



ELEMENTAL

*The Official Mental Health Magazine of the
University of Toronto*

FALL 2019



SPOTLIGHTS

CANNABIS USE, ALCOHOL ABUSE,
AND CONCURRENT DISORDERS

SUBSTANCE USE THROUGH
A PUBLIC HEALTH LENS

BEACON: A DIGITAL PLATFORM
MAKING TREATMENT
MORE ACCESSIBLE

SUBSTANCE ABUSE

HOW RECOVERY FROM
DRUG ADDICTION IS POSSIBLE

A PERSPECTIVE ON THE FUTURE
OF INDIGENOUS HEALTH

HOW AUTISM MAY AFFECT
SUBSTANCE ABUSE RISK

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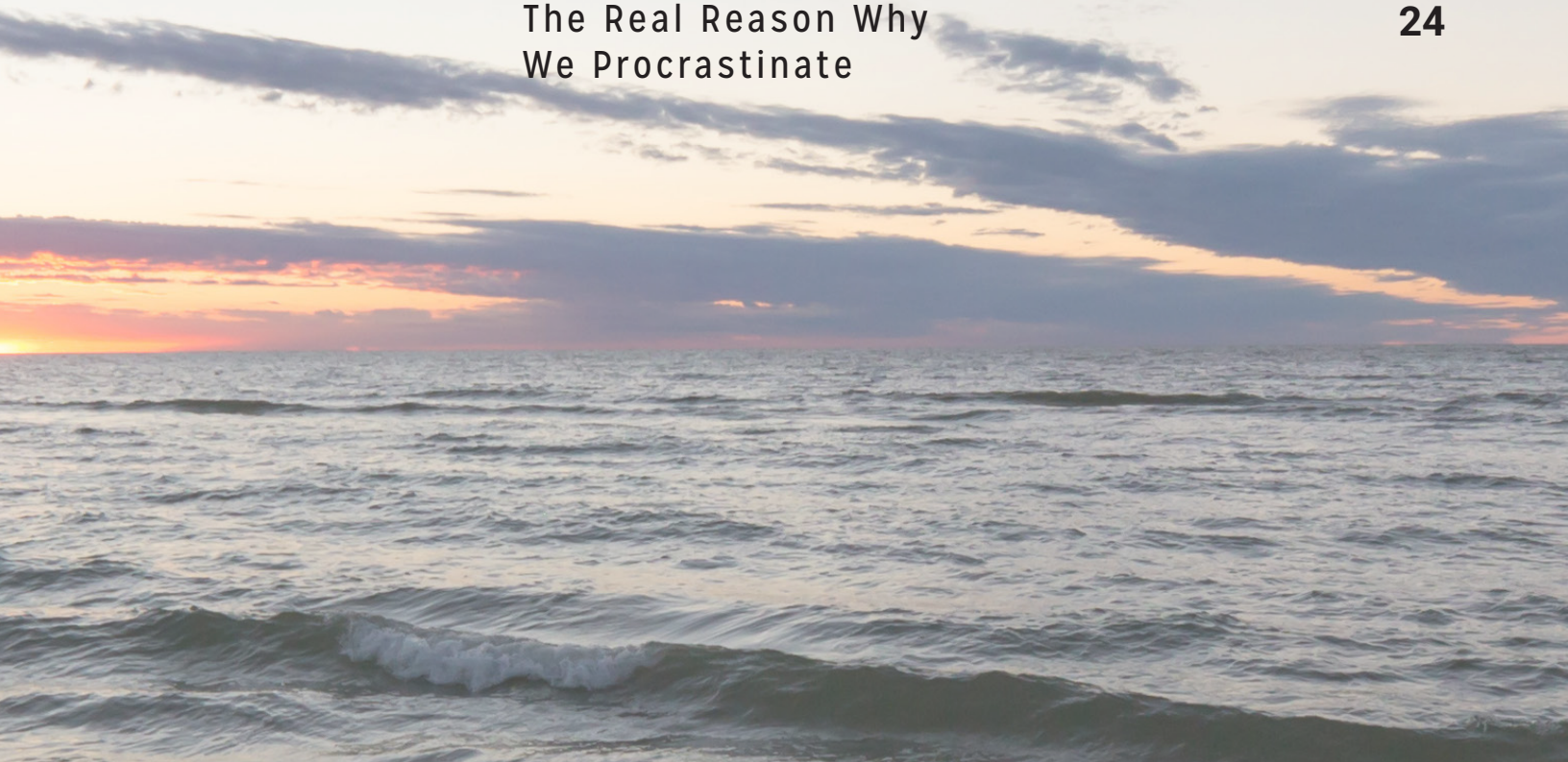
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LETTER FROM THE EDITORS

We are excited to introduce the fourth issue of Elemental, the University of Toronto's official tri-campus mental health magazine. The theme of the current issue is substance use and addiction. People can engage in substance use for a multitude of reasons—wanting to experiment, fit in, have fun, or cope with stressors. While the degree of use varies by individual, casual substance consumption can sometimes, although not always, escalate into addiction. Addictions can be either substance-related (drug consumption, for example) or process-related (such as social media use) [1]. Both forms of addiction can significantly impede an individual's quality of life, if not recognized and treated.

Substance use and addiction are thought to exist on a spectrum, with a multitude of biological, psychological, and social contributing factors at play. One important factor to consider is how mental health and addictions impact one another. Research indicates that more than 50% of people with substance use disorders have also experienced mental health challenges at some point in their life [2]. In a University context, students are susceptible to high levels of stress and may engage in substance use as a means of coping or temporary escape. According to the 2016 Canadian National College Health Assessment, which surveyed 41 institutions and over 43,000 students, approximately 67% and 19% of Ontario college students had engaged in alcohol and

marijuana consumption in the last 30 days, respectively. Within a 30-day period, 12% of students had operated a vehicle after consuming alcohol. Moreover, within the last 12 months, approximately 15% of college students had consumed prescription drugs that were not prescribed to them [3]. Providing opportunities to discuss and educate students on substance use and addiction is critical to reducing the stigma, preventing problematic use, and highlighting available supports and positive coping strategies. With the recent legalization of cannabis use in Canada, these discussions are not only timely but informative.

In this issue, we delve deeper into the area of substance use and addiction. Dr. Tony George, Professor and

Clinician Scientist at the Centre for Addiction and Mental Health (CAMH), discusses the link between mental illness and addiction. Dr. Jose Trigo, Neuroscientist at CAMH, discusses some of the risk factors associated with cannabis use and debunks some of the biggest myths surrounding substance use disorders. Dr. Christian Hendershot, Professor and Head of Psychology in the Addictions Division at CAMH, sheds light on alcohol use disorders, while Dr. Julianne Vandevoort, psychologist at CAMH, discusses available psychotherapy treatments for cannabis use disorder and some of the challenges associated with treatment. We also explore the impact of social pressures on substance use in individuals with autism spectrum disorder, as well as substance use in Indigenous communities and the need for culturally sensitive treatment approaches. Dr. Peter Farvoldhen, Professor and Founder of CBT Associates, talks about making evidence-based treatment more accessible through digital cognitive behavioural therapy platforms. We also discuss the mental health benefits of mindfulness and self-compassion, and explore why individuals engage in procrastination, and what strategies can be employed to circumvent this behaviour and the stress associated with it.

We would like to extend our deepest gratitude to the Elemental editorial team as well as Grad Minds, for their hard work and dedication in contributing to this initiative and mental health education at the University of Toronto. We would also like to recognize the faculty, students, staff, and community mental health advocates who have shared their knowledge, research, and insight with us. To our sponsors at the Faculties of Arts and Science,

Engineering, and Medicine – we are immensely appreciative of the support provided since this initiative's inception. Lastly, a special thank you to our readers, without whom this endeavor would not be a success. This magazine continues to serve as a forum for constructive discussion on mental health and wellness at the University and beyond, and we thank you for engaging in the conversation!

Sincerely,

Rachel Dragas and Kate Rzaccki
Editors-in-Chief, Elemental

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LOOKING AT SUBSTANCE USE THROUGH A PUBLIC HEALTH LENS

ASHLEY BO ZHANG, FARINAZ GHODRATI

AN INTERVIEW WITH DR. HAYLEY HAMILTON

Dr. Hayley Hamilton obtained her PhD in sociology, studying population health and the life course, which led to her involvement in the field of mental health and addictions. Dr. Hamilton has a quantitative background in data analysis, and currently serves as Co-Lead on the Ontario Student Drug Use and Health Survey and the CAMH Monitor, both of which look at substance use behaviour and general wellbeing in the Ontario population. We sat down with Dr. Hamilton to discuss her involvement in substance use research and her perspectives about the field.

Can you provide a brief overview of your current research projects?

We are currently in the data collection phase of the 2019 Ontario Student Drug Use and Health Survey (OSDUHS), which is a cross-sectional survey of students in grades 7-12 that has been repeated every 2 years since 1977. When the survey began over 40 years ago, it was initially focused on substance use, but has since evolved to include mental health, physical health, and general wellbeing. A report outlining findings from our 2017 adult survey was recently released and now we are collecting data for our 2019

survey. Furthermore, I am involved in research focused on substance use prevention and the mental health service needs of vulnerable youth.

What are some current trends based on the latest OSDUHS and are these trends similar for older populations?

Over the past 20 years, there has been a gradual decline in cannabis use amongst grades 7-12 students (currently 19% report past-year usage). In contrast, use has almost doubled amongst adults. This increase was particularly evident amongst 18-29 year olds with 39% indicating past-year use in our 2017 survey. Cannabis use also increased amongst adults over 50 years of age. Prior to the recent legalization, there were more conversations about cannabis and its availability rapidly increased with the proliferation of dispensaries. In the past few years, no significant declines in cannabis use have been reported in our student survey, but we are very interested in seeing the data after its legalization.

What are some of the “motivations” behind drug use, especially amongst the student population?

People tend to use drugs for multiple reasons. There is a social aspect, which refers to drug use in a social setting when spending time with friends and so on. Another motivation is peer pressure, which points to the pressure to ‘fit in’. Drug use could also be a coping mechanism to combat stress, or personal/work issues for instance. Boredom is another potential motivator. It should be noted that we have not explored the motivations and reasons for cannabis use in our surveys.

Which populations are most affected by substance use and why do you think that is?

In the past, there were greater differences between males and females when it came to drug use. These differences have been reduced, but there still remain a few. For instance, men tend to have a higher prevalence of using harder drugs and binge-drinking. Additional factors influencing drug and alcohol use include socioeconomic status and related factors. However, we must keep in mind that it is hard to generalize to a certain degree.

In your professional opinion, what do you think students can do to alleviate the stigma surrounding substance use disorder without undermining the health concerns?

Part of the stigma surrounding substance use disorder comes from the misconception that these individuals are “choosing” to continue their drug use, which is not the case for those suffering from dependence. Therefore, there is a need to recognize that substance use disorder is an illness and people require help and support to combat their substance use problems. Diverse forms of supports and services are available to those affected by substance use problems. In terms of reducing substance use generally, it is important to consider, for example, improved coping skills and educational conversations about the harms associated with substance use, including the negative consequences of dependence.

What are your thoughts on cannabis legalization and its public health consequences, particularly for university students?

I think the consequences are still undetermined. One of the most important advantages of our two population surveys is that they have been ongoing for a considerable number of years, which gives us the

ability to track trends within Ontario. We need to continue tracking these trends after cannabis legalization and monitor the prevalence of cannabis use and related problems over time – which is something we plan to do. One of the important components of assessing legalization is to evaluate what is happening over time and to respond to the trends as needed. Moving forward, it is crucial to continue monitoring cannabis use, not just with respect to general use, but also hospital visits, impaired driving, usage amongst teens, co-use with other substances, etc. This will allow appropriate responses to be developed - whether through targeted prevention efforts, public education campaigns, or other means.

What would you say is the biggest misrepresentations in the general population regarding substance use disorder?

One of the misrepresentations that exists in the young adult population regarding substance use, particularly for alcohol and cannabis, is the sense that “everybody” is partaking in use. Also, as previously mentioned, the misconception that continues to persist regarding substance use disorders – that it is entirely within a person’s control to stop using the substance.

What are some of the challenges facing researchers in the field of substance use problems and what do you think is the future of research in your field?

Our student survey focuses on students in publicly funded schools, while the population that may be facing a higher prevalence of substance use disorders may not be in school due to dropping out, etc. Therefore, there is about 8-9% of the adolescent population that we do not have access to, which likely

makes our estimates conservative. This also pertains to our adult survey on substance use – accessing the whole adult population would be difficult. A specific focus on individuals that are actively engaged in problematic use requires more targeted studies.

Another challenge is keeping up with emerging drugs - we ask about both common and emerging drugs, but there are constant reports about novel substances and risky behaviours involving students. Keeping track of what is important to include in our student survey can be challenging.

While there are countless challenges, improvements in public knowledge about substances and advances in technology with regard to how data are collected will likely improve this type of research in the future.

Do you have any tips for the student population specifically when it comes to substance use disorder prevention and treatment?

Although it may seem obvious, I do want to emphasize the dangers of sharing medications and urge readers to abstain from doing so. Moreover, be informed and aware with respect to the potential consequences and harms associated with substance use. Think about your own substance use and the extent to which it may be having a negative impact on other aspects of your life. You might also recognize that others around you may be having problems with substance use. Students can seek out assistance and services in the university and/or larger community. There are various groups and organizations that are there to assist.

CONCURRENT DISORDERS: A VICIOUS CYCLE OF SUBSTANCE ABUSE AND MENTAL ILLNESS

JEFFREY LYNHAM

AN INTERVIEW WITH
DR. TONY GEORGE

Dr. Tony George is a Clinician Scientist in the Campbell Family Mental Health Research Institute, and the Head of the Biobehavioural Addictions and Concurrent Disorders Research Laboratory at the Centre for Addiction and Mental Health (CAMH). He is also a Professor in the Department of Psychiatry at the University of Toronto. He received his M.D. at Dalhousie University, and he did his medical internship and residency in general psychiatry at Yale University School of Medicine. Dr. George's research interests include understanding and treating concurrent disorders, with a focus on tobacco and cannabis use in schizophrenia. I sat down with Dr. George to learn about some of his latest research.

Your primary research interest is in understanding concurrent disorders. What initially drew you to this area of research?

As a senior medical student, I realized that the brain was the most important organ that we needed knowledge on. I decided early on that I wanted a career studying psychosis and schizophrenia. When I did my first rotation, I noticed something interesting—just about all these people with schizophrenia had addiction problems, and it really impacted their illnesses in terrible ways. It led to worsened symptoms



and to relapses. Back then, everyone in the hospital was smoking tobacco. The inpatient units were filled with smoke and I remember the senior doctor who was supervising me said, “We need to get this problem under control.”

We ordered a meeting of all the patients and staff and the senior doctor said, “Anyone who is caught smoking is going to lose their privileges to go outside. And if this happens repeatedly, we may have to discharge you.”

One of the patients became very upset and threw a chair at the senior doctor. By the time the local police arrived,

and all was done, there were very upset patients, and a staff member with a broken arm. I said to myself, “Wow! This whole tobacco thing is really important to patients and we don’t even understand why.”

Why do you think there is a strong link between mental illness and addictions?

I would say—and this is maybe oversimplifying things—is that if you look at the biology and pathways of the brain—whether it be dopamine or glutamate signaling—the areas that are dysfunctional in psychiatric disorders overlap almost perfectly with the areas that mediate substance abuse. If you have dysregulation of one, it may also have an effect on the

other. What we find, when we look epidemiologically, is that during the onset of mental illness, if someone is also vulnerable to substance abuse, the substance abuse usually comes on board at about the same time. They're probably developmentally driven in that sense, and it all emanates from the same common biology.

Could you tell me about some of your current research looking into tobacco or cannabis use in schizophrenia?

The majority of my work has historically been on tobacco, but now it has shifted to understanding cannabis effects in schizophrenia and in people with mood disorders like depression and bipolar disorder. What we've done in the last five to seven years is we've said if people with schizophrenia or mood disorders are more prone to taking up and getting hooked on and continuing cannabis use, then why is that? Most importantly, if you look at their symptoms and their functional outcomes—memory, attention, and judgment—what would happen if we got people to stop using them in the short term?

We wanted to know what happened if we got people to stop using cannabis for at least thirty days. We used a neat little trick to get people to quit. We offered an alternative reinforcer to the drugs, and very simply, that alternative reinforcer is money. We say that if you can prove to us that you can quit for thirty days (using biochemical test of urine for a THC metabolite), we will give you a big reward. The protocols are approved by the CAMH research ethics board. We find that about 50 percent or more are able to respond to the alternative reinforcer. At this point, we can say, "Now that we've got past withdrawal, what was the substance really doing to these patients?"

With these studies, it's important to get beyond the withdrawal syndrome. Withdrawal symptoms from drugs depend on how long the drug sticks around, and cannabis is one of the drugs that sticks around the longest. It takes a month to wash cannabis out and withdrawal sort of comes and goes within a week. It's more protracted, and that is often why people have trouble quitting.

Those who quit see dramatic improvements in their symptoms. Not so much improvements with psychotic symptoms like what you see in schizophrenia—like delusions or hallucinations—but improvements in cognition, and improvements in mood and anxiety. Many people will say that they're using cannabis to treat their depression, anxiety, or post-traumatic stress disorder, but these findings are inconsistent with this notion of self-medication.

How are concurrent disorders treated? Separately or simultaneously?

There's a lot of controversy about whether you should treat them concurrently, and practically speaking, you kind of have to treat them concurrently because you're typically not going to have a treatment for one disorder that will also treat the other disorder. In mental illness and addiction, part of the problem is that one begets the other because the biology is related to the substance abuse. Then it becomes a vicious cycle. Recovery must be a dual kind of thing, and there have been no real breakthroughs in this area.

One of the things we've been trying to do is using neurobiologically informed approaches to target comorbidity. In our most recent case with cannabis and schizophrenia, we've been looking at the frontal lobe and how it links

addiction to schizophrenia. People with schizophrenia have very poor cognitive control, and we found that transcranial magnetic stimulation of the frontal lobe can improve their cognitive function and reduce craving.

What advice would you give to your students who are starting out in this field?

Pick a really interesting question. Pick a question that fascinates and consumes you, and then find a supervisor or mentor who you trust, and then talk to people. Go to conferences and meet lots of different people. If you're going to be an innovator, you've got to constantly fuel yourself with new ideas, and the only way to do that is to have collaborators. I think those that do well are those who take risks, get out there, and challenge themselves.

What does the future have in store for research and treatments of concurrent disorders?

The future is collaboration and getting investigators together who have common interests to ask very similar questions. I think the challenge for us is recruiting patients in sufficient numbers. The only way to do that is to band together with other scientists who have similar interests. We need to come up with protocols that can recruit a large number of subjects so that we can do things like brain imaging, genetics and genomics, which will allow us to look at mechanisms and follow people over time. I've spent most of my career doing our pilot studies understanding the mechanisms, and we're now at a pivotal point for larger, more definitive studies to be done.



BEACON DIGITAL THERAPY: MAKING EVIDENCE-BASED TREATMENT MORE ACCESSIBLE

JEFFREY LYNHAM

AN INTERVIEW WITH DR. PETER FARVOLDEN

Almost one half of Canadians (49%) suffering from depression or anxiety will not seek help [1]. Common barriers to treatment include long waitlists, geographic distance, insufficient number of healthcare providers, and perceived stigma. However, with the exponential advances in technology over the last few decades, internet-based interventions have been proposed as one solution to help bridge the treatment gap.

Dr. Peter Farvolden is a Founding Clinical Director of CBT Associates, a leading Toronto-based psychology practice, and the Clinical Lead of BEACON, a digital therapy platform that delivers internet-based cognitive behavioral therapy (iCBT). He also holds faculty appointments at the University of Toronto, University of

Waterloo and Ryerson University. I had a conversation with Dr. Farvolden to learn more about BEACON and iCBT.

Could you explain what iCBT is and how it was developed?

The way we describe it is therapist-assisted internet-delivered CBT (TAiCBT). There's about forty years of research on the effectiveness of CBT for mood and anxiety. There's also been a long history of research on figuring out what minimal intervention is—how to take the effective components of CBT and deliver them in the most efficient way. With iCBT, there's about twenty years of research with over a hundred randomly controlled trials in depression and anxiety. With all this data, we have been able to draw conclusions about who it would work for, how long treatment should last for, and what components of CBT would be most effective for mood and anxiety disorders.

What steps are involved in accessing online therapy through BEACON?

People start by completing a thorough online assessment, which is the first step in a stepped-care model. The assessment is then interpreted by a therapist, and then, if appropriate, they're "onboarded" to BEACON therapy. Currently, if they have depression, generalized anxiety, panic disorder, social anxiety, or post-traumatic stress disorder, we can onboard them to a protocol driven treatment. If iCBT is not appropriate, they're directed toward other resources.

After registration, they will receive their first message from the BEACON therapist that reviewed their initial assessment. After which they will receive new material on roughly a weekly basis. The therapy introduces clients to ideas and techniques that are part of CBT. The client works through the activities with the guidance of a

dedicated therapist who will give them feedback on their progress. On average, effective treatment occurs in about eight weeks, but if needed, we can keep them onboard BEACON therapy for up to twelve weeks.

In our model, all of the therapy occurs through messaging. There are no scheduled phone or video sessions. You message your therapist whenever you wish, and your therapist responds within 1-2 business days.

What advantages and disadvantages does BEACON provide for the client?

BEACON helps to overcome barriers to accessing effective evidence-based treatment. One barrier is stigma. Although people have done great work over the last ten years to reduce stigma, it's still a significant barrier for some people to access treatment. In my experience, people will access therapy this way who would otherwise never darken the door of a psychologist. They just wouldn't do it. It still takes quite a bit of courage to show up to the office of a psychologist.

There's also geography; for example, a lot of people can't take an afternoon off work every week to see their psychologist. It may take an hour to get to the office, and then an hour for the appointment, and then another hour to get back home. It becomes a three-hour thing that no one really has time for.

Another advantage is that they can do it when, where, and however they want. They can do a lot of it intensely over a short period of time, or they can do it more stretched out over the twelve weeks. We certainly tell people that the more they engage with us, and the more effort they put into it, the better the chances are that this is going to be helpful.

The disadvantage is that some people would prefer face-to-face therapy. They would prefer to have that interaction. At first, people might say that iCBT would not work for them, but when we start to tell them to look at the research that says that it's just as effective as face-to-face treatment, their openness to iCBT increases.

What advantages and disadvantages does BEACON provide for the therapist?

For therapists it provides several advantages. One of them is that the educational part of CBT can be done by the platform. For example, if I'm meeting with a client who has panic disorder, one of the things I have to do is explain how the panic cycle works. I have had clients over the last several years who asked, "Why don't you have a video on this? Why am I paying you to do a lesson on panic disorder?" A platform can probably do a better job giving out information, and in this way, the therapist doesn't have to be repeating information. This frees up more time to do therapy with the client.

Additionally, the idea of weekly one-hour sessions is a convention based on how traditional psychotherapy is done. For a lot of people, it might be more useful to have three or four briefer interactions with your therapist every week. For example, if a client is given a CBT assignment, they might forget what they were supposed to do. With the conventional once-a-week psychotherapy format, the client would have to wait until the next week to say to their therapist that they forgot what to do for their assignment. With the BEACON format, if you don't understand something, you can get feedback faster.

The other huge advantage for therapists is that they have time to think. In traditional psychotherapy, if you're

sitting in a room with somebody and having an interaction, you're unable to pause time and consider what you're going to say next. With this platform, you have time to consider what you're going to say next. Not only that, they have time to consult with colleagues to get their input on how to treat a client.

A disadvantage is that you can't see the person's face and their emotions, because normally we get information from people from the tone of their voice and all the non-verbal cues. If you're messaging, you don't have access to that information. However, there is a science developing of how to do therapy through messaging in the most effective way. Researchers are looking at message histories to find out what makes for effective psychotherapy when using this modality.

What does the future have in store for BEACON?

I think the future is building out our library of protocols. Today we are treating mild-to-moderate depression, anxiety and PTSD; we are in process of developing more protocols to provide care for other conditions that are treatable through CBT. The future also involves including relapse prevention. Typically, in psychotherapy, we treat somebody until they're well enough, but then we stop treatment and don't follow up. I think in terms of maintaining wellness, the future is that somebody can come on the platform and be treated, and then we'll continue to follow them in order to help them stay well.

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1. Canadian Mental Health Association. (2019). Fast Facts about Mental Illness. Retrieved from: <https://cmha.ca/about-cmha/fast-facts-about-mental-illness>

SHEDDING LIGHT ON ALCOHOL USE DISORDERS

JEFFREY LYNHAM

AN INTERVIEW WITH
DR. CHRISTIAN
HENDERSHOT

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Alcohol is one of the most commonly used drugs in Canada. As with many drugs, alcohol can become addictive, it can be abused, and it can cause people to become dependent on it. But why do some people who start drinking alcohol eventually become alcoholics while others seem more resilient? In order to develop more personalized therapeutics and interventions for alcohol use disorder (AUD), researchers are investigating AUD in specific populations.

Dr. Christian Hendershot is a Senior Scientist at the Centre for Addiction and Mental Health where he serves as the Head of Psychology, Addictions Division. He completed his PhD in Clinical Psychology and his Clinical Residency in the Department of Psychiatry and Behaviour at the University of Washington in Seattle. He also completed postdoctoral fellowships at the Mind Research Network and the Center on Alcoholism, Substance Abuse and Addictions at the University of New Mexico. Dr. Hendershot shared some of his insight and current research looking into the etiology and treatment of addictive behaviours.



Your primary research interest is in understanding alcohol use disorders (AUDs). What drew you to this area of research?

Studying addictive behaviours allows for some unique opportunities to integrate psychological and pharmacological perspectives in studying a common behaviour with large-scale health implications. One of the things that got me interested in AUDs was working on a study that examined genetic variation in alcohol metabolism in people of East Asian heritage. That led me to do some research looking at how genetic factors involved in alcohol metabolism might relate to cognitive and behavioural risk factors for alcohol use.

Generally speaking, what effect does alcohol have on our mental health, and why does it become addictive?

Alcohol has a complex pharmacological profile, meaning that it activates a number of neurotransmitter systems—there's no single mechanism of action. One of the more popular views is that there are distinct neurodevelopmental stages leading up to addiction. For example, early stages are characterized by reward-based drinking, while later stages largely involve relief-based drinking. Over time, drinking to feel good turns into drinking to avoid feeling bad. These stages are thought to involve a developmental shift in the brain mechanisms that influence decision-making while addiction progresses.

Could you comment on some of the risk factors for developing an AUD? To what extent is it based on environment, and to what extent is it based on genetics?

The evidence is clear that environmental and genetic factors are both important. At the population level, genes and environment appear to contribute roughly equally. We also know that the relative strength of genetic and environmental influences changes from adolescence to adulthood, and that genes and environment interact to affect risk, so it's a complex picture. Some risk factors are more consistent than others. For example, personality traits related to impulsivity or disinhibition, early life stress, and having a family history of alcohol problems—which is both a genetic and an environmental risk factor. But no one risk factor in itself is a determinant, and there's no single gene or set of genes responsible for developing alcohol problems.

Could you tell me about any of your current research on AUDs?

At any given time, we have a number of projects going on—ranging from clinically oriented treatment studies to laboratory studies that use drug administration methods. Some of our recent projects have used intravenous alcohol administration procedures as a way to study behavioural and brain markers of responses to acute alcohol, because we now know that individual differences in alcohol response are linked to future risk for heavy drinking. Soon, we'll be starting a couple of laboratory-based medication trials, which involve using drug self-administration procedures as a way to test potential treatments for AUD and smoking cessation.

What would you say is your most significant research accomplishment to date?

A while back we published the first study that showed, on a large scale, the extent to which alcohol consumption is related to non-adherence to antiretroviral medications in patients with HIV/AIDS. That study stands out because it had clear clinical applications, and it got some attention in areas of the world that have suffered the most from the impact of the HIV epidemic. More recently, I've also been fortunate to receive a couple of early career recognition awards from CIHR.

What are the most rewarding experiences you have while doing your job?

One of the most rewarding experiences has been seeing my students and post-doctoral fellows begin to transition to independent academic careers—mainly because it reflects the end product of a lot of hard work on their parts. I also enjoy being able to interact with researchers in other parts of the world, and I enjoy collaborating with colleagues at other institutes on common projects.

What does the future have in store for AUD research and treatment?

Some of the hot topics right now are similar to those that you're seeing in other areas of health research, for example, lots of interest in mobile- and biosensor-based assessment methods, as well as "big data" projects. Soon we'll be seeing results from some large, longitudinal imaging studies with adolescents that aim to characterize the effects of alcohol and other drugs on the developing brain.

In terms of treatment, we've recently seen some very convincing evidence from large-scale clinical trials that

non-abstinence treatment outcomes—basically meaning reductions in heavy drinking or grams of alcohol per day—are associated with long-term clinical and health benefits, even when total abstinence isn't achieved. These findings are challenging the conventional focus on abstinence as the only acceptable treatment goal, and as a result, there will be a push for the Food and Drug Administration to approve non-abstinence outcomes as a basis for approving new medications. These findings are particularly important because abstinence-based treatments—while important for many people—can also deter many people from entering treatment. There's good evidence to suggest that simply accessing treatment has a much larger impact on drinking reductions, as compared to the specific type of treatment that's offered.

Everyone responds to alcohol differently—not everyone who drinks alcohol becomes addicted. It's clear that many factors influence the rate at which we can slide into addiction including environment, culture, genetics, and even personality traits. A better understanding of what makes certain people more susceptible to addiction is warranted in order to develop more personalized therapies for AUD.

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ON THE HIGHS AND LOWS OF CANNABIS

FARINAZ GHODRATI,
ASHLEY BO ZHANG

AN INTERVIEW WITH
DR. JOSE TRIGO &
DR. JULIANNE VANDERVOORT

We had the pleasure of sitting down with Dr. Jose Trigo, a neuroscientist at the Centre for Addiction and Mental Health (CAMH) studying substance use disorders as a part of Dr. Bernard Le Foll's team at the Translational Addiction Research Laboratory in the Campbell Family Mental Health Research Institute. His current research focuses on translational studies of clinical and preclinical research on cannabis and opioid use disorders.

Your primary research interest is the field of cannabis use disorder. What drew you to this area of research?

Cannabis use has been consistently increasing and research shows that approximately 8% of people that ever use cannabis may develop cannabis dependence (1,2). According to the United States National Institute of Health, prevalence of daily use of cannabis (5.8 %) is at least equal to the combined use of cigarettes (3.6%) and alcohol (1.2%) in 12th graders (3). Even before the legalization of marijuana, the use of cannabis had been increasing in Canada (4), which poses as a huge problem. The perceived lower risk associated with cannabis use is problematic as it is leading to an increased usage of the drug. There are many studies showing that as the subjective perceived risk



Dr. Jose Trigo is a Neuroscientist at the Centre for Addiction and Mental Health (CAMH)

of a drug decreases, the use will increase (5). Our research is aimed at finding pharmacotherapy treatments for cannabis use disorder as the current standard of care for patients solely includes psychotherapy with no approved pharmacotherapy. Ultimately, there is a problem coming, and it might not be here yet, but inevitably, there will be a need for pharmacotherapeutic interventions of cannabis use disorder in the future as the use of cannabis escalates.

What are the most important risk factors/predictors for substance use disorder, especially for university student population?

Cannabis use during adolescence is definitely riskier than when your brain is fully developed, so it is not recommended to use cannabis in the developmental stages during which neuronal connections are shaping. Epidemiological studies have shown that use during this period translates to an increased probability of developing future cannabis dependence (6,7). In addition to age, another important risk factor is the amount of tetrahydrocannabinol (THC) in

cannabis preparations. In fact during the '60s-70s, the amount of THC in cannabis products was only 4% while now, it is easy to find cannabis products with a 28% THC content, with some concentrates having an even higher amount up to 90% of THC (8). The THC dosage is significant as it is the psychoactive ingredient in cannabis and higher amounts can lead to negative health effects such as anxiety and cannabis-induced psychosis (9).

In your professional opinion, do the viewpoints of students on different substances such as nicotine, alcohol and cannabis affect their pattern of use/abuse?

There is clear data showing that the perception of risk for using cannabis is decreasing while its usage is increasing (10). Contrarily, due to public awareness of the risks of tobacco, the perception of risk of cigarette smoking has been increasing and its usage has been on the decline. It is evident that substance use is associated with the perception of risk (10), which is why we need to educate the youth and provide them with all the facts so they can make informed decisions.

What are your thoughts on marijuana legalization and its health effects and consequences especially on university students?

Marijuana or their isolated components do have medicinal applications and some beneficial applications may have yet to be discovered. However, as a recreational substance, the public needs to be educated on all the facts, including the associated risks because as with any other drug, cannabis also has side effects. Cannabis is the most common illicit drug worldwide (11), and its use has been increasing even before legalization. I want to once again emphasize the importance of education when it comes to cannabis use, particularly amongst the teen and young adult population.

What would you say is the biggest myth in the general population regarding substance use disorders?

There are a variety of myths, which essentially come from the lack of knowledge and education. One of the most common misconceptions that I have encountered regarding cannabis comes from the fact that it has medicinal properties, which promotes the erroneous thinking that if a drug has medicinal properties then it cannot be detrimental for your health. What is lacking from the reasoning here is the fact that all medication, even over the counter drugs, if used improperly can lead to health problems, and the same goes for cannabis. For instance, it is intuitive that you would not take a pill for your headache or to decrease cholesterol levels when you do not actually have such problems.

What do you think is the future of research in your field?

As I mentioned before, while approved pharmacotherapy exists for other substance use disorders such as nicotine and alcohol, the treatment

options for cannabis use disorder are lacking. Given the uprise in the use of cannabis, we are in need of pharmacotherapy intervention for this disorder and it is imperative that we keep investigating in order to be prepared. Moreover, historically, studies on the effects of cannabis have been conducted with lower doses of THC than the ones currently available (e.g. up to 90% THC), so we are largely ignoring the long-term effects of the exposure to these high concentrates of THC in humans. It would be particularly interesting to have longitudinal studies assessing the risk of various higher doses of THC, so in general a lot remains unknown in this field of research.

Do you have any final tips for our student readers specifically when it comes to substance use disorder prevention and treatment?

Ensure you have all the information from reliable sources in order to make informed decisions. Furthermore, familiarize yourself with the official guidelines including Canada's Lower-Risk Cannabis Use Guidelines, available online on the CAMH website.

Our discussion continued with Dr. Julianne Vandervoort, a psychologist in the Concurrent Outpatient Medical and Psychosocial Addiction Support Service (COMPASS) at CAMH, working alongside Dr. Le Foll. Dr. Vandervoort provides assessment in addition to both individual and group psychotherapy to individuals with substance use disorders (primarily cannabis and alcohol) and other concurrent mental health disorders.

Currently, what are the available psychotherapy treatments for cannabis use disorder?

The three main behavioural treatments available for cannabis use disorder,



Dr. Julianne Vandervoort is a Psychologist in the Concurrent Outpatient Medical and Psychosocial Addiction Support Service (COMPASS) at CAMH

which have empirical evidence, include cognitive behavioural therapy (CBT), motivation enhancement therapy (MET), and contingency management. At COMPASS we offer a 12-week, manualized treatment encompassing both CBT and MET. Other community-based treatments available include Marijuana Anonymous and Self Management And Recovery Training (SMART) recovery.

In your professional opinion, what are the major challenges when it comes to treatment?

Historically, one of the challenges has been that treatment for substance use disorders was not substance specific. Patients have shared that when seeking treatment for their cannabis use and finding themselves in a group amongst people working on goals related to other substances, they have sometimes felt invalidated. Common misconceptions, for example, that cannabis is not really a harmful substance, may lead people who are suffering from their cannabis use to feel misunderstood or even discounted by others. It has

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therefore been very important to create a platform for people to unite to specifically talk about cannabis. Unfortunately, treatment specifically aimed at cannabis use can be hard to find in Ontario and Canada. It is my hope that with increased awareness about warning signs for cannabis use disorder and increased open discussion about cannabis treatment, there will be a push for more hospitals and clinics to offer cannabis-specific treatment, whether in the form of individual or group-based psychotherapy. With the important research conducted by Dr. Le Foll, Dr. Trigo, and others, ideally it will be possible to combine psychotherapy and pharmacotherapy for promising outcomes.

The second major challenge relating to cannabis use treatment is the fact that patients' cannabis use did not appear problematic for several years before they detected the significant negative impacts on their mental and physical health. Most people seeking treatment for cannabis use have been using cannabis daily for several years by the time they present for treatment. I hope that with increased awareness and understanding of cannabis use disorder, people will recognize early warning signs and seek support or treatment earlier on.

The third major challenge relates to the fact that most people presenting for treatment for cannabis use disorder also have other concurrent psychiatric disorders. Cannabis has been used for "self-medication" of anxiety and depression or to numb symptoms of post-traumatic stress disorder. Conversely, cannabis use may have exacerbated other mental health issues. If we do not address these comorbid disorders in treatment, then it is unrealistic to expect significant, lasting changes in cannabis use. In other words, if cannabis use has been

the patient's main coping strategy, we need to build other coping strategies to address these concurrent problems in order for treatments to be effective.

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POSSIBILITY OF FULL RECOVERY FROM A DRUG ADDICTION

ALIREZA (ALLAN) JAMSHIDI

Recovery from substance addiction requires more than medicating patients. Even a combination of medical therapy and psychotherapy would not necessarily result in a full recovery from drug addiction. What is missing in the recovery process?

Drug addiction can affect the physical, mental, and social health of people suffering with this disorder. Neuroscience research has made large strides in understanding the biological effects of drug abuse, particularly as it relates to the central nervous system. Through these discoveries, psychiatrists and psycho-pharmacologists have been involved in creating medications to balance the unbalanced biochemistry of drug users to aid in their recovery process. Achievements in these areas are significant and progressive. On the other hand, psychologists have studied behavioral patterns of people with substance addiction and created several efficient therapies. Despite the advancements in psychology and psychiatry, many people with addiction never fully recover and relapse rates remain high. Treating the social aspects of recovery remains a challenge in existing treatment paradigms. Providing social support for patients as they resume their normal life after a period of drug abuse might be the

missing component in the treatment of drug addiction.

Stress is a contributing factor for people to take drugs and even develop a chronic dependence on them. Feeling of depression, detachment, shame, and guilt are also common among people during the recovery phase of addiction [1]. Unlike chemical imbalances caused by drugs abuse that have a more straightforward solution, social aspects of addiction are not as easily treatable. Therapists might be able to provide some psychological support for people who are trying to give up drugs by reminding them of their efforts, enhancing their self-esteem and self-confidence, and shifting their perceptions on areas of their personal life connected to their drug use; however, an individual's social life exists beyond therapy sessions yet addressing social factors is remains a challenge during treatment. For example, chronic involvement with drugs may isolate individuals from healthy social interactions with non-drug users creating an environment that may be less conducive to recovery from substance abuse. Alternatively, if someone decides to abandon friends or social connections that are connected with their drug use, feelings of social disconnection, loneliness, and depression may become heightened.

Moreover, finding new friends, developing new healthy habits, and building a healthy social life is not easy for many people. Further compounding the issue is that finding a job or reuniting with family may be challenging for people during and after recovery. Lost connections, loneliness, detachment, guilt, shame, and financial problems are all undeniable sources of stress and discomfort that might increase chances of relapse and failing the recovery process [2]. All these issues highlight the importance of developing thorough recovery strategies and treatment plans that address the relationship between social and psychological challenges related to drug use and recovery from drug addiction.

Unfortunately, social programs are not as widespread as necessary partly due to the requirement for more sophisticated recovery plans that are tailored for the specific person with drug addiction and their uniquely personal social situation. Providing social support on top of biological and psychological based treatment needs to be included in recovery programs for people with drug addiction to allow for the development of social behaviours and environments that promote a life of sobriety.

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PRESSURE OF SOCIALIZATION IS AT LEAST PARTLY RESPONSIBLE FOR INCREASED RISK OF DRUG AND ALCOHOL ABUSE ON THE AUTISM SPECTRUM

PAULINA SCHECK

I always used alcohol and drugs to deal with social demands, but I did not start regarding it as self-medication until much later, as a so-called “late-in-life” diagnosed autistic. As an adult, a successful bar night involves drinking just enough to deal with sensory issues but not enough to get drunk or feel hungover the next day. It wasn’t always like this. As a teenager, I went through a binge drinking phase, and experimented with any drugs I could get a hold of, all to make it easier for myself to interact with others. Later, in my 20s, someone gave me a Dexedrine pill at a party. I was planning to get drunk that night, but suddenly I did not need to. That was when I realized there was an underlying issue to my need to have a drink as soon as I entered a loud and crowded space.

A recent study found that autistic people, and especially those with a shared diagnosis of Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactive Disorder (ADHD), are at higher risk of addiction [1]. This study suggested shared genetic and environmental factors were liable for increased drug and alcohol consumption for those on the Autism Spectrum; however, this interestingly contradicts community-generated knowledge. According to autistic social media, autistic people themselves believe that the pressure of socializing is at least partly responsible for their increased rates of drug and alcohol consumption. To test this hypothesis, I created a short, informal questionnaire and shared it with five autistic individuals, both male and female, between the ages of 22 and 55 years. Below, I discuss some of the findings.

All respondents identified drug and alcohol use as a primary support for socializing. Social drinking and drug use began during teenage years, ages 13 to 18, with only one respondent indicating a late start, at age 21. The types of substances used included alcohol, prescription opiates, amphetamines, cocaine and marijuana, with alcohol being the primary substance resorted to due to ease of access. Reasons for the use of substances to socialize included: shyness, loneliness and isolation, lack of confidence, the need to fit in or feel included, the need to deal with inhibition, self-doubt, the need to appear more “fun”, selective mutism, and sensory issues, with sensitivities to sound and touch reported as the greatest obstacles to socializing. Respondents also reported that drug or alcohol use allow them to engage in physical contact, with some respondents indicating that they would need to use drugs or alcohol to be able to have sex.

Drug and alcohol use were described as “unavoidable” and “necessary” in the process of habitual socialization and learning to make friends. Although positive outcomes were identified, respondents also indicated that they would not recommend using drugs and alcohol as a socializing strategy. For example, one respondent said “I have a lot of sensory issues and only drinking gives me a sense of stillness that allows me to focus on others. I find it easier to notice social cues and respond appropriately and even perform the social gestures required of me – fake eye-contact, facing people, arms relaxed, open etc., the sorts of things that communicate good intentions. I just can’t do it as well or as often sober”. When asked whether they condone this strategy or would recommend it to others, the same respondent said “I definitely would not. Some of the things I got desensitized to while drunk have stayed with me sober, and I am thankful for that, but I wish there were other ways to get to where I am today.”



A common complaint with drinking and drug use in social contexts was the risk of becoming too uninhibited. For example, one respondent said, “alcohol tends to be a bit too much of a release from the social pressure, self-doubt and stress that I seem to constantly feel, it has been problematic for me in the past so now I choose to avoid it altogether”. Most respondents confessed they had lost control of their drug and alcohol use at some point in their lives and felt they were spiraling into addiction. A more distressing finding is that nearly all female respondents confessed to losing their ability to negotiate boundaries during physical contact while being intoxicated.

Most respondents answered that they were not receiving any other support, such as therapy, when they resorted to drug and alcohol use to socialize. One respondent indicated a link between the absence of a formal diagnosis and drug and alcohol use for socialization: “I wasn’t diagnosed until age 32, so I had been through a lifetime of just feeling different and not quite knowing why, often blaming myself for my lack of friends, failure to fit in etc. Had I known when I was younger, I might not have felt the need to drink, take drugs to fit in with people, I might have accepted myself for who I was and not bothered to be like other people”.

When asked what would replace alcohol in the autistic socializing toolkit, most respondents indicated that there is no replacement that works quite the same way. However, some alternatives were discussed. As one respondent confessed, “I find that, in social situations, if I have any kind of drink in my hand (coffee or pop) I feel more comfortable. I use it as a barrier between me and the world”. Another respondent answered that they use their phone as a “blocker” and confessed that they would be interested in using stim toys, toys

that allow autistic people to manage their sensory issues as they interact, as socialization supports, but that they are worried about perception and potential stigma. All respondents indicated that self-acceptance is one effective way to overcome the pressure of substance use; as one respondent indicated, “easier said than done, but I always say, ‘own your awkwardness’.” The same respondent suggested that more widely accessible social groups for neurodivergent people who struggle with the same issues would at least let them know they are not alone.

How to make sense of these findings? The difficulties that respondents identified seem to fall in a few general categories including: isolation, social anxiety, issues of self-worth, pressure to live up to expectations, and sensory issues. Sensory hypersensitivities are a consequence of what has been previously described as sensory processing disorder, which leads to poor sensory integration and the risk of becoming overwhelmed for people on the spectrum. While this is not intended to be an exhaustive investigation of the topic, I believe it reinforces the insights coming from autistic social media and community support-groups; issues related to socialization are responsible for at least a subset of the kinds of drug and alcohol use-related problems that autistic people face. The story, as it emerges from my experience and my respondents’ is very similar; faced with an increasing pressure to perform socially and a limited acceptance of our difficulties, we all eventually discovered that drugs and alcohol allow us to do what we need to do, mostly in our teens. As adults, we regretted excesses and pondered over just how vulnerable we were. As some confessed, not being provided with the means to understand “why we are this way”, as one respondent put it, prevented us from being more effective in our self-management, and sometimes it made us judge ourselves harshly and push ourselves too far.

There are many potential solutions emerging from the stories autistic people share on social media and in support groups, some of which were also mentioned by my respondents. A wider awareness and acceptance of autism in public spaces would go a long way in making us feel comfortable asking for accommodations or using sensory supports. Similarly, universal diagnosis for anyone on the spectrum, not just for those who experience severe challenges, will lead to a better understanding of our own needs. People from older generations, like my grandmother, passed away without ever knowing they were autistic, nonetheless, their struggles lasted throughout their lifetime. There is increasing awareness that social and environmental change are the most effective way to deal with autism. This comes with a related understanding that it is less important to focus on a cure than to create inclusion for people on the spectrum.

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INDIGENOUS HEALTH – LOOKING INTO THE FUTURE

MARIJA ZIVCEVSKA

A history of colonization, isolation, loss of culture and subsequent intergenerational trauma have left Indigenous communities in Canada particularly vulnerable to various health and social inequities [1]. It is often easy to dismiss these issues as something of the past, yet historical injustice is embedded in the present, notably in the modern landscape we live in today. Mental health and substance use are now recognized by Indigenous communities and their governing organizations as top health priorities [2], yet underutilization of services and high treatment dropout rates suggest systemic barriers exist within our current Western approach that fail to address the needs of these populations [3].

Over the years, healthcare professionals have begun to embrace more holistic, multidisciplinary approaches in efforts to blend Western biomedical practices with more traditional Indigenous views [4,5]. In essence, culturally sensitive treatment emphasizes the need to recognize wellness from an Indigenous lens, understood as the interplay between the mind, body and spirit [4]. This intersect between Indigenous and Western methods is referred to as “Two Eye Seeing”, a concept that describes the capacity to view the strength of Western practices with one eye while viewing the strengths of Indigenous practices with the other [6]. Binocularity, then ultimately offers a larger, more comprehensive field of view, in relation

to each perspective individually [6]. This pedagogy emphasizes the need for mutual respect and understanding, encouraging collaboration across Indigenous and non-Indigenous systems of thought. So how can this approach be applied to treatment of substance use disorders?

A recent review by Rowan and colleagues, examined the efficacy of integrating both Western and culture-based interventions to treat substance use disorders in Indigenous populations across North America [7]. A total of 19 studies were examined. Some of the cultural interventions included were: prayer, talking circles, sweat lodges, fasting, art creation, singing, traditional teachings and

ceremonial practice. Interestingly, benefits were seen across all areas of wellness (physical, emotional, mental, and spiritual) with 74% of studies reporting eliminated or reduced substance use problems [7]. Given the vast variety of interventions included, it is, however, difficult to compare exact benefits across modalities. Nevertheless, such reports offer an intriguing insight into the validity of recognizing alternative approaches and expanding our current Euro-centered healthcare model.

In exploring how traditional healing practices can be incorporated in treatment, it is important to recognize that there is vast diversity across Indigenous communities in Canada, each with unique geographic and linguistic cultures, spiritual beliefs and experiences. Subsequently, research and treatment should reflect such diversity, understanding the legacy of colonial policies that affect the wellbeing of each particular group.

Ultimately, there is an urgent need to supplement and expand community centered research, to involve Indigenous perspectives across various levels, services and programs [2]. Substance use disorders are still predominantly seen and treated from an individual Western perspective, limiting treatment efficacy and relevance

across Indigenous communities [2]. As a first step towards development of culturally relevant and applicable treatment models, efficacy of non-alternative interventions require further investigation. Looking into the future of Indigenous health, we must broaden our perspective beyond our mainstream norm and consider alternative ways of thought.

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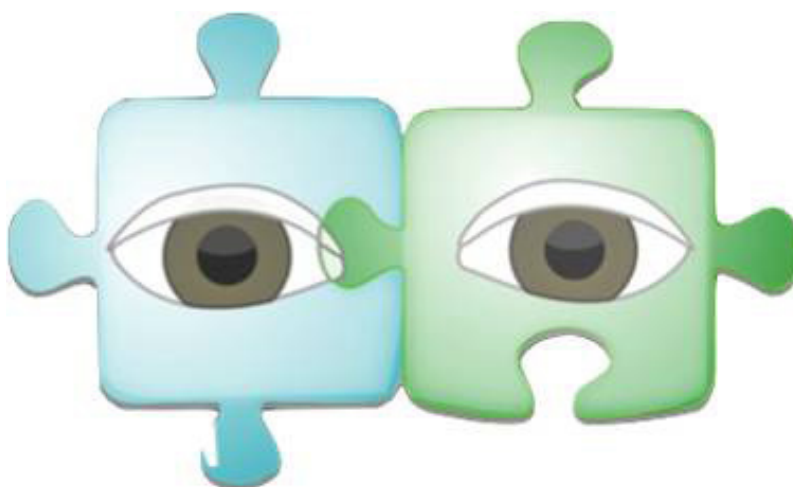
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KINDLY PRESENT

ANDREA DIAZ

As the notion of mindfulness has become more relevant in Western culture, and ever more prevalent in popular media, psychologists have begun to study its effects on the different facets of well-being. A related concept, self-compassion, has similarly been researched in the field of positive psychology. Though similar, mindfulness and self-compassion are two different constructs that can both contribute to psychological well-being. Moreover, studies have shown that the two can work in harmony to bolster the positive effects of the other, as discussed below.

The practice of mindfulness has origins in Buddhist philosophy, which sees suffering as an inevitable universal phenomenon [1]. In the field of psychology, mindfulness has been adopted as the practice of being nonjudgmental and accepting awareness of the present moment [2-4]. It is focused on distancing oneself from the situation at hand to create enough space for open and honest reflection before responding [1]. Mindfulness is a dichotomous construct comprised of realizing that focused attention is being paid to the present moment and noticing what the individual's outlook is on said moment [2].

Self-compassion, by contrast, can be divided into three components: self-kindness, common humanity, and mindfulness [3,5]. Self-kindness refers to adopting an attitude of kindness towards oneself in times of hardship, as opposed to engaging in self-criticism [6]. A shared, common humanity is the notion of

recognizing that one's mistakes and failures are not radically different from the ones consuming others [6], and thus the individual can begin to connect to friends or even strangers as opposed to suffer in isolation [7]. Mindfulness in self-compassion refers to the ability of remaining aware of the painful experience rather than using mechanisms such as avoidance or rumination [3,7].

Extensive research has been done on the effects of mindfulness and self-compassion on many aspects of the individual. Increased mindfulness appears to be highly correlated with increased Psychological Well-Being (PWB) and decreased stress [4]. Similarly, higher self-compassion scores have been associated with less anxiety and depression [5] as well as higher PWB [4]. In this context, PWB is concerned with the components that can lead an individual to lead a self-actualizing life, namely a sense of purpose, autonomy, warm relationships, personal growth, self-acceptance, and environmental mastery [8]. High levels of mindfulness, in association with self-compassion, can thus lead an individual to exhibit more characteristics corresponding to PWB. Since mindfulness appears to be one of the three fundamental aspects of self-compassion, it is reasonable to propose that the two constructs might be individually correlated in some way. However, despite some overlap, there are some important differences between mindfulness and self-compassion that are worth mentioning. Mindfulness focuses on the present moment; this may be positive, negative, or even neutral—the goal is to be keenly aware of what that present moment entails. In contrast, self-compassion focuses mainly on the human aspect of suffering and how individuals relate to that suffering [3]. While mindfulness focuses on one's experience with the

present, be that thoughts or sensations, the central point of self-compassion is the relationship with the self.

Both mindfulness and self-compassion have been found, independently, to be highly correlated with PWB. Baer, Lykins, and Peters found that self-compassion and mindfulness appear to predict PWB with different strengths [3]. Self-compassion was a significantly stronger predictor of eudaemonic living than mindfulness when they looked at the constructs as a whole. By contrast, examining the effects of individual components of each construct yielded equal predictions of wellbeing [3].

However, when the interconnections between mindfulness, self-compassion, and psychological well-being are examined, the literature consistently shows that self-compassion is a robust mediator between mindfulness and PWB [6,7]. Maintaining a present-oriented and nonjudgmental awareness is associated with improved psychological health when the individual shows an attitude of self-kindness, considers one's experiences as part of a common humanity, and is mindfully aware of his or her suffering. The ability to notice human experience with compassion in the present moment lends the individual access to a deeper understanding with clarity, thus allowing the capacity for judgement-free acceptance. Individuals tend to make decisions that facilitate the characteristics of psychological well-being when mindfulness levels are high—this is likely due, at least in part, to self-compassionate behaviours [8]. The openness and acceptance of mindful awareness gives space for compassionate understanding of the self, placing individuals on a path toward meaningful and fulfilling lives.

Given the profound implications of



self-compassion on the mindfulness-happiness relationship, researchers have used a plethora of interventions to harness mindfulness and self-compassion in efforts to increase PWB. These include meditation programs such as the Mindfulness-Based Stress Reduction (MBSR), compassion meditation, and loving-kindness meditation. Collectively, these strategies aim to increase either mindfulness, self-compassion, or both and have all found significant correlations between these constructs and PWB [3,6,9]. More active interventions including mind-body practices such as yoga [4] and Tai Chi [7] have been found to reinforce mindfulness and self-compassion, further improving an individual's psychological well-being.

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THE REAL REASON WHY WE PROCRASTINATE

JEFFREY LYNHAM

Everyone has goals, dreams, and desires. Whether it's going to the gym regularly, learning a new language, or moving to Africa to build a school, we all have an area of our lives we would like to improve. But how come we procrastinate doing the things that we know are important?

You might think that we procrastinate because we don't know how to make changes. But now that we're in the digital age, we have all the information we need readily available. You can find a mentor who has already done what you want to do and follow in their footsteps. You could walk into a bookstore and find dozens of books written by accredited experts that will give you a step-by-step guide on how to accomplish what you want. You could even use Google to find hundreds of articles with instructions on how to get started on your goals.

Even if we know what to do and how to do it, we often don't push ourselves to actually do it because of one simple fact: We never feel like it. For example, someone who has not exercised in years will probably not wake up one morning and feel like going for a jog. The mistake that procrastinators make is that they wait for inspiration to strike. But if you wait until you're "in the mood" to do an unpleasant task, you might be waiting forever. Logically, we know what we should be doing, but our feelings often make our decision. Unfortunately, how we feel in the moment usually does not align with our overall goals.

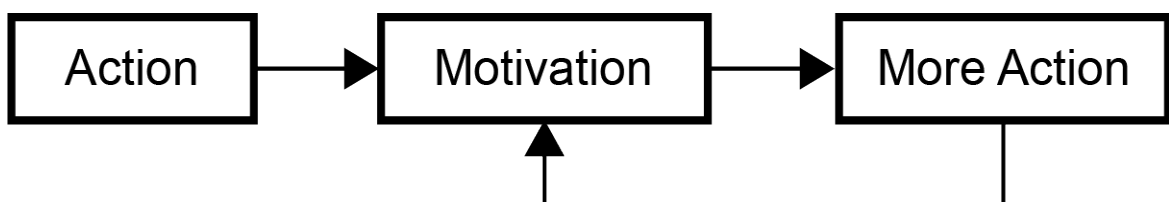
Procrastination is typically caused by this "emotional reasoning." You take your emotions as evidence for the truth and assume that they reflect how things really are. Your logic: "I feel overwhelmed about starting this term paper; writing it will be unbearable." Since your thoughts about the task that you have been procrastinating feel so negative, you conclude that the task will indeed be too difficult to complete.

Most procrastinators try to analyze why they procrastinate. They may wonder why they are so unmotivated or what happened in their childhood to cause them to be so lazy. Different mindsets contribute to procrastination, such as hopelessness, feeling overwhelmed, perfectionism, undervaluing the rewards, fear of failure, fear of success, and fear of disapproval. However, insight into why you procrastinate wouldn't change your life. Even if you find out that your parents placed too much pressure on you as a kid, this will probably not motivate you to do things that are challenging or uncomfortable.

You might be wondering, "So where does motivation come from?" Well, let me ask you another question: What comes first, motivation or action? Many procrastinators think that motivation comes before action, but it doesn't. The most successful people know that it's the other way around. Once you actually do something, you will often feel more motivated.

To overcome procrastination, you must learn how to separate how you feel from how you act. In other words, you may not be able to control your feelings, but you can control your actions. Next time you have the impulse to finally start working on that term paper you said you were going to do last week, you have only a few seconds before you will talk yourself out of doing it. But if you commit yourself to acting immediately, you will disengage yourself from the repetitive loop of emotional reasoning. At first, you will probably feel anxious, or even afraid, but you need to push past those feelings and act anyways.

To help you get started on achieving your dreams and your goals, you can break a complex task into a series of small steps that you can complete in a few minutes each. Focus on taking one step at a time, rather than trying to do everything at once. For example, the first step for writing your term paper may be to just search for some references online. Once you get started, you may feel a sense of accomplishment that will motivate you to do even more than you had initially planned. As you progress, you will often find the task to be much easier than you had anticipated, and you will forget about why you were procrastinating in the first place.



Action

Motivation

More Action

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