her of being "careless" and bringing shame to her family, making her situation even worse after she revealed her traumatic experience (Larson, 2018).

In Australia, actress Yael Stone alleged that Geoffrey Rush harassed her in Sydney during a 2010-11 theatre production (Mao, 2018). Australian defamation laws may silence victims of sexual violence and misconduct.

There are a number of connected, overarching, consistent patterns found in these global examples:

- sexual assault being predominantly found in patriarchal societies;
- the use of shame and threats of unworthiness in cases of sexual violation;
- victims feeling that they have no one they can trust (and fearing their complaints will fall on deaf ears);
- the power gaps between victims and predators; and
- many of the victims reporting that they suffer from PTSD's four major symptom clusters – intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity (American Psychiatric Association, 2013).

For the practitioner, a number of approaches are useful in

Sexual violation trauma may remain undiscovered for a long time, leading to misdiagnosis and repeated trauma.

aiding victims of sexual abuse. Yet, sexual violation trauma may remain undiscovered for a long time, leading to misdiagnosis and repeated trauma. Few people outside the mental health industry use the term 'psychological trauma' to describe their abuse experiences; more commonly, 'depression' is used instead. This misappropriation is often how trauma sufferers' families, friends and those in society treat them and, ultimately, miss a history or background of psychological trauma.

Multicultural responses and influences

The culture of silence and stigma around sexual violence and the ensuing isolation is a reality for child and adult survivors, demonstrated in their lack of ability to disclose and eventually begin to process and heal from the sexual violation (Kennedy & Prock, 2018; Tillman et al., 2010). A lack of empathy and victim blaming can be one cause of the silence that survivors experience, in addition to legal practices that uphold the culture of silence (Harber, Williams & Podolski, 2015; Prasad, 2018). According to Shen (2011) help-seeking behaviours for survivors may be more informal than formal. The ineffective responses from the ecosystem, including cultural values, beliefs, obligations and expectations, can leave the victim silent, blaming themselves and untrusting of others (Harber, Williams & Podolski, 2015; Cook, 2012; Shen, 2011). Gender expectations based on family values and societal norms may also have an impact on the survivor's disclosure and/or response to self-care after an assault. The World Health Organization (WHO, 2016) recognised women and girls as the populations most often impacted by violence within relationships. It's important that the response from counsellors and professionals includes recognising the potential for cultural encapsulation around the client's cultural identity (Cook, 2012; Ratts et al., 2016).

The American Counseling Association (ACA) Code of Ethics (2014) guides counsellors to avoid the misapplication of traditional theories and techniques that fail to encompass clients' culture and cultural influences. The Association for Multicultural Counseling and Development (AMCD) recently updated the original Multicultural Counseling Competencies (MCC) by Sue, Arrendondo and McDavis (1992) to be inclusive of both a multicultural and social justice focus (Ratts et al., 2016). This inclusion of social justice expands the emphasis on special populations and the need for counselling professionals to increase their competence and scope of practice to meet both the diverse and intersectional needs of clients using a global lens (Hong & Marine, 2018; Marich, 2014).

Social justice practices

Social justice practices include recognising the systemic barriers within counselling delivery systems and taking action to assist clients with overcoming systemic barriers (Hong & Marine, 2018). When responding to sexual assault survivors, systemic barriers can encompass many intersections, including race, gender, gender-based violence, language barriers and miscommunication (Nassar-McMillan, 2014). As systems respond ineffectively by overlooking the cultural and social justice needs of sexual assault survivors, a narrative of mistrust can be created and enforced through unsuccessful practices, creating a misalignment with the ACA Code of Ethics (2014).

Researchers of trauma and abuse are beginning to focus on a culturally competent perspective with a social justice influence. An example from Westby (2007) reminds us, "No practice that is harmful to a child should be condoned in the name of culture or tradition" (p. 141). This perspective prompts recognition of the intersection of victimisation and culture, and reinforces the needs for AMCD Multicultural and Social Justice Counseling Competencies (2015). Being able to recognise the global needs of survivors of sexual assault and the realities that reach beyond national borders is an important aspect of the global social justice lens (Nassar-McMillan, 2014).

Multicultural and social justice

Ratts et al. (2016) provide guidelines that include a focus on four developmental and multi-layered domains, supporting a focus on the interactions between the counsellor and the client which, when applied, can result in increased multicultural and social justice competence. These four developmental domains and layers include a focus on counsellor self-awareness, client worldview, counselling relationships,

and counselling and advocacy interventions – in relation to privileged counsellors, marginalised clients, marginalised counsellors and privileged clients. It is important to engage in an examination of client issues, recommendations and interventions within the culturally contextual framework of the client (Ratts et al., 2016). Hong and Marine (2018) also suggest responding to childhood sexual abuse and sexual assault using a social justice model, as a way of recognising oppression, gender biases and intersections. This is done in effort to utilise awareness, knowledge and skills to counter the adverse and oppressive systems.

Both the ACA (2014) ethical codes and the Australian Counselling Association (ACA) Code of Ethics and Practice (2015) recognise the relevancy of responding to clients in a competent and experienced manner. ACA (2014) directs a focus on autonomy, non-maleficence, beneficence, justice and fidelity as it applies to the special populations counsellors work with, as a way to ensure all efforts are being made to meet the needs of the client, and to avoid any type of harm. According to the ACA (2015) Section 4.3 Anti-Discriminatory Practice, counselling should encompass, as key factors in responding to clients:
(a) client respect;
(b) client autonomy; and
(c) counsellor awareness.

Counsellors need to recognise the significance of the client's values and beliefs and to identify cultural differences. This will allow them to incorporate culturally appropriate intervention and responses into their practice, while recognising the potential for their own personal prejudices, stereotyping attitudes, and behaviours to harm clients.

Trauma competence

If clinicians are aware of trauma-informed practices and best practice in responding to sexual abuse and sexual assault, then this will result in increased awareness of traumatic symptoms and understanding of the impact of traumatic stress on children, youth and adults. These competencies assist the clinician with recognising and responding effectively to trauma, while minimising any secondary trauma. In addition, using a multicultural and social justice model to view the long-term impact of sexual assault can strengthen the competencies and, in essence, enhance counselling and other services provided to clients (Nassar-McMillan, 2014; Ratts et al., 2016).

Utilising resources for continued professional development to increase trauma competency, such as the Association of Traumatic Stress Specialists (ATSS), The Green Cross Academy of Traumatology Certificate, or Traumatology, and the International Society for Traumatic Stress Studies (ISTSS), can be beneficial. As we identify the benefits of using both a multicultural and social justice lens in responding to sexual abuse and sexual assault, we should also continue to examine the overall response to trauma in the public health literature in terms of social justice advocacy and a global perspective (Bowleg, 2012). Several entities, including WHO, National Sexual Violence Resource Center (NSVRC) and Substance Abuse and Mental Health Services Administration (SAMSHA), recognise sexual violence as a traumatic experience and a public health and human rights issue.

Responding to child clients

According to the National Child Traumatic Stress Network (2019), child abuse and sexual abuse are among the common trauma experiences of children. Children's responses to trauma may be immediate or delayed; they may include flashbacks, loss of trust, fear of reoccurrence, fear of loss, increased vulnerability, regressive behaviours, withdrawn behaviours (irritability, anger, depression, anxiety, guilt), and other antisocial behaviours (NCTSN, 2019). It is important that counsellors working with children and adolescents who have experienced sexual abuse are trained and competent in assessment and treatment planning that promote best practices in addressing both the clients' trauma and their cultural and social justice needs (Marich, 2014; Ratts et al., 2016)

Play therapy approaches can be one of the most effective evidenced-based practices (EBP) to utilise in response to childhood sexual abuse and/or sexual abuse with children and adolescents (Ray & McCullough, 2015; revised 2016). Penn and Post (2012) stress the relevance of including multicultural counselling in play therapy practices with children and adolescents. While play therapists are trained to work specifically with children and adolescents, it is imperative that their play-therapy training and supervision include a specific focus on multicultural and social justice competence (Ceballos, Parikh & Post, 2012).

Goal(s) for treating victims of sexual assault

I. Increasing self-efficacy

The essentials of trauma adaptation consist of two aspects: (1) the management of a traumatic experience right after the crisis, and (2) coping with environmental changes after trauma (Van der Kolk, McFarlane & Weisaeth, 1996; Benight et al., 2015).

According to Social Cognitive Theory (SCT), humans learn to regain a sense of self-control by using self-regulation skills to adopt changes in life. Benight and Bandura (2004) found that Coping Self-Efficacy (CSE) is the competency needed to regulate both the internal and external recovery process after traumatic stress is identified. CSE also plays an important role in an individual's mental health following the traumatic experience. To further test their theory of CSE, Benight and Bandura developed a CSE scale and collected data from more than 500 participants in three settings – hospitalised trauma patients, disaster survivors and college students who have reported traumatic event exposure. The factor analysis showed that nine items on the scale significantly correlated with trauma-coping self-efficacy, which means those are positive signs and goals that counsellors and therapists can work on with clients to promote positive coping skills.

The skills are:

1. dealing with emotions;
2. getting life back to normal;
3. not 'losing it' emotionally;
4. managing distressing dreams;
5. not being critical of themself;
6. being optimistic;
7. being supportive to other people;
8. controlling thoughts; and
9. getting help from others (Benight & Bandura, 2004).

Most important of all, clients need to be empowered to gain self-control, believe in themselves and foster a positive self-concept.

II. Narrative approach

Narrative therapy and journal writing has been used in grief and loss counselling and been proved effective by various studies (Doughty et al., 2011). It is highly appreciated in culturally diverse populations because it allows people to tell their stories based on their unique cultural roots, and develop their own reconstruction and solutions that fit their environment (White & Epston, 1990). The common therapeutic factors found to be most powerful are constructing and reconstructing experiences, rewriting the life script, and encouraging positive narratives to integrate trauma memories, which can help desensitise people to them (Adenauer et al., 2011; Cloitre et al., 2012). Using conversation cards and pictures and projective cards has been shown to aid counsellors in breaking the barriers of culture differences, and allow clients more creativity in developing reconstructed narratives that foster a life-changing process.

In Taiwan, Liang and Shu (2016) used visual cards as a projection skills and narrative approach for six students in junior high school, who had been through bereavement pain and highly stressful situations in life. After 12 weeks of group sessions, students reported a decrease in sadness and pain, both

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emotionally and physically. Liang and Shu suggested the benefit of using projective visual cards for storytelling is that it can help to trigger students' recall of negative experiences and memories, foster their resistance against negative thoughts and their retrospect of profound experience during the group sharing. Furthermore, this study showed some beneficial outcomes. The approach invited students to express themselves, stimulated discussion about their inner personal issues, helped them regain control and regulation, reframed their experience of loss and helped them make decisions about their lives. The card projection activity also provided insightful feedback.

In Israel, Ayalon (2007) developed therapeutic associative cards called 'COPE' to utilise the metaphor of trauma as a "whirlpool vortex" that is difficult to control. COPE teaches children and adolescents how traumatic experiences can turn them from "victim to victor" by narrative and cognitive strategies. This set of 88 cards with pictures for free association helps clients to explore deep feelings, narrate their experiences of trauma and to learn to identify their unique ways of coping with stress and trauma. Additionally, the cards help clients in dealing with challenging situations, especially in culturally sensitive and culturally diverse environments, ultimately inviting them to tell stories from their worldview, so counsellors may gain a deeper level of understanding.

Post-traumatic growth model and Trauma Treatment Foundational Phase-Work

The concept of post-traumatic growth (PTG) was introduced by Tedschi and Calhoun (1995); they developed a model and inventory to measure the psychological coping and shifting in relating to the resilience of people after PTSD (West & Berger, 2010). PTG therapy was found to improve outcomes in more than 60 per cent of patients who experienced PTSD, and also can be applied with cancer survivors (Cordova & Andrykowski, 2003). Taking this further, Dezelic, Ghanoum and Potter (2016) developed a six-phase model based on existentialism and logo therapy for counsellors and practitioners to encourage dynamic and organic growth in clients. The Trauma Treatment Foundational Phase-Work (TTFP) focuses on decreasing the sense of shame, guilt and brokenness, and the chaotic dysregulation and self-harmful behaviours that accompany trauma. The six phases of recovering can be briefly introduced as follows:

1) **Stabilising self –** several strategies such as mindfulness, yoga and expressive art skills (such as painting and dancing) can help a PTSD sufferer to relieve stress and set up a new boundary for safety within themself (Dezelic, Ghanoum & Potter, 2016).
2) **Traumatic revisiting –** counsellors can help clients to practice skills such as "bringing words to the body feelings" that re-connect the body and promotes a clear awareness of the mind, while helping clients to explore meanings of feelings and perceptions through narratives.
3) **Language and meaning –** to challenge negative beliefs, counsellors need to help clients re-examine the words and meanings that are self-defeating in order to help them reprocess, reconstruct and reword their language about the self to focus more on the present and the positive, and to make new meanings.
4) **Re-owning –** Crystal and Gutierrez (2013) used Branden's (1971) concept of "disowned selves" to bring clients "back to the self"; to see themselves as a whole person and regain the sense of control by visualising the trauma and removing it.
5) **Integration –** integrating asks the person to create a whole-person perspective by integrating the separate parts of the self and creating a safe place within themself.
6) **Reconnection –** the last phase, 'reconnection', means to return to a healthy interpersonal relationship, which requires a healthy boundary with people around, explore meaning and purpose in life by participating in meaningful activities and examining one's values and attitude.

Conclusion

In summary, psychological trauma may last from childhood into adulthood, and without understanding and awareness of how trauma may affect a person's physical and mental health, families and societies across the world may fail to support survivors. In addition, counsellors and practitioners need to take the initiative to promote social justice and advocate for people who have endured traumatic experiences, especially for those who have suffered from sexual assault, because under the pressure of cultural norms and gender stereotypes, they may feel hopeless and remain silent. By counsellors and practitioners taking the initiative to be aware and inclusive of culture, promoting social justice practices and advocating for those who have suffered from childhood sexual abuse or sexual assualt, they are helping to decrease the adverse affects of cultural norms, gender stereotypes and incompetence, which may help prevent the instances of hopelessness and silence. ■

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