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Cannabis legalization

Légalisation du cannabis

David Teplin, PsyD, C. Psych.
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Cannabis legalization

Légalisation du cannabis

Is it time for Canada to get on the legal cannabus?

David Teplin, PsyD, C. Psych, private practice

Worldwide, cannabis is the most commonly used illicit drug, and Canada boasts one of the highest rates of such use.[1] Cannabis use among the Canadian general population has increased over the years, and use among Canadian youth aged 15-24 is almost three times higher than that of adults.[1] It remains to be seen whether those numbers will significantly increase, following legalization of recreational cannabis, and if so, whether there will be a temporary or more permanent spike in use.[2]

Although the Government of Canada has now committed to legalizing cannabis for recreational use by 2018, it remains controversial and both camps are guilty of spreading misinformation. The most common pro-legalization arguments are that cannabis is relatively harmless and that legalizing cannabis for recreational use by adults would reduce criminal justice system involvement and costs, increase tax revenue, reduce the power of criminal drug syndicates, help reverse the failure of current drug policy, and increase business revenue.[3] Conversely, the most common anti-legalization arguments are that legalizing recreational cannabis would harm youth, create legal cannabis businesses that attract crime, lead to cannabis impaired driving, lead to a powerful new industry, and fail to eliminate the illegal market.[3] Those who oppose legalization, sometimes spout over-inflated claims about the dangers ("reefer madness"). As such, youth are often exposed to apparently credible sources of drug knowledge that distort what the science has actually shown.[4]

According to science, legalization has the potential to increase access to cannabis by adolescents, increase the number of those consuming cannabis, and increase the number of those who develop a cannabis use disorder.[4] Currently, the prevalence rate for developing a cannabis dependence is 9%, increasing to 17% for those who first used cannabis in adolescence.[5]

Legalization also has the potential to further decrease perceptions of harm. Overall, perceived harm of cannabis use among the general population has decreased.[5,6] Probable reasons for this include increased media coverage of the medical uses of cannabis, the notion that cannabis is natural, and the perception of cannabis as a soft drug; that is, cannabis use has far fewer adverse health effects than alcohol, or other illicit substances.[5] By normalizing the use of cannabis, legalization may potentially promote attitudes that are more tolerant of cannabis use by adolescents.[4]

While the public health burden of cannabis use is evidently less than that of alcohol, tobacco, or other illicit drugs, cannabis use is still associated with risks for various adverse health consequences.[7] There is compelling data that cannabis use is associated with acute cognitive and psychomotor impairments, adverse effects on adolescent brain development and chronic functioning, psychosis in those with genetic vulnerability, dependence, motor-vehicle accidents, poorer pregnancy outcomes, and pulmonary or bronchial system problems. In large part, these problems occur in those who first use during adolescence, or those who continue to use frequently into adulthood. However, causality has not been clearly established for all such outcomes.[7,9]

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Given the prevalence of misinformation, it is important that legalization policy be able to provide for the delivery of accurate and available science-based knowledge around cannabis use. Lower risk cannabis use guidelines have been empirically developed to improve public health outcomes. The guidelines include avoiding early age initiation of cannabis use (i.e., definitively before age 16), choosing low-potency THC or balanced THC-to-CBD–ratio cannabis products, avoiding combusted cannabis inhalation and giving preference to non-smoking use methods, avoiding daily or near-daily use of cannabis, abstaining from cannabis-impaired driving, and avoiding cannabis use altogether if at higher risk for cannabis use–related health problems.[7] To best inform public education, legalization policy should also put in place a long-term, adaptable research plan that addresses a wide range of potential direct and indirect public health risks and benefits.[10]

Finally, policy-makers should give serious and thoughtful consideration to the kinds of organizations or agencies that are allowed to provide cannabis, the regulations under which those organizations or agencies operate, the nature of cannabis products that can be distributed, taxes, and pricing. Such considerations can have profound consequences for health and social wellbeing, as well as for job creation and government revenue.[11] As the full consequences of legalization will likely take a generation or more to become apparent, upcoming legalization of recreational marijuana is more likely to be a design undertaking rather than an evaluative one.[11]

In light of the Government of Canada's commitment to the legalization of cannabis, the Canadian Psychological Association set up a task force to look at the potential effects of legalization on the health and wellbeing of Canadians. In this regard, the task force looked at what the current science says about the potential harms of non-medical cannabis use. This included the association to mental health, cognitive and psycho-motor functioning, social harms, as well as evidence-based psychological treatments for youth, emerging adults, and adult populations. The task force also made recommendations about areas of further research to address current gaps and urged the government to fund the promotion of scientifically-based health education, further scientific research, as well as evidence-based treatment from tax revenues generated from legalized cannabis (see report on page 24).

In this special edition dedicated to the legalization of cannabis, several Canadian educators, researchers, and clinicians address various issues related to cannabis. First, Smith addresses what science says around the detrimental effects that the early onset of cannabis use can have on adolescent brain development and how this can, in turn, impact the workplace, academia, relationships, and life in general.

Bourque discusses the temporal interplay between cannabis use and subclinical psychotic experiences when they co-occur in early adolescence. In particular, she addresses whether impairments in cognitive development due to cannabis misuse exacerbate psychotic experiences, and whether such use induces symptoms of anxiety and/or depression, which then lead to psychotic experiences.

Leadbeater, Thompson, Ames, Merrin, Sukhawathanakul and Sturgess address cannabis use in the transition from adolescence to young adulthood, the differences in patterns and frequency of use during this transition, and what policy-makers need to consider with respect to this particular population.

Fleming and McKiernan share the thoughts and perceptions of Canadian youth on cannabis-related topics, including the approaches they feel could help reduce potential harms from cannabis use. They also highlight the importance of talking to youth and finding out what they need to live healthier and happier lives.

Daniels discusses perceptions and attitudes toward prenatal cannabis use and raises the issue of using or considering using cannabis, medically (not recreational or due to dependence), to treat serious prenatal conditions that threaten the health of both mother and child, the most common of which is Hyperemesis gravidarum.

Goldstein and Thompson highlight the importance for understanding and preventing problematic cannabis use in post-secondary students and the unique challenges for college and university campuses that have little guidance regarding what works for minimizing cannabis-related harms.

Finally, Thiessen, Crosby, and Walsh explore preliminary evidence that increased access to cannabis may improve health and safety by serving as a substitute for potentially more harmful psychoactive substances, such as alcohol, illicit substances, or prescription medication. They also address preliminary evidence that cannabis may be effective for reducing problematic use of alcohol and other drugs, and may be a consideration as a substitute therapy for such problematic use.

While much is known about cannabis use, there remain major gaps in the research with regards to the potential harms and consequences of recreational cannabis use, including what is causative and what is affected by confounding factors. This includes both chronic heavy use, as well as moderate use, over time. Psychologists have, and must continue to play an instrumental role in conducting such research, promoting accurate health education, and providing evidence-based psychological treatment to help minimize potential harms of cannabis use.

Dr. David Teplin is a clinical psychologist in private practice in Richmond Hill, Ontario and an adjunct professor in the Doctor of Clinical Psychology program at Medaille College in Buffalo, New York. He is on the Editorial Review Board of several peer-reviewed clinical journals. He is also the founding member and past Chair of the CPA's Section on Addiction Psychology and acted as Chair of the CPA's Task Force on the Legalization of Cannabis.

For a complete list of references, visit www.cpa.ca/psynopsis

Légalisation du cannabis : le Canada est-il prêt à se lancer dans l'aventure?

David Teplin, Psy. D, C. Psych, pratique privée

Dans le monde entier, le cannabis est la drogue illicite la plus couramment utilisée, et le Canada enregistre l'un des taux les plus élevés de consommation de cannabis[1]. L'usage du cannabis dans la population générale du Canada a augmenté au fil des années, et, chez les jeunes Canadiens âgés de 15 à 24 ans, la consommation de cannabis est près de trois fois plus élevée que chez les adultes[1]. Il reste à voir si ces chiffres augmenteront significativement à la suite de la légalisation du cannabis récréatif, et le cas échéant, si la montée de la consommation de cannabis sera passagère ou permanente[2].

Bien que le gouvernement du Canada se soit engagé à légaliser l'usage du cannabis à des fins récréatives en 2018, sa décision demeure controversée, et les deux camps sont coupables de répandre de fausses informations. Les tenants de la légalisation du cannabis soutiennent, tout particulièrement, que le cannabis est relativement sans danger et que la légalisation du cannabis consommé à des fins récréatives par des adultes permettrait de réduire le recours au système de justice pénale et les coûts qui lui sont associés, augmenterait les recettes fiscales, réduirait le pouvoir des organisations criminelles de trafic de drogue, contribuerait à inverser l'échec de la politique antidrogue actuelle et augmenterait le revenu des entreprises[3]. En revanche, les opposants de la légalisation du cannabis soutiennent en général que la légalisation du cannabis à des fins récréatives risque de causer du tort aux jeunes, de créer des entreprises légales de vente de cannabis qui attireront la criminalité, de mener à la conduite avec les facultés affaiblies par le cannabis et de conduire à une nouvelle industrie puissante, sans parvenir à éliminer le marché illégal[3]. En outre, certaines personnes qui s'opposent à la légalisation ont tendance à faire des affirmations exagérées et alarmistes au sujet des dangers du cannabis. Ainsi, les jeunes sont souvent exposés à des sources d'information sur la drogue, crédibles en apparence, qui faussent ce que la science montre dans les faits[4].

Selon la science, la légalisation est susceptible d'accroître l'accès au cannabis chez les adolescents, et d'augmenter le nombre de personnes qui consomment du cannabis et de personnes qui développent un trouble lié à l'usage du cannabis[4]. En ce moment, le taux de prévalence du développement de la dépendance au cannabis est de 9 %, et il passe à 17 % chez les personnes qui ont consommé pour la première fois du cannabis à l'adolescence[5].

La légalisation risque également de donner aux gens l'impression que le cannabis n'est pas dangereux. Dans l'ensemble, la perception à l'égard du cannabis dans la population en général a changé, les dommages associés à son usage étant considérés comme moins graves[5,6]. Cela s'explique probablement par l'augmentation de la couverture médiatique de l'usage thérapeutique du cannabis, l'idée que le cannabis est naturel et le fait que le cannabis est perçu comme étant une drogue douce, c'est-à-dire une drogue dont la consommation engendre beaucoup moins d'effets néfastes sur la santé que l'alcool ou d'autres substances illicites[5]. En normalisant l'usage du cannabis, la légalisation risque de promouvoir des attitudes qui encouragent la tolérance quant à la consommation de cannabis par les adolescents[4].

Bien que le fardeau de l'usage du cannabis pour la santé publique soit manifestement moins lourd que celui de l'alcool, du tabac ou d'autres drogues illicites, la consommation de cannabis reste associée à des risques de survenue de différents effets néfastes sur la santé[7]. Nous disposons de données probantes montrant que l'usage du cannabis est associé à des déficiences cognitives et psychomotrices aiguës, à des effets néfastes sur le développement du cerveau et le fonctionnement chronique de la fonction cognitive des adolescents, à la psychose chez les personnes qui ont une vulnérabilité génétique à ce trouble, à la dépendance, aux accidents de la route, à des issues de grossesse défavorables et à des problèmes pulmonaires ou bronchiques. En grande partie, ces problèmes se produisent chez les personnes qui ont consommé du cannabis pour la première fois à l'adolescence ou chez celles qui continuent d'en consommer fréquemment à l'âge adulte. Cependant, la causalité entre l'ensemble de ces effets et l'usage du cannabis n'est pas clairement établie[7,9].

Compte tenu de la prévalence de la désinformation, il est important que la politique de légalisation soit en mesure d'assurer la diffusion de connaissances scientifiques exactes et accessibles sur l'usage du cannabis. Des lignes directrices sur la consommation à faible risque ont été élaborées à l'aide de données empiriques dans le but d'améliorer les résultats sur la santé de la population. Les lignes directrices sont, notamment, retarder l'âge de la première consommation de cannabis (c.-à-d., jamais avant l'âge de 16 ans), choisir des produits du cannabis à faible teneur en THC ou ayant un ratio de THC-CBD équilibré, éviter d'inhaler la fumée produite par la combustion de cannabis et opter pour des modes de consommation sans combustion, éviter de consommer du cannabis tous les jours ou presque tous les jours, s'abstenir de conduire sous l'effet du Canada et, pour les personnes qui risquent de développer des problèmes de santé connexes liés à l'usage du cannabis, s'abstenir complètement d'en consommer[7]. Pour orienter de manière adéquate la sensibilisation

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du public, la politique de légalisation devrait également mettre en place un plan de recherche à long terme adaptable, qui étudie un large éventail de risques et d'avantages potentiels directs et indirects pour la santé publique[10].

Enfin, les décideurs devraient examiner sérieusement et soigneusement les types d'organisations ou d'organismes qui sont autorisés à fournir du cannabis, les règlements en vertu desquels ces organisations ou ces organismes fonctionnent, la nature des produits du cannabis qui peuvent être distribués, les taxes et les prix. Ces considérations peuvent avoir de graves conséquences pour la santé et le bien-être de la société, ainsi que pour la création d'emploi et les revenus du gouvernement[11]. Comme l'ensemble des conséquences de la légalisation prendront probablement une génération ou plus pour se manifester, la légalisation prochaine de la marijuana à des fins récréatives sera probablement davantage un travail de conception qu'un travail d'évaluation[11].

À la lumière de l'engagement du gouvernement du Canada en matière de légalisation du cannabis, la Société canadienne de psychologie a mis sur pied un groupe de travail chargé d'examiner les effets potentiels de la légalisation sur la santé et le bien-être des Canadiens. À cet égard, le groupe de travail a examiné ce que dit la science actuelle sur les dangers potentiels de l'usage non thérapeutique du cannabis. Il s'agit, notamment, de l'association avec la santé mentale, le fonctionnement cognitif et psychomoteur et les problèmes sociaux, ainsi que les traitements psychologiques fondés sur des données probantes à l'intention des jeunes, des jeunes adultes et des adultes. Le groupe de travail a également formulé des recommandations sur les champs de recherche à explorer pour combler les lacunes actuelles et exhorte le gouvernement à financer, à partir des recettes fiscales générées par la légalisation du cannabis, la promotion de l'éducation sanitaire basée sur des données scientifiques, la recherche scientifique ainsi que les traitements fondés sur des données probantes (voir le rapport en anglais à la page 24).

Dans le présent numéro spécial consacré à la légalisation du cannabis, plusieurs éducateurs, chercheurs et cliniciens canadiens abordent différentes questions liées au cannabis. Tout d'abord, Smith se penche sur ce que dit la science au sujet des effets nocifs possibles de l'usage précoce du cannabis sur le développement du cerveau de l'adolescent, et explique les répercussions potentielles que ces effets peuvent avoir, à leur tour, sur le milieu de travail, le milieu universitaire, les relations et la vie en général.

Bourque examine la relation temporelle entre l'usage du cannabis et les expériences psychotiques subcliniques quand ceux-ci sont concomitants au début de l'adolescence. En particulier, elle tente de déterminer si l'altération du développement cognitif causée par l'abus de cannabis exacerbe les expériences psychotiques, et si cette consommation abusive induit des symptômes d'anxiété ou de dépression, qui mènent ensuite à des expériences psychotiques.

Leadbeater, Thompson, Ames, Merrin, Sukhawathanakul et Sturgess se penchent sur l'usage du cannabis au cours de la transition de l'adolescence à l'âge adulte, les différences par rapport aux habitudes de consommation et la fréquence de l'usage du cannabis pendant cette transition; ils abordent également ce que les décideurs devraient prendre en considération lorsqu'il s'agit de cette population.

Fleming et McKiernan font part des réflexions et des perceptions des jeunes au sujet du cannabis, y compris les approches qui sont susceptibles de contribuer à réduire les effets nocifs potentiels associés à la consommation de cannabis. Elles soulignent également l'importance de parler aux jeunes et de trouver ce dont ils ont besoin pour mener une vie saine et heureuse.

Daniels examine les perceptions et les attitudes à l'égard de l'usage du cannabis pendant la grossesse et soulève la question de l'usage ou de la pertinence du cannabis thérapeutique (c'est-à-dire une consommation non récréative ou entraînée par la dépendance) pour traiter des problèmes prénataux graves qui menacent la santé de la mère et de l'enfant, dont le plus courant est l'hyperemesis gravidarum.

Goldstein et Thompson soulignent l'importance de comprendre et de prévenir la consommation problématique de cannabis chez les étudiants postsecondaires et les défis propres aux collèges et aux campus universitaires, qui disposent de peu d'indications sur les méthodes et les mesures qui fonctionnent pour réduire les méfaits liés au cannabis.

Enfin, Thiessen, Crosby et Walsh explorent des données préliminaires, selon lesquelles un plus grand accès au cannabis améliorerait la santé et la sécurité, car le cannabis remplacerait ainsi les substances psychoactives potentiellement plus dangereuses, comme l'alcool, les substances illicites ou les médicaments d'ordonnance. Les auteurs se penchent aussi sur d'autres éléments probants préliminaires, selon lesquels le cannabis pourrait être efficace pour réduire l'usage problématique d'alcool et d'autres drogues, et pourrait être envisagé comme thérapie de remplacement pour traiter cet usage problématique.

Bien que l'on en sache beaucoup sur l'usage du cannabis, il subsiste des lacunes importantes en matière de recherche sur les inconvénients et les conséquences de la consommation de cannabis récréatif; à cette fin, il faut notamment déterminer les facteurs étiologiques et ce qui est affecté par les facteurs de confusion. Cela comprend à la fois la consommation excessive chronique et la consommation modérée, au fil du temps. Les psychologues doivent jouer, et doivent continuer de jouer, un rôle déterminant dans la réalisation de ces recherches, en faisant la promotion d'une éducation sanitaire basée sur des informations précises et en fournissant des traitements psychologiques fondés sur des données probantes pour aider à réduire les dangers potentiels de l'usage du cannabis.

Le Dr David Teplin est un psychologue clinicien qui exerce en pratique privée à Richmond Hill, en Ontario. Il est professeur auxiliaire au programme de doctorat en psychologie clinique du Medaille College, à Buffalo, dans l'État de New York. Il fait partie du comité de lecture de plusieurs revues de psychologie clinique. Il est également le membre fondateur et l'ancien président de la Section de psychologie des toxicomanies de la SCP et a été président du groupe de travail de la SCP sur la légalisation du cannabis.

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The teenage brain is under construction:

What role does cannabis play?

Andra Smith, PhD, Associate Professor of Psychology, University of Ottawa

Recreational cannabis is soon to become legal in Canada. However, many myths about the substance remain, and it is imperative that the public be made aware of some of the possible negative outcomes of cannabis use, particularly on the developing brain. Strong research indicates that early onset use of cannabis can be detrimental to brain development.[1,2] This includes commandeering the brain as it undergoes critical stages of growth, particularly in the prefrontal cortex. Optimized structure and function is required in this region to succeed in the workplace, academia, relationships and life in general.

Two critical stages of prefrontal cortex development occur during the teen years - pruning and myelination.[3] The adage "use it or lose it" is fitting here, as those neurons that are just taking up space are minimized, while at the same time, those neurons that are useful and required for higher order cognition (e.g. planning, organizing behaviour, goal directed activity, impulse control, etc.) are being enhanced. This occurs through myelination (the production of an insulating fatty layer around the axons), which helps speed up connectivity between neurons and ultimately maximizes efficiency.[4]

Pruning and myelination of the prefrontal cortex is not complete until young adulthood, in the early 20s. It is also interesting to note that while striatal development (associated with reactivity to motivational stimuli) occurs in a curvilinear fashion during adolescence, prefrontal development occurs in a linear fashion over the course of the teenage years. Thus, amid a developmental window in which motivational reactivity outpaces cognitive control, adolescents may be particularly prone to making high-risk choices, valuing immediate reward over long-term considerations. Adding cannabis use to this naturally tenuous period of time in which risk taking behaviour is common could lead to poor decision making, such as driving while under the influence of cannabis, engaging in unprotected sexual activity, and increased use of other drugs.[5]

This sculpting or streamlining of the prefrontal cortex and its connections with the rest of the brain throughout adolescence is assisted by the endocannabinoid system.[6] Some proponents of cannabis argue that the existence of this endogenous cannabinoid system means the brain must have developed to be ready for cannabis use. This is, in fact, faulty rationale. The brain does have many cannabinoid receptors that are widespread throughout the brain and that use two neurotransmitters that resemble cannabinoids.[6] However, this is a crucial system for regulating many cellular processes responsible for the maturation of the brain, in particular the brain networks involved in controlling motor coordination, judgement, reward, memory, appetite, motivation, learning and memory consolidation.[5,6] When external cannabis (THC – delta-9-tetrahydrocannabinol) is consumed and taken up by the brain, it targets the cannabinoid receptors in much higher quantities than endogenous cannabinoids, effectively flooding the system to the point that it no longer works efficiently. This "hijacking" of the endocannabinoid system wreaks havoc on many complex neurophysiological processes, disrupting the regulatory role the system plays, and inducing neurotoxic changes in several brain regions.[6]

Despite the evidence that cannabis can harm the brain, particularly when it is under construction, there is a normalization of the use of cannabis in today's society. It is therefore clear that educational campaigns are needed to ensure teens are making informed decisions about whether or not to use cannabis. Far too many teens that use cannabis regularly become apathetic or amotivated and perform poorly, weakening their foundation for future life successes. Cannabis is not a benign substance and it has significant long term impacts on productivity and quality of life. We have a responsibility to our kids and to society as a whole. It may be a cliché, but our kids are the future after all.

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Cannabis use and psychotic experiences in Canadian high school students

Josiane Bourque, PhD Candidate in Biomedical Sciences, University of Montreal

With the recent wave of decriminalisation and legalisation of recreational cannabis occurring in the Western world, there has been a resurgence of research on the mental health consequences of cannabis use in the past few years. Thanks to this research, the relationship between cannabis and psychosis is now well established.

The association was first noted in the scientific literature more than a hundred years ago when clinicians recognized that the use of cannabis was related to a higher prevalence of mental illness, such as insanity. Studies from the last three decades have provided substantial evidence of a 2- to 3-fold increased risk of a first-episode psychosis in cannabis users.[1] The magnitude of this risk seems to be dose-dependent, and influenced by the age of onset of cannabis use, as well as premorbid psychosis vulnerability. Altogether, these findings support the hypothesis that cannabis use precedes, and is part of, the causal pathway to psychosis. This raises a further question... By which processes does cannabis use induce psychotic symptoms?

Fortunately, the recent restructuring of psychotic disorders towards a psychosis continuum, where subclinical psychotic experiences may also be observed in the general population,[2] allows us to deepen our investigations into the relationship between cannabis and psychosis. Subclinical psychotic experiences are defined as perceptual abnormalities (mild auditory or visual hallucinatory experiences), delusional thoughts (e.g., the feeling that a separate part of one's personality is taking control of one's actions, being under the impression that the television is sending you personal messages), feelings of being spied on, and/or feelings of being disconnected from everyone else. Although they may be infrequent and thus benign in the majority of cases, when reported continuously, year after year, these experiences increase the likelihood of experiencing a first psychotic episode or another psychiatric condition.[3] Epidemiological studies have shown that such experiences can be observed as early as late childhood and early adolescence.

Consequently, my supervisors and I were interested in investigating the shorter-term temporal interplay between cannabis use and the advent of subclinical psychotic experiences when these two phenomena co-occur in early adolescence. Most importantly, we explored two different underlying mechanisms of this relationship. First, we tested whether impairments in cognitive development due to cannabis misuse may exacerbate psychotic experiences. Second, considering the important comorbidity between anxiety and depression symptoms with psychotic experiences, we tested whether cannabis use induces anxiety and/or depression symptoms, which in turn lead to psychotic experiences during adolescence.

As part of my doctoral thesis, I was implicated in a follow-up study involving approximately 4,000 adolescents recruited at 13 years old from 31 high schools in the Greater Montreal area. This ongoing large-scale study, the Co-Venture Trial,* was instigated by Dr. Patricia Conrod, my PhD supervisor. This cohort of students recruited in September 2012 while in Grade 7 is re-assessed on a yearly basis until they graduate high school. Every year students fill out confidential computerized questionnaires that assess both substance use and the presence of psychiatric symptoms, namely psychotic experiences, anxiety, and depression symptoms. The teens also complete cognitive tasks to assess whether the relationship between cannabis use and psychotic experiences may be explained by the effects of substance use on developing cognitive abilities.

We first demonstrated that within this community-based cohort, a small group of adolescents (8%) reported persistent psychotic experiences throughout high school - a group considered of clinical importance. When investigating the impact of cannabis use on the reports of psychotic experiences throughout adolescence we observed that the frequency of both cannabis use and psychotic experiences increase in parallel. Indeed, we found that going from occasional use of cannabis to weekly or daily use increases the risk of experiencing persistent psychotic experiences by 159% in adolescents.

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* http://co-venture.ca/en/

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Using cannabis in the transition to young adulthood:

Recognizing and reducing risks

Bonnie Leadbeater, PhD, Professor of Psychology, University of Victoria; Kara Thompson, PhD, Assistant Professor of Psychology, St. Francis Xavier University; Megan Ames, PhD, Postdoctoral Fellow, University of Victoria; Gabriel J. Merrin, PhD, Postdoctoral Fellow, University of Victoria; Paweena Sukhawathanakul, PhD, Postdoctoral Fellow, University of Manitoba; and, Clea Sturgess, Master's student, University of Victoria

Success in the developmental tasks of young adulthood, defined as ages 18 to 29, creates the foundation for life-long health, lifestyle choices, and economic well-being. Developmental tasks of this phase include building the capacity for financial and residential independence through post-secondary education and job training, and establishing stable sources of support from parents, romantic partners, and peers. These are the social determinants of life-long health.

Plans for the legalization and regulation of cannabis in Canada focus on adolescents as a sub-group of considerable concern – this is not unwarranted. According to a 2013 UNICEF survey, Canadian youth ages 11 to 15 are the highest users of cannabis among developed countries with 28% reporting using cannabis in the last year.[1] Legislators aspire to reduce these numbers by setting 18 as a minimum age for recreational use and by providing criminal penalties for people who sell or give cannabis to minors, create cannabis products that appeal to children or adolescents, or engage children or adolescents in the distribution of cannabis to youth.[2]

At the same time, new legislation will allow for growth in the number of neighbourhood dispensaries, as well as ownership of cannabis plants for private use by any adult who is age 19 or older. Although statistics for young adults are often grouped together with older adults, research suggests use peaks between ages 21 and 23.[3] Unfortunately, our understanding of how Canadian youth may be impacted by the legalization and regulation of cannabis is limited by a lack of Canadian longitudinal research, and the absence of statistical monitoring of cannabis use and harms during this key period of development.

Research clearly shows that youth who start using cannabis before age 15 and become chronic users of cannabis (about 10% of the population of users) suffer the most negative consequences and are most likely to become long-term users. Early risks for chronic use include co-occurring externalizing, mental health, and academic problems.[3] We also know that cannabis use, alcohol use, and binge drinking frequently co-occur, that early onset and chronic polysubstance use in adolescence predict substance use problems and dependency

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in young adulthood, and that chronic use is associated with poorer academic and economic outcomes in young adulthood.[3,4] Other patterns of cannabis use (e.g., onset after age 18, occasional use, increasing use) are more common than chronic use across the transition to young adulthood;[3] however, we know less about the risks associated with these more common patterns of use. Further research on the various patterns of cannabis use is needed to help distinguish between problematic and non-problematic use, identify subgroups of young people who are at increased risk of experiencing negative consequences from their use, and inform prevention efforts.

Our own research on cannabis use in the transition to young adulthood is based on data collected over a decade (2003 to 2013) from a randomly recruited sample of 662 youth from British Columbia.[5,6] We used Latent Class Growth Analysis (LCGA) to detect group differences in the frequency of their cannabis use. Five use patterns were found over time: "*Abstainers*" (29%) who never used cannabis; "*Occasional Users*" (27%) who started as abstainers in adolescence and increased use up to a "few times a year" after age 17; "*Decreasers*" (14%) who used cannabis a few times per month at age 15 and decreased to less than a few times per year by age 23; "*Increasers*" (20%) who used a few times per year by age 15 and increased rapidly, peaking at more than once per week at about age 22 and declining to a few times per month by age 28; and "*Chronic Users*" (11%) who used cannabis more than once per week across all ages.

Early findings indicate that the higher risk groups (Increasers and Chronic Users) had more externalizing problems both as adolescents and as young adults than the Abstainers.[5] Decreasers (i.e., high levels of use in adolescence only) had more depressive symptoms and conduct problems in adolescence but not in young adulthood. Occasional Users showed higher levels of depressive symptoms and externalizing problems by young adulthood than Decreasers. Rates of co-use of alcohol (i.e., binge drinking) with cannabis use and driving while using cannabis were high across all youth who used cannabis.[6] Our next steps are to investigate the associations between these patterns of cannabis use and young adult outcomes in physical health, educational and occupational success, and quality of romantic relationships.

The following are recommendations to policy makers for legalization of cannabis use in Canada to reduce harms across the transition to young adulthood:

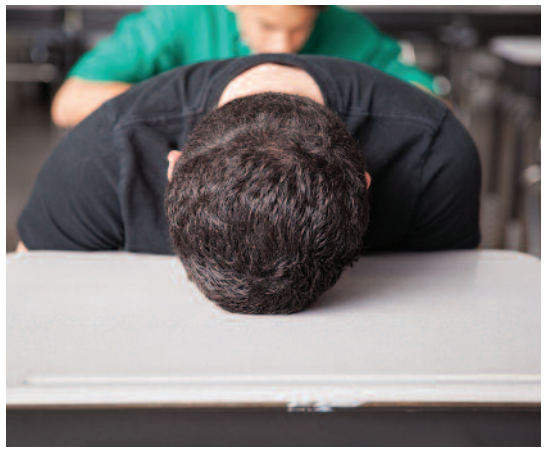
- Expect differences in patterns of use of cannabis among adolescents and promote more research and education on recreational use.
- Expect an increase in cannabis acceptance, use, disorders, and dependencies in adolescents and young adults.
- Monitor statistics for use and harm in young adults (ages 19 to 25) separately from older adults.
- Make age 21 the legal age for marijuana use in all provinces to disentangle the legal age of substance use with the time when most young adults are obtaining a driver's license.
- Take account of co-use of alcohol and co-morbid externalizing problems in approaches to education, harm reduction, early identification, and treatment of cannabis-related problems.
- Widely disseminate accurate information to youth so they can make informed choices about their cannabis use.

For a complete list of references, visit www.cpa.ca/psynopsis

Cannabis use and psychotic experiences

in Canadian high school students

Continued from page 9



When looking at the underlying mechanisms underpinning the relationship between cannabis and psychotic experiences, we showed that the cognitive impairment hypothesis was only partially confirmed. Among the different cognitive abilities evaluated, the development of inhibitory control was the only cognitive function negatively affected by an increase in cannabis use. Inhibitory control is the capacity to withhold or inhibit automatic behaviours in favour of a more contextually appropriate behaviour. Our findings demonstrate that while cannabis use is associated with a number of cognitive and mental health symptoms, only an increase in depressive symptoms – such as negative thoughts and low mood – could explain the relationship between increasing cannabis use and persistent psychotic experiences in youth.[4]

What's next?

While preventing adolescent cannabis use should be the aim of all drug strategies, targeted preventive approaches are particularly needed to delay and prevent cannabis use in young people at risk of psychosis. The clinical implications of these results also highlight the importance of addressing depressive symptoms in programs aimed at preventing persistent psychotic experiences in at-risk youth.

For a complete list of references, visit www.cpa.ca/psynopsis

What Canadian youth want to know about cannabis:

Implications for prevention

Katie Fleming, MA, Knowledge Broker, Canadian Centre on Substance Use and Addiction and Anna McKiernan, MA, Research and Policy Analyst, Canadian Centre on Substance Use and Addiction

As Canada plans to legalize, regulate and restrict access to cannabis, Canadians are beginning to speculate about how this policy shift will affect one of our most vulnerable populations: youth. There is good reason for concern about this population; our youth have one of the highest rates of cannabis use worldwide.[1] According to the Canadian Tobacco, Alcohol and Drugs Survey (CTADS), 20.6% of youth aged 15–19 reported using cannabis in the previous 12 months in 2015. We also know that youth are unclear on the effects and harms of cannabis, which could put them at an increased risk for use.[2] This is concerning as brain development and mental health can be affected if cannabis use, particularly frequent use, begins in early adolescence.[3] This period is therefore crucial for youth to discuss and reflect upon why they might begin, continue or abstain from cannabis use.

To prepare for the regulation of non-medical cannabis use, we need to understand youth's perceptions about cannabis harms and tune into the conversations about cannabis that are taking place every day in schools, at home and in community centres. Understanding these perceptions helps us uncover why youth are using cannabis and shape prevention efforts to reduce harms. To do this, the Canadian Centre on Substance Use and Addiction (CCSA), conducted focus groups with 77 youth ages 14–19 from across Canada. We asked youth about their thoughts and perceptions on cannabis-related topics.[4] What we uncovered provided insights for those who work directly with youth.

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What We Learned

Youth are looking for cannabis information; they are conducting their own research online and through conversations, but are confused by inconsistent messages.[4] They know cannabis use has benefits, as it is legal for medical purposes, and feel that many conversations ignore this perspective. They strongly believe that conversations about cannabis should avoid a "preachy" approach and avoid exaggerations or fear tactics such as "you'll die if you smoke cannabis."

During our focus groups, the participating young people said they really enjoyed talking to us about cannabis and sharing their views and opinions on the substance–something they said they rarely get to do. This finding is consistent with other qualitative research,[5] indicating that youth have few opportunities to discuss the complexities of their decision making with adults in a supportive, unbiased environment.[6]

What We Can Do

While young people thought it was difficult to prevent cannabis use among their peers, they felt some approaches could help reduce the harms due to use. They provided the following recommendations for future prevention efforts:

- Someone with cannabis use experience (negative, positive or both) should deliver prevention messaging.
- Youth need better resources to help manage stress. One of the main reasons participants in the focus groups reported using cannabis was to "escape reality" and deal with negative emotions. They felt that more should be done to help their age group deal with such feelings.
- Give both sides of the story: Stop the "just say no" prevention approach and instead provide youth with unbiased, evidence-informed information on both the positives and negatives of cannabis use.
- Prevention efforts should use a harm-reduction approach. Many participants suggested teaching youth harm reduction strategies in the form of "low risk" guidelines for cannabis use.
- Begin efforts earlier with consistent follow up - drug education and related information should begin before youth enter high school and then be repeated consistently throughout their education, whether through health class, driver education, assemblies or guest speakers.
- Provide more and different information. Youth said there are a number of topics they feel are not covered sufficiently by current prevention efforts (e.g., drug-impaired driving, effects on the brain and strategies to quit cannabis use).

We know that when youth are able to engage in meaningful discussions about cannabis, they are more informed, which can support them in their decision making.[6] An innovative method of cannabis education that supports discussion about decision making and cannabis use, can generate a more comprehensive and effective conversation about a youth's decisions to use cannabis. With cannabis legalization approaching, it is increasingly important we talk to youth and find out what they need to live healthier and happier lives.

For a complete list of references, visit www.cpa.ca/psynopsis

Prenatal cannabis use
The Elephant in the delivery room

Sarah Daniels, Master's student,
University of British Columbia

Soaked in sweat and panting with exertion, Kate* had just given birth to her first baby boy when he was rushed from the room before she even had a chance to see his face. Soon, she found herself being airlifted to a major centre while doctors struggled to get oxygen to her newborn's vital organs. He was suffering from persistent pulmonary hypertension of the newborn (PPHN). While the medical staff bustled around in a thinly-veiled panic, Kate couldn't shake one thought from her mind. Tearfully, she looked at the doctor and begged him to answer, "Could this be happening because I smoked weed?"

The current literature on prenatal cannabis use is slim, vague, and conflicting at best. While some studies find correlations with lower birth weight and impacts on future executive function,[1,2] meta-analyses have found that after controlling for confounding factors, cannabis does not appear to be an independent risk factor for adverse neonatal outcomes.[3,4] Regardless, when it comes to pregnancy the general consensus seems to be "better safe than sorry," and to simply avoid possible risks completely. So why do pregnant women like Kate continue to use cannabis?

Since beginning a study on perceptions and attitudes towards prenatal cannabis use, my inbox has been inundated with emails from mothers searching for laudable research on cannabis use during pregnancy, striving to make the best possible decision for themselves and their babies. Invariably, the mothers are using or considering using cannabis not recreationally or because they are struggling with dependence, but rather, to medicate serious conditions that threaten the health of both mother and child, the most common of which is Hyperemesis gravidarum (HG).

HG is a severe and potentially dangerous form of morning sickness characterized by nonstop vomiting and nausea leading to weight loss and dehydration. Effective, safe, prescribed medications used to treat HG and severe morning sickness are sorely lacking, so before its prohibition, cannabis was widely used to medicate HG, as well as multiple other conditions related to gestation and

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women's health.[5,6] After trying every possible medication and home remedy offered by her doctor, Kate was still losing weight, becoming dangerously dehydrated, and experiencing unbearable nausea. Desperate, she apprehensively tried cannabis with the support of her partner, and immediately felt relief from her symptoms. Throughout the duration of her pregnancy, she was only able to keep food down and provide nutrition for herself and her developing child with the use of cannabis.

Kate is not alone in her prenatal use of cannabis; however, stigma often prevents pregnant women from discussing the practice with their healthcare providers, friends, and family. A survey of women's access to information about cannabis use in pregnancy found that they were generally unable to obtain useful information from their healthcare provider and used the Internet as their primary source instead.[7] To avoid misinformation, as health care professionals, we need to open the door to honest discussions around prenatal cannabis use, namely:

- Is using cannabis during pregnancy more harmful than experiencing HG?
- How do the harms of experiencing severe anxiety and depression, or the side effects of some drugs used to treat these conditions, compare to the potential effects of medicating these conditions with cannabis?
- What are the effects of extracts such as cannabidiol (CBD) on the health of the mother and child?

- Why can we not subject the use of cannabis to a rational cost-benefit appraisal, like any other drug?

Cannabis is currently the number one reported non-pharmaceutical drug used during pregnancy, and unreported rates are undoubtedly much higher.[8,9] Efforts to eliminate the stigma mothers experience will provide them with better access to care and encourage pertinent conversations with their healthcare practitioners. For the sake of the health of both mother and child, it's time to take a hard look at the big, green, leafy elephant in the delivery room and move towards informed, rational discussions around prenatal cannabis use.

* Name changed to protect privacy.

For a complete list of references, visit www.cpa.ca/psynopsis

Cannabis on campus: Addressing legalization in the post-secondary context

Abby L. Goldstein, PhD, C. Psych., Associate Professor of Applied Psychology and Human Development and Canada Research Chair, Ontario Institute for Studies in Education, University of Toronto, and Kara Thompson, PhD, Assistant Professor of Psychology, St. Francis Xavier University

As the Canadian government prepares for the legalization of cannabis, youth and young adults have been identified as a particularly vulnerable group in need of a public health approach that will protect their mental health and well-being. In consideration of this need, the post-secondary context represents an important arena for understanding and preventing problematic cannabis use for several reasons. First, cannabis is the second most commonly used substance among university and college students, with 17.9% of students reporting cannabis use at least once in the past 30 days.[1] Second, the sheer size of the post-secondary population (2,054,943 in 2014/15)[2] makes it an ideal context for disseminating public health messages to youth and young adults. Third, the minimum age for cannabis use will likely correspond with provincial drinking ages (i.e., 18-19 years old), which most students reach while attending college or university. Finally, the post-secondary context overlaps with 'emerging adulthood' a critical developmental stage marked by significant psychological, social, and cognitive transition. Many students are away from home for the first time, exploring their identities without parental supervision, and facing instability in their careers and relationships, setting the stage for experimentation and possible escalation of cannabis use.

The legalization of cannabis use will present unique challenges for campus administration, faculty, and staff who have little guidance regarding 'what works' for minimizing cannabis-related harms. Although the legalization of cannabis in several U.S. states may serve as a template for establishing policies and practices outside the campus context, U.S post-secondary institutions are mandated to follow federal legislation and simply ban cannabis use on campus, regardless of its legal status in that state.

Impacts of cannabis on the post-secondary experience

Cannabis use, especially early and frequent use, is associated with deficits in multiple domains that impact learning, including attention, working memory, concentration, and executive functioning. In addition, cannabis use has implications for academic success and degree attainment. For example, research has found that Canadian youth engaging in frequent cannabis use (more than once a week) had lower grades and were less likely to finish high school or enroll in post-secondary education compared to youth who only use cannabis occasionally or not at all. In addition, those frequent users who do enroll in post-secondary studies are more likely to drop out.[3]

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Health promotion and prevention messaging

Cannabis education is important to assist students in making informed choices about where, when, how, and how much cannabis they will use. To minimize cannabis-related harms for students, campuses can draw on the Lower-Risk Cannabis Use Guidelines (LRCUG) developed by researchers at the Centre for Addiction and Mental Health, which include recommendations such as choosing lower tetrahydrocannabinol (THC) products, avoiding synthetic cannabinoids, avoiding smoking (e.g., in favour of vaporizing or edibles), limiting use to one day per week or weekends and waiting at least six hours after using cannabis to drive.[4]

Health messaging should also focus on the following issues relevant for minimizing cannabis harm for students, including:

- Risks associated with cannabis and driving
- The effects of combining alcohol with cannabis
- The impact of cannabis on cognitive functioning and educational success
- The risk of addiction or dependence (14% for young adults aged 18-24)[5]
- The various forms of cannabis, modes of administration, and amounts associated with impairments and health concerns

Campus services and implementation and the enforcement of campus policies

As legalization comes into effect, campuses will need to implement services and policies that respect students' decisions to use and/or not use cannabis while ensuring student safety. For example, campuses should consider adopting screening and brief intervention programs for cannabis, such as the Electronic THC Online Knowledge Experience (E-TOKE),[6] which provides online personalized feedback to students about their use. It will also be important to identify students at high-risk for negative consequences of use (e.g., cannabis use disorder, psychosis, dropping out), and campuses should ensure staff have the proper training to identify and respond to the needs of these students.

Campuses should also consider offering cannabis free housing and/or residence floors to minimize exposure and harm to those who choose not to use cannabis, stipulate safe storage procedures, limit where cannabis can be consumed, and develop disciplinary procedures for breeches of campus restrictions. Although some current policies (i.e., smoking policies) might deter certain modes of cannabis administration (e.g., cannabis smoking), the growing availability of other methods of cannabis administration (e.g., edibles) will require the creation of new policies beyond those currently used to minimize campus harm from student tobacco or alcohol use.

Although it remains unclear how legalization will impact student cannabis use, campuses will play an important role in supporting responsible consumption among Canadian youth and young adults. Like alcohol, addressing risks associated with cannabis will require a multifaceted approach involving health promotion, prevention and education, campus services, and the introduction and enforcement of regulatory policies consistent with provincial and federal mandates.

For a complete list of references, visit www.cpa.ca/psynopsis

Cannabis substitution: A brief review

Michelle S. Thiessen, Master's student, University of British Columbia, Kim Crosby, MA, doctoral student, University of British Columbia and Zach Walsh, PhD, R. Psych., Associate Professor of Psychology, University of British Columbia

The last decades have witnessed a vigorous but largely unsuccessful international prohibition on cannabis use. In response to the increasingly widespread recognition of the negative consequences and unsustainability of cannabis prohibition, Canada is set to be the first large nation to legalize adult use of cannabis for non-medical purposes in 2018. Cannabis legalization has the potential to impact the use of other psychoactive substances, and there is concern that legalized access to cannabis may promote the use of other substances (e.g., "gateway effect"). Contrary to this notion, research suggests that cannabis may potentially serve as a *substitute* that will reduce the use of other substances.[1] Estimating the extent to which access to cannabis accentuates or attenuates the harms associated with the use of other substances is essential for clinically contextualizing cannabis use at the individual level and for anticipating and evaluating the public health consequences of cannabis legalization.

A substitution effect, in which cannabis use replaces or reduces the use of other substances, has been identified in both therapeutic and recreational cannabis users. In one of the largest surveys to date of medical cannabis users in Canada, a majority (87%) of participants reported substituting cannabis for alcohol, illicit substances, or prescription medication.[2] A recent survey of patients using cannabis for therapeutic purposes also found that two thirds used cannabis as a substitute for prescription drugs.[3] In the U.S. state of Washington, where recreational cannabis use is legal, nearly 46% of cannabis users report using cannabis as a substitute for prescription drugs,[4] and a recent survey of chronic pain patients in New Mexico reported that 34% of individuals ceased the use of all prescription medications within 18-months of enrollment in a medical cannabis program.[5] Taken together, these reports suggest that cannabis users often use cannabis as a substitute for alcohol and other drugs.

The current opioid overdose epidemic highlights the importance of understanding the potential of cannabis to serve as an opioid substitute. Patients report substituting cannabis for prescription opioids for a number of reasons, including more acceptable safety and side-effect profiles. Substituting cannabis for opioids is common among both medical and recreational cannabis users, with approximately one third of individuals reporting substituting cannabis for opioids.[1,4] Medical cannabis patients in California reported that cannabis provided comparable analgesia to opioid medications, and the

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majority of respondents indicated that cannabis use facilitated a decrease in the quantity of opioid consumption.[6] Post-legalization, epidemiological data will provide further insight into the use of cannabis as an adjunct to or substitute for opioid therapy.

Preliminary research also suggests that cannabis may be effective for reducing problematic use of alcohol and other drugs. Cannabis has been proposed to meet many of the criteria required for consideration as a substitute therapy for problematic alcohol use,[7] and a study of individuals using cannabis as a treatment for alcohol use problems reported that cannabis was effective for reducing alcohol consumption.[8] Among medical cannabis users, substituting cannabis for alcohol is prevalent, with approximately 40-50% of patients indicating that they use cannabis instead of alcohol.[2] Evidence from surveys of Canadian medical cannabis users also suggests that cannabis may be effective for reducing the use of illicit drugs.[2] A study of Brazilian crack cocaine users found that over half reported using cannabis as an aid to crack cessation,[9] and a recent study of Canadian polysubstance users reported effectiveness for the intentional use of cannabis to reduce consumption of crack cocaine.[10] Finally, given the longstanding use of cannabis to treat mental health concerns,[11,12] it is not surprising that medical cannabis users report relatively high levels of cannabis substitution for benzodiazepines and antidepressants,[1,4] leading clinical researchers to speculate on the potential for cannabis to serve as a front-line treatment for anxiety and depression.[13]

Epidemiological data that compares jurisdictions with varying levels of legal access to cannabis, complement survey data from cannabis users. Findings suggest that reducing barriers to accessing cannabis may have substantial public health benefits. A compelling study comparing U.S. States with and without medical cannabis access reported dramatic reductions in opioid overdose fatalities in States with medical cannabis programs,[14] and studies of traffic fatalities have reported sizable reductions that have been proposed to reflect substitution-related reductions in alcohol-impaired driving.[15,16]

In sum, preliminary evidence at the individual and public health levels suggests that increased access to cannabis may have the largely unanticipated consequence of improving health and safety by serving as a substitute for potentially more harmful psychoactive substances. However, pending the controlled clinical trials required to more definitively determine the efficacy of cannabis therapies as treatments for problematic use of other substances, such an assertion is tentative. In the meantime, as citizens of the first large nation to legalize cannabis use for all adults, Canadians will soon have the privilege to decide for themselves the role that cannabis will play among the array of approved options for altering mood and cognition.

For a complete list of references, visit www.cpa.ca/psynopsis

CPA HIGHLIGHTS

Karen R. Cohen, PhD, C. Psych., Chief Executive Officer and
Lisa Votta-Bleeker, PhD, Deputy CEO and Director, Science Directorate

Below is a list of our top activities since the last issue of *Psynopsis*. Be sure to contact membership@cpa.ca to sign up for our monthly CPA News e-newsletter to stay abreast of all the things we are doing for you!

1 CAF and VA Joint Suicide Prevention Strategy

On October 5, the CPA attended the launch of the Canadian Armed Forces and Veterans Affairs Joint Suicide Prevention Strategy. As a member of the Mental Health Advisory Group, the CPA supports the strategy and appreciate its attention to streamlining administrative processes to improve access to needed services and supports.

https://www.canada.ca/en/department-national-defence/corporate/reports-publications/caf-vac-joint-suicide-prevention-strategy.html

2 Membership renewals

Your membership matters. Your continued collaboration and engagement allows the CPA to remain strong and steadfast in its role as psychology's national voice in Canada and to ensure that the discipline and profession contribute to the health and well-being of all Canadians. Renewing your membership online is easy, fast, and secure - simply log in with your email address as your username.

3 Increasing access to non-pharmacological pain management

On November 13, the CPA and its fellow members of the Coalition for Safe and Effective Pain Management (CSEPM) released an interim report: "Reducing the Role of Opioids in Pain Management." The report makes a series of recommendations that, if implemented, would improve access to medication free pain management and reduce the number of patients being prescribed opioids in Canada.

http://csepm.ca/

4 Dr. Cohen named Co-Chair of the Disability Advisory Committee

Based on the recommendation of advocates and stakeholders in the area of disability, including the CPA, the Honourable Diane Lebouthillier, Minister of National Revenue announced on November 23 that the Disability Advisory Committee is being re-instated. Dr. Cohen was named Co-Chair of the Committee along with Frank Vermaeten, Assistant Commissioner of the Canada Revenue Agency (CRA). The Committee will have a renewed mandate to provide the CRA with a formalized means of collaborating with stakeholders.

5 Registration is now open for ICAP 2018

Registration is officially open for the 29th International Congress of Applied Psychology (ICAP) set to take place June 26-30, 2018. CPA members can benefit from discounted registration fees by inputting their membership number at the time of registration. To help further offset the difference in cost from typical registration, the CPA will subsidize the participation of members and student affiliates. Full members who register before February 28, 2018 will automatically be given an additional discount of $100 off the early bird fee, and CPA student affiliates will receive a $75 reduction in fees.

6 Bill C-211 – Federal Framework on Post-Traumatic Stress Disorder Act

On October 26, the Canadian Psychiatric Association joined the CPA in a meeting with MP Todd Doherty to discuss his private member's bill. The aim of Bill C-211 is to establish a comprehensive federal framework to address the challenges of recognizing symptoms and providing timely diagnosis and treatment of PTSD.

7 CPA President discusses juror mental health

On November 22, Dr. Patrick Baillie joined CBC's Ontario Today to discuss the potential psychological impacts of jury duty and his recommendations to governments to better support jurors. He then picked up the conversation with CBC's Alberta at Noon on November 24. On December 6, he presented his recommendations to the Standing Committee on Justice and Human Rights as part of its study on counselling and other mental health supports for jurors.

8 Pre-budget consultations

On September 27, Dr. Votta-Bleeker presented to the Standing Committee on Finance on behalf of the Canadian Consortium of Research as part of the 2018 pre-budget consultations. That same day, Dr. Cohen and Mr. Phelps, Executive Director of the Canadian Association of Social Workers, presented to the Standing Committee on behalf of the Canadian Alliance on Mental Illness and Mental Health.

9 New "Psychology Works" fact sheet

A new fact sheet on concussions is now available for download on our website. Check it out to see how psychologist can help with assessment, treatment, and research. Many thanks to Dr. Christopher Friesen and to members of the Section for Psychologists in Hospitals and Health Centres for their assistance in developing the fact sheet.

http://www.cpa.ca/psychologyfactsheets/

10 Updated resource for practitioners

The document *Canada's Psychologists Contributing to Primary Health Care* has been added to our website. This revision of the 2000 document, *Strengthening Primary Care,* was prepared by Dr. Sam Mikail and Dr. Jean Grenier.

http://cpa.ca/docs/File/PracticeDirectorate/StrengtheningPrimaryCare-FINAL_SEPTEMBER_8_2017.pdf

FAITS SAILLANTS des activités de la SCP

Karen Cohen, Ph. D., C. Psych., chef de la direction, et
Dre Lisa Votta-Bleeker, Ph. D., directrice générale associée et directrice de la Direction générale de la science

Voici la liste des principales activités menées depuis la publication du dernier numéro de *Psynopsis*. Écrivez à membership@cpa.ca pour vous abonner à notre bulletin électronique semestriel, *Nouvelles de la SCP*, pour vous tenir au courant de toutes les choses que nous accomplissons pour vous!

1 Stratégie conjointe de prévention du suicide des FAC et d'ACC

Le 5 octobre, nous avons assisté au lancement de la Stratégie conjointe de prévention du suicide des Forces armées canadiennes et d'Anciens Combattants Canada. En tant que membre du Groupe consultatif sur la santé mentale, nous appuyons la stratégie et sommes heureux de constater qu'elle cherche à simplifier les procédures administratives afin d'améliorer l'accès aux services et au soutien nécessaires.

https://www.canada.ca/fr/ministere-defense-nationale/organisation/rapports-publications/fac-acc-strategie-prevention-suicide.html

2 Renouvellement de l'adhésion

De vous compter parmi nos membres est important pour nous. Grâce à votre collaboration et à votre engagement continus, nous pourrons, à titre de porte-parole national de la psychologie au Canada, rester forts et fermes dans nos revendications et veiller à ce que la discipline et la profession contribuent à la santé et au bien-être de l'ensemble des Canadiens. Le renouvellement en ligne est facile, rapide et sécurisé – vous n'avez qu'à vous connecter en utilisant votre adresse électronique comme identifiant.

3 Améliorer l'accès à la prise en charge non pharmacologique de la douleur

Le 13 novembre, nous avons rejoint nos collègues de la Coalition pour la gestion sûre et efficace de la douleur (CSEPM) en publiant un rapport provisoire sur le sujet, intitulé « Réduire le rôle des opioïdes dans la gestion de la douleur ». Le rapport formule une série de recommandations qui, si elles sont mises en œuvre, amélioreront l'accès à la gestion de la douleur sans médicaments et réduira le nombre de patients à qui l'on prescrit des opioïdes au Canada.

http://csepm.ca/

4 La Dre Cohen nommée coprésidente du Comité consultatif des personnes handicapées

Suivant la recommandation de défenseurs et de groupes d'intérêt dans le domaine de l'incapacité, y compris la SCP, le 23 novembre, l'honorable Diane Lebouthillier, ministre du Revenu national, a annoncé que le Comité consultatif des personnes handicapées sera rétabli. La Dre Cohen a été nommée coprésidente du Comité, au côté de Frank Vermaeten, sous-commissaire de l'Agence du revenu du Canada (ARC). Le Comité aura comme nouveau mandat de fournir à l'Agence un forum officiel de collaboration avec les intervenants du milieu.

5 La période d'inscription à l'ICAP 2018 est ouverte

La période d'inscription à l'ICAP 2018, qui se tiendra du 26 au 30 juin 2018, est officiellement ouverte. Les membres de la SCP peuvent bénéficier d'une réduction des frais d'inscription en identifiant leur numéro de membre lors de l'inscription. Pour réduire encore plus l'écart de coût par rapport à l'inscription typique, la SCP subventionnera la participation de tous les membres et membres étudiants. Les membres ordinaires qui s'inscriront avant le 28 février recevront automatiquement une subvention supplémentaire de 100 $ sur le tarif préinscription. Les membres étudiants de la SCP recevront une subvention de 75 $, peu importe le moment où ils s'inscrivent.

6 Projet de loi C-211 – Loi concernant un cadre fédéral relatif à l'état de stress post-traumatique

Le 26 octobre, la SCP a été jointe pas l'Association des psychiatres du Canada pour une réunion avec le député Todd Doherty afin de discuter du projet de loi d'initiative parlementaire qu'il a présenté. L'objectif du projet de loi C-211 est de créer un cadre fédéral visant à surmonter les difficultés que posent la reconnaissance des symptômes de l'état de stress post-traumatique et l'établissement rapide de son diagnostic et de son traitement.

7 Le président de la SCP discute de la santé mentale des jurés

Le 22 novembre, le Dr Patrick Baillie a été invité à l'émission Ontario Today de CBC afin de discuter de l'impact psychologique de la charge de juré et des recommandations qu'il adresse aux gouvernements pour mieux soutenir les jurés. Il a ensuite continué la conversation, le 24 novembre, au micro d'Alberta at Noon, sur les ondes de CBC. Le 6 décembre, il a présenté ses recommandations au Comité permanent de la justice et des droits de la personne dans le cadre de son étude sur le counselling et le soutien psychologique des jurés.

8 Consultations prébudgétaires

Le 27 septembre, la Dre Votta-Bleeker a fait une présentation au Comité permanent des finances au nom du Consortium canadien pour la recherche dans le cadre des consultations prébudgétaires de 2018. La même journée, la Dre Cohen et M. Phelps, directeur général de l'Association canadienne des travailleuses et travailleurs sociaux, ont fait une présentation au Comité au nom de l'Alliance canadienne pour la maladie mentale et la santé mentale.

9 Nouvelle fiche d'information de la série « La psychologie peut vous aider »

Une nouvelle fiche d'information sur les commotions cérébrales est maintenant disponible en téléchargement sur notre site Web. Jetez-y un coup d'œil pour tout savoir du rôle que peuvent jouer les psychologues dans l'évaluation, le traitement et la recherche en matière de commotions cérébrales. Un grand merci au Dr Christopher Friesen et aux membres de la Section des psychologues en milieu hospitalier et en centres de santé pour leur aide dans l'élaboration de la fiche d'information.

http://cpa.ca/lapsychologiepeutvousaider/

10 Nouvelle ressource pour les praticiens

Un nouveau document, intitulé *Canada's Psychologists Contributing to Primary Health Care*, a été ajouté à notre site Web. Préparé par le Dr Sam Mikail et le Dr Jean Grenier, il s'agit d'une révision de *Strengthening Primary Care,* publié en 2000.

http://cpa.ca/docs/File/PracticeDirectorate/StrengtheningPrimaryCare-FINAL_SEPTEMBER_8_2017.pdf

Recommendations for the legalization of cannabis in Canada

- A position paper of the Canadian Psychological Association

Prepared by: David Teplin, PsyD, C. Psych.; Carmen Bellows, MA, R. Psych.; Kim Corace, PhD, C. Psych.; Abby Goldstein, PhD, C. Psych.; Joanna Henderson, PhD, C. Psych.; and Carolyn Plater, MSW, RSW

The Canadian Psychological Association (CPA) is the national association for the science, practice, and education of psychology in Canada. The CPA's chief mandate is to improve the health and welfare of all Canadians, which we accomplish by supporting and promoting the development, dissemination and application of psychological knowledge. The CPA is committed to working with government and other health and science stakeholders in advocating for public policy that is evidence-informed and best meets the needs of the publics it serves. It is the science and practice of psychology, particularly in the areas of mental health and addictions, that the CPA brings to the following set of recommendations about the legalization of cannabis in Canada.

Cannabis is the most commonly used illicit drug in Canada, with highest use among those ages 15 to 24. In 2017, the federal government has taken steps to legalize cannabis. Policy frameworks now need to extend beyond discussions about legalization, and move toward how best to protect the health and wellness of Canadians. Research to date into the use and abuse of cannabis evidences the following:

- Regular or heavy cannabis use in adolescence is related to poorer educational outcomes, lower income, suicidality, greater welfare dependence and unemployment, as well as lower relationship and life satisfaction.
- Acute cannabis use is associated with an increased risk of motor vehicle collisions, especially for fatal collisions.
- Functional imaging shows clear differences between cannabis users and non-cannabis users in several areas of the brain.
- Cannabis use can disrupt normal adolescent brain development.
- Verbal learning, memory and attention are most consistently impaired by acute and chronic cannabis use, and in youth, some of these effects remain even after cannabis use is discontinued.
- Heavy or chronic cannabis use adversely affects cognitive performance on measures that assess attention, working memory, verbal memory, and executive functioning.
- Cannabis use is linked with an earlier age of onset for psychosis, and the risk of psychosis onset is greater at higher levels of cannabis use.
- There is a modest positive relationship between cannabis use and the onset of depression and bipolar disorder. The findings regarding anxiety are less clear, with researchers finding only a small, positive relationship between cannabis use and anxiety. In all studies, associations are stronger with heavier cannabis use.

- Structured school-based universal and selective programs targeting a range of individual skills, particularly decision-making, healthy coping, and substance use resistance skills offered in early adolescence can have strong effects on reducing substance use, including cannabis use.
- Early identification and brief motivational enhancement approaches have shown positive effects on reducing youth cannabis use and negative consequences. Cognitive-behavioural therapy and multi-dimensional family therapy have also shown positive effects on cannabis use in youth.
- Cognitive-behavioural therapy, Motivational Interviewing, and their combination have been shown to be effective interventions for cannabis use problems, specifically in reducing cannabis use and severity of dependence. Evidence also supports that the addition of Contingency Management (i.e., abstinence based incentives) improves outcomes.

Following from the above findings, the CPA recommends that:

- Legalization should be accompanied by public health messaging and education, including awareness of the potential harmful effects of cannabis use.
- Investments should be made in education, treatment, and research to help understand and mitigate some of the negative psychosocial harms of cannabis use.
- Awareness campaigns for brain health and cannabis use, and the effects of cannabis use on the developing brain should be created.
- Those with mental health concerns should be made aware of the potential impact and negative consequence of cannabis use. Special attention should be paid to those adolescents and young adults with vulnerabilities to mental health disorders.
- When cannabis use problems are identified, treatment should be made available by trained service providers, using evidence-based approaches.
- Psychologists should routinely screen for problematic cannabis use with validated tools. Based on screening, psychologists should further assess for cannabis use disorders and readiness to change cannabis use as part of their comprehensive assessment. Psychologists should provide evidence-based psychological therapies with concrete treatment goals for those who want treatment for cannabis use disorder.
- Like other substance use disorders, abstinence rates are low and relapse is common. Thus, harm reduction approaches should be routinely incorporated to reduce the harms associated with cannabis use.
- Psychologists should provide treatment for cannabis use disorders and for other mental health disorders concurrently.
- Psychologist training and continuing professional developmental programs should include attention to substance use and its associated problems.

There are important gaps in what is known about the use and abuse of cannabis. Funding is needed to support further research, which includes the meaningful involvement of stakeholders (e.g. young people who use cannabis and their families), to:

- Better understand the complex relationship between cannabis use and mental disorders, with a particular focus on prospective, longitudinal research with adolescents and emerging adults.
- Better understand the effects of the legalization of cannabis on the incidence and prevalence of psychosis, depression, anxiety, and bipolar disorders.
- Further examine the relationship between cannabis use and suicidal ideation and suicidality.
- Further investigate the efficacy of psychological and pharmacological treatments for cannabis use disorders, with a focus on effective interventions for those with concurrent mental disorders and other comorbid substance use.
- Further examine the risks to memory, attention, and executive function with increased cannabis use.
- Further investigate the effects of acute cannabis use on driving and motor vehicle accidents.
- Determine the relationship between the effects of cannabis and individual characteristics, such as sex/gender, age, race, ethnicity, and other co-morbidities.

Summary statement

The legalization of cannabis in Canada has the potential to enhance the safety and quality control of the substance. It could also remove the criminal element from the cannabis market and the negative consequences that illegal or black-markets entail.

The CPA has long been concerned about the inaccessibility of evidence-based psychological treatments for mental and substance use disorders because these interventions are inadequately resourced through our public and private health insurance plans. The legalization of cannabis will bring about increased tax revenue for governments, revenue which could be allocated to the prevention and treatment of mental health and substance use disorders.

Canada's psychologists, and other mental health and addictions stakeholders, need to work collaboratively to guide and inform the implementation of the regulation and legalization framework for cannabis in the best interests of the health, safety, and welfare of Canadians. Attention needs to be paid to factors attendant on cannabis use that in themselves affect the health and safety of the public. These include the health hazards of inhaling combusted cannabis or otherwise consuming cannabis, as well as the public safety hazards that result from the use of cannabis while performing certain jobs and/or functions. This implementation work can be informed by the experience of other countries where cannabis has already been legalized.

**To view the full report with references, visit www.cpa.ca/policystatements*

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The Banff International Conferences on Behavioural Science

Celebrate 50 years: 1969—2018

Kenneth D. Craig, OC, PhD, Professor Emeritus, University of British Columbia

Fifty years of conferences bringing exciting advances in psychological science and practice to psychologists, other health care practitioners, educators and policy makers is decidedly an occasion to celebrate.

The first Banff International Conference on Behavioural Science in 1969 was supported by Buck Blair, a former President of the Canadian Psychological Association who, at the time, had recently been commissioned by the Alberta government to report on mental health services. Having completed what became known as the Blair Report – a hard driving analysis identifying serious gaps in mental health services and recommending improved, integrated and comprehensive programs to redress them – he requested that the Alberta government sponsor a meeting in lieu of an honorarium for his service. The resulting conference was organized by Blair along with Park Davidson (another former President of the CPA) and other faculty from the University of Calgary, where Buck headed the psychology department. The theme of that conference, "Ideal Mental Health Services" remains current given recent initiatives at the federal and provincial levels to enhance and resource badly needed mental health services.

I remember attending that first meeting well—I found it extraordinarily exciting to be attending a conference on improving mental health services with so many outstanding speakers and workshop leaders, including Nathan Azrin, Ogden Lindsley, Gerry Patterson and Todd Risley. And to top it off, it was in Banff, the most remarkable of Canada's wonderful national parks, with many opportunities for winter sports and recreation, including skiing, then and now a personal passion. That first conference was a decided success for all who attended. Participants found the papers inspiring and many went on to deliver keynotes and workshops at the many Banff meetings that followed.

Since that first meeting, there have been 49 conferences, all featuring cutting-edge advances in practice, as well as the foundational evidence supporting their developments. The conferences have had varied themes cutting across normal development in family, school and community settings, as well as the challenges of addictive disorders, debilitating anxiety and depression, sexual dysfunction and deviancy, major mental disorders and behavioural medicine.

Ray Peters (Queen's University), Robert McMahon (Simon Fraser University and the B.C. Children's Foundation), and I (University of British Columbia) have been organizing the conferences with help from many others, since 1982.This year, we revisit the theme of 50 years ago, but with a special focus on what are increasingly recognized as the dramatic needs of children and youth. There will be six keynote addresses and eight workshops, the latter providing opportunities for detailed examination of issues and opportunities to acquire practical skills from leading clinician scientists. This year's exciting program will include plenaries and workshops by Peter Szatmari, Matt Sanders, Bill Pelham, Mark Greenberg, Patrick McGrath, Charlotte Waddell, Kim Schonert-Reichl, Holly Waldron, Claire Crooks, David Philpott, Christa Turksma and Anne Marie Albano.

The 2018 International Conference on Behavioural Science will take place from March 18 to 21 at the Banff Centre, where it has been held since 1972. Please consider attending "Ideal Mental Health Services for Children and Youth: The Next 50 Years." We would be most pleased to have you join us as we celebrate this terrific and timely conference in the most beautiful of locations.

To learn more, visit: https://banffbehavsci.ubc.ca/

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Dr. Martin Drapeau

Elected to College of New Scholars, Artists, and Scientists

The Royal Society of Canada recently elected new members to the College of New Scholars, Artists, and Scientists. Those appointed to the College are individuals who have demonstrated a high level of achievement in the early stages of their career and who represent the next generation of intellectual and scientific excellence in Canada. This year, Dr. Martin Drapeau was among the recipients of this very prestigious award.

Dr. Drapeau is a professor at McGill University and Chair of the McGill Psychotherapy Research Group. His research is in the area of psychotherapy and access to psychological services, as well as on best practices and practice guidelines in psychology. He is a researcher affiliated with *Équipe Renard*, a network of researchers dedicated to knowledge synthesis and dissemination, with the *Centre International de Criminologie Comparée* of the University of Montreal, and with the Qualaxia Network. He is also former Project Director at the Lady Davis Institute for Medical Research, an FRSQ Research Scholar, and an Adjunct Professor of Clinical Psychology at the University of Sherbrooke.

Dr. Drapeau is a former vice president of the Order of Psychologists of Quebec and a current member of its executive committee and Board of Directors. He served as the Quebec representative on the American Psychological Association Council of Representatives, chaired the Clinical Psychology Section of the Canadian Psychological Association (CPA), and was a member of the CPA's task forces on evidence-based practice and progress tracking. Dr. Drapeau is the Editor in Chief of *Canadian Psychology* and Founding Editor and former Editor of *Science and Practice*. He is also on the editorial board of a number of other journals and is cofounder of Medipsy Psychological Services.

Congratulations Dr. Drapeau!

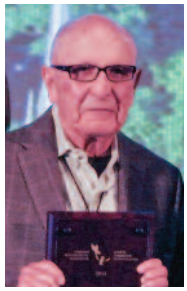
Section on women and psychology annual student awards

The Section on Women and Psychology (SWAP) is pleased to announce that Mia Sisic is the 2017 winner of the SWAP Student Paper Award. The winning paper, "*A focus on strength: Outcomes of wartime sexual violence in a sample of ethnically diverse Bosnian women*," was presented at the CPA's 2017 annual national convention. Ms. Sisic is a PhD student in the Applied Social Psychology program at the University of Windsor. She is supervised by Dr. Charlene Senn, who co-authored the winning paper. The $500 award was presented to Ms. Sisic at the SWAP annual business meeting.

SWAP also awards $250 travel bursaries to students presenting papers or posters particularly relevant to women and/or feminism at the CPA's convention or a SWAP-sponsored pre-conference institute. The 2017 travel bursary winners are: Kathryn Jenson (Acadia University), Hillary McBride (The University of British Columbia), Jennifer McWilliams (University of New Brunswick), Chen Vu (University of British Columbia), and Pamela Young (University of New Brunswick).

Harvey Brooker (1932 – 2017)

Joel O. Goldberg, PhD, C. Psych., Chair and Associate Professor, Department of Psychology, York University



Dr. Harvey Brooker was Ontario Psychology's veteran clinician scholar, the psychologist's psychologist. He was also an ardent sports fan. Immortalized on the wall of a sports Hall of Fame are the poet's inspiring words, "to you from failing hands, we throw the torch." Dr. Harvey Brooker was psychology's hall of famer and our torch bearer. At the end of his 85 years, which was not an easy time for him or his dear wife Grace, Harvey's sight was failing but not his insight. He had trouble hearing but not listening. And when he spoke, you listened, his perceptiveness and his brilliant and timely wit cut through all self-deceptions.

Born and raised in Toronto, Harvey graduated from Harbord Collegiate, the University of Toronto (BA, MA) and Indiana University (PhD; 1962). After early career work in vocational rehabilitation, including outreach consultations in Northern Ontario, he was recruited to found and head the Adult Psychology Service of the Clarke Institute (now CAMH) where his clinical knowledge, intuition, superlative supervisory skills and dedication to mentorship established it as a premier training place for generations of clinical psychologists.

Under his leadership, the Clarke Institute also became the first accredited site in the province. Indeed, he facilitated the establishment of an Ontario Psychological Association Accreditation Council (1979) on which he served and chaired (1979-1985). It was the first of such bodies in the country to set standards, review and accredit doctoral programs, and continued to do so until 1990 after the CPA, at the OPA's urging, had developed a national programme of accreditation. Harvey became a member and later chair of the CPA Accreditation Panel, served on the Executive and as Chair of the Canadian Council of Clinical Program Directors and was a site visitor for clinical internships and clinical training programs for the OPA, CPA and APA for decades. At the time of his death, some many years after he completed his last site visit, he still held the record for the most site visits completed by a single visitor. On accreditation training site visits, he liked to say that the most important session would be the one with the students. They opened up to him - he had the gift of being someone who you told things to, sometimes even things you feared saying to yourself.

Harvey loved teaching. He coordinated clinical psychology practicum training at York University for decades, and was the instructor for mandatory courses in ethics, jurisprudence and professional issues, and core skills courses in psychodiagnostics. Both the OPA Harvey Brooker Award for Excellence in Clinical Teaching, of which he was the first recipient (1998), and the CPA Award for Distinguished Contributions to Education and Training in Psychology in Canada (2013) recognize his lifetime achievements as an educator, but it is his many former students who are themselves now outstanding professionals, to whom he has passed the torch, who are truly his legacy.

Harvey brought his analytic supervision skills to his love of sport too. I now score baseball games because of him. Learning how he recorded each batter and defensive play was the easy part. Far more challenging was trying to replicate how he interpreted these scores to best know the players, their strengths and weaknesses; how he could anticipate what might happen; how he knew when a manager needed to know when to wait, to be patient, and when to make a change to make things better.

And this was his approach to supervision, to get to know us as his students, what we brought and what about us could be brought out, helping us to develop our gifts further. But more, and it was this "more" that made Harvey truly special, is that he was there for us when we were unsure and felt conflicted. He was the safe house for those who were hurt. He kept confidences. He was the one you could trust. He didn't tell you what to do, but he made sure you discovered what to do for yourself.

For two decades, Harvey was a member and chair of the OPA Ethics and Policy Committee and in so doing contributed to the development of the set of principles that would become the framework for the socially responsible professional psychologist, that is, the first Canadian Code of Ethics for Psychologists. Harvey was a moral compass, showing us directions and paths, not scripts or rituals. Though not religious, he had standards and values. I can hear him advising students to be professional, dress like a mensch, and treat people, your clients and your colleagues with dignity and respect. Adjust your approach to them, don't make them adjust to you.

Harvey taught us about the depth of psychological intervention. Depth meant inspiring his students, whatever their treatment orientation, to consider personality. He would sing, "personality, personality," recognizing that for some that it was called core beliefs. When he taught the Thematic Apperception Test (TAT), where clients look at cards and make up stories about them, he liked to say, that the projective technique is based on the principle of gossip. When you tell stories about others, it says more about you than it does about them. And he listened not just to the stories, but the way the stories were told, which was so revealing of character.

He eschewed the word 'eschew' – "be clear," he would say. He eschewed the word 'nice,' which he would say could describe food (e.g. a nice piece of fish, a nice brisket), not a person. He pressed us to think who is that individual really? Beyond the façade they may present to others, what are they thinking, what are they preoccupied with and what are they conflicted about? He loved to read great novels, to attend the opera, to see plays and artistic films, not frivolous stuff. He appreciated and learned from those artists who could portray people struggling and grasping, searching and overcoming.

With Harvey's death, a chapter in the book of Canadian professional psychology closes for the many students he trained and colleagues with whom he worked. In the face of our personal and professional loss, we have no choice but to carry on, to step up, to take the torch. May the legacy of Dr. Harvey Brooker provide a lasting light for our journey ahead as colleagues, as teachers and as psychology as a profession.

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