CE

CONTINUING EDUCATION TREATING SUBSTANCE MISUSE IN OLDER ADULTS

Substance use conditions often go untreated in older adults, but psychologists have the skills and knowledge to help

BY ZARA ABRAMS

Substance use among older adults has been on the rise for years. Between 2001 and 2013, alcohol misuse increased 107%, then continued to rise during the COVID-19 pandemic. By 2022, 1 in 11 adults over 60 had a substance use disorder. As the population ages, psychologists expect that upward trend to continue (Grant, B. F., et al., *JAMA Psychiatry*, Vol. 74, No. 9, 2017; Nordeck, C. D., et al., *Addiction*, Vol. 117, No. 2, 2021; *Behavioral Health Among Older Adults: Results From the 2021 and 2022 National Surveys on Drug Use and Health*, Substance Abuse and Mental Health Services Administration [SAMHSA], 2024).

CE credits: 1

Learning objectives: After reading this article, CE candidates will be able to:

1. Describe patterns of substance use in older adults, including trends and risk factors.
2. Explain how cannabis use has shifted in adults ages 65 and older, and what research says about the risks and motivations for use.
3. List psychological interventions that can help reduce substance misuse and describe how they can be adapted for older adults.

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Alcohol use is the biggest threat, with growing rates of binge drinking and heavy drinking, especially among older women (Han, B. H., et al., *Journal of the American Geriatrics Society*, Vol. 67, No. 10, 2019). Cannabis use is also on the rise, partly because of changing laws and norms, despite little research on how it affects the aging brain.

"The baby boomers experienced much higher rates of substance use in their youth than previous generations," said Wilson Compton, MD, deputy director of the National Institute on Drug Abuse (NIDA) of the National Institutes of Health. "In some cases, they're bringing those habits with them, either continuing their use or starting up again in their later adult years."

But older adults struggling with substance use are often overlooked and undertreated, despite the serious mental and physical health risks those habits pose. Physiological changes, including decreases in muscle mass and liver function, alter the way the body processes alcohol and drugs as we age. That can, in turn, increase the risk of medication interactions, falls, and vehicle accidents, and may even exacerbate cognitive decline (*Treating Substance Use Disorder in Older Adults*, SAMHSA, 2020).

"Smaller amounts of substances have bigger effects in older individuals because of changes in absorption and metabolism. Even low levels of use—one or two drinks, for example—can have a big impact on everyday functioning," said psychologist Frederic C. Blow, PhD, a professor of psychiatry and director of the U-M Addiction Center at the University of Michigan who has overseen the development of national consensus statements for treating substance misuse in older adults.

Fortunately, research shows that this group can be well served by substance use treatment programs, especially when interventions are adapted for their stage of life. By routinely screening for problematic substance use and learning to recognize risk factors, such as retirement or the death of a spouse, mental health professionals can prevent a problem from starting or intervene before it causes harm.

"A lot of the change in later life is thematic of loss, and we know that loss can contribute to all kinds of mental health challenges, including substance use," said Kimberly Burton, a peer recovery educator and the retired director of older adult programs for the Mental Health Association of Maryland who herself has been sober for more than 30 years. "So how can we be proactive about keeping people connected to the things they really care about?"

PATTERNS OF USE

Substance use is highest in young adults, ages 18 to 25, but older adults today are using more substances than did people of the same age group from past generations. Most experts attribute the shift to changing attitudes toward heavy drinking, cannabis, and other substances over the past few decades.

Nearly 13% of older adults from SAMSHA's latest National Survey on Drug Use and Health (NSDUH) reported binge drinking in the

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past month. About 10% used cannabis and 2.3% misused opioids. Of those who needed treatment, fewer than 1 in 3 received it (*Behavioral Health Among Older Adults: Results From the 2021 and 2022 NSDUH*, SAMHSA, 2024).

"The media has attended to other substances, but alcohol is by far the most common among older adults," said clinical psychologist Erin Woodhead, PhD, an associate professor of psychology at San José State University who studies substance use treatment for older adults.

Alcohol and other substances can be seen as a way to cope with later in life challenges, including the death of a spouse or the onset of a chronic health problem. They may also be used as a pastime or a way to enhance social outings. For example, happy hours and other alcohol-centered events are regular programming in many senior living communities.

Problematic substance use in this group can fit a few different profiles. Some people may start using substances for the first time to deal with a change or loss; others have a decades-long history of use and tend to be harder to treat. Still others used substances at a low level throughout their life, with that use rising to a problematic level as they age.

"No matter how well we're doing with aging, we're all going to have physiological shifts that will make it harder for our body to process alcohol and other substances," Woodhead said.

Experts say mental health professionals need training to recognize the different risk factors and complications related to substance use in older adulthood, compared with the circumstances younger adults face.

"Older people are not just aged young people. They have different issues and different concerns," Blow said.

Physical health is one factor to consider, though significant variability among this group means there is no one-size-fits-all solution. For people diagnosed with a chronic medical condition, taking multiple medications, or experiencing cognitive impairment, any amount of alcohol poses risks, said clinical psychologist Derek Satre, PhD, a professor of psychiatry at the University of California, San Francisco Weill Institute for Neurosciences who works to improve mental health services for underserved older adults.

"Partner drinking is also an issue for this age group, and sometimes a person can develop or sustain an alcohol problem if their partner is also drinking," Satre said.

Other risk factors for substance misuse include financial stress, social isolation, bereavement, forced retirement, a change in living situation, and a past substance use disorder (*Treating Substance Use Disorder in Older Adults*, SAMHSA, 2020).

In older adults, substance use conditions are often missed. These individuals may lack the common checkpoints that younger adults have, such as an employer who pressures them to seek care, Blow said. Symptoms of substance misuse can also be mistaken for medical problems, medication interactions, or age-related shifts, such as balance issues, fatigue, or cognitive changes, said Lisa Lind, PhD, a geropsychologist and chief clinical officer at Deer Oaks, a behavioral health care provider for people who live in long-term care facilities.

"Misuse may often go undetected if mental health professionals aren't routinely screening for substance use problems using screening instruments designed to detect misuse in older adults," Lind said.

KEY POINTS

1. **One in 11 adults over 60 had a substance use disorder in 2022, and the prevalence is expected to continue increasing.**
2. **Alcohol is the most misused substance, followed by cannabis.**
3. **Common risk factors for substance use conditions in this population include bereavement, forced retirement, and health problems.**
4. **Evidence-based interventions, including cognitive behavioral therapy and motivational interviewing, are highly effective at reducing misuse.**



CANNABIS AND OTHER DRUGS

Behind these missed cases are often assumptions about older adults that may not hold true.

"Among clinicians, there can be a naïve assumption that if



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a person is 70 years old, they couldn't possibly be using heroin, opioids, or even cannabis," Compton said.

In fact, the prevalence of cannabis use in adults 65 and older rose 75% (from 2.4% to 4.2%) between 2015 and 2018 and continues to increase, according to analyses of NSDUH data led by Benjamin H. Han, MD, of the University of California, San Diego (*JAMA Internal Medicine*, Vol. 180, No. 4, 2020; Kapner, W. E., et al., *Alcohol*, Vol. 107, 2023).

In a separate study, Han and his colleagues also surveyed 568 adults ages 65 and older on their cannabis use habits, finding physical and mental health concerns to be the primary reason for use, including to reduce pain, arthritis symptoms, sleep disturbances, anxiety, and depression (*Journal of the American Geriatrics Society*, Vol. 69, No. 1, 2021). Clinical psychologist Claudia Padula, PhD, an assistant professor of psychiatry and behavioral sciences at Stanford University, found a similar pattern when she and her colleagues studied motivations to use cannabis by age group (*Addictive Behaviors*, Vol. 72, 2017).

"We found that older adults were most motivated to use cannabis for chronic medical conditions, including to address pain concerns or stimulate appetite," compared with younger adults who were more likely to report using cannabis for social reasons, Padula said.

In older adults, substance use conditions are often missed because of a lack of common checkpoints, such as accountability to employers, and symptoms can be mistaken for medical issues, medication interactions, or age-related changes.

Cannabis may be more widely accepted today, but the substance is not without its dangers. Han and his colleagues analyzed cannabis-related California emergency room visits, including cannabis poisoning or symptoms linked to overuse that required urgent medical attention, in adults 65 and older. They found an overall 1,804% relative increase in visits, with the highest jumps in older men and older Black adults (*Journal of the American Geriatrics Society*, Vol. 71, No. 4, 2023).

That increase is likely linked to the higher levels of the psychoactive compound tetrahydrocannabinol (THC) in today's cannabis strains—typically 20% or more compared with 2% or less before 1990 (Stuyt, E., *Missouri Medicine*, Vol. 115, No. 6, 2018).

In other words, people whose most recent cannabis use was decades ago may accidentally overdose on today's stronger versions. "The THC content across these different modes has increased dramatically," Blow said. "This is not the Woodstock generation's cannabis."

Education is an important first step. Cannabis can have medical utility for managing chronic pain and other health concerns in older adults (Abuhasira, R., et al., *Journal of Clinical Medicine*, Vol. 8, No. 11, 2019). However, it is not always a safe or advisable remedy for daily problems such as anxiety or sleep, Burton said.

"Older adults need accurate information about vulnerabilities, and we just don't know yet what cannabis does in aging bodies," she said.



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Compared with cannabis and alcohol use, opioid use is uncommon among adults over 65. But some groups face a higher risk, including people with a history of opioid use disorder who receive a prescription for painkillers following a medical procedure. Asking about medical history and offering alternatives for pain control can minimize the risk of relapse in such patients, Compton said.

Compared with other racial groups, older Black men are also particularly vulnerable to opioid overdose, a pattern that requires urgent attention and research (Volkow, N., NIDA, Aug. 30, 2024).

"We should really be concerned about those disparities," Blow said.

HOW TO HELP

First and foremost, both primary-care and mental health care providers should routinely ask patients of all ages about their substance use. Burton suggests taking a nonconfrontational approach, for example: "You're talking about your health issues, which makes me wonder about medications. A lot of people are unaware that their medications make them more vulnerable to the effects of alcohol."

Studies show that for substance use disorders, including alcohol and opioid use disorders, older adults achieve equivalent or better treatment outcomes compared with their younger counterparts.

That could lead to an educational conversation about alcohol metabolism—or it could alert the provider to a mental health emergency. Suicide rates are highest among adults ages 75 and older, and alcohol use is a key risk factor.

"If we see someone with increased drinking who also has a constellation of losses, we need to do what we know reduces suicide risk," including connecting people to services and prioritizing firearm safety, Blow said.

For most older patients dealing with substance use challenges, the prospects are good.

Large-scale reviews of treatment for substance use disorders, including alcohol use disorder and opioid use disorder, have found that older adults achieve equivalent or better treatment outcomes compared with their younger counterparts (Sahker, E., et al., *Journal of the American Geriatrics Society*, Vol. 63, No. 11, 2015; Carew, A. M., & Comiskey, C., *Drug and Alcohol Dependence*, Vol. 182, 2018).

"Particularly for those who start using these substances later in life, when they do enter a formal treatment program, the success rate is overwhelmingly positive," Padula said.

SAMHSA's Treatment Improvement Protocol (TIP) 26, Treating Substance Use Disorder in Older Adults, provides detailed guidance on evidence-based ways to address substance misuse in older adults, including brief interventions, inpatient programs, sleep and pain support, medications, cognitive behavioral therapy, skills-based approaches, and motivational interviewing (MI).

Adapting programs so they are relevant for this age group may include respecting certain social conventions, such as conversing more formally than practitioners may act with younger patients. Providers should also adopt a supportive, nonjudgmental approach that recognizes a person's wisdom gained from lived experience, builds their sense of worth and value, and helps them set and meet treatment goals.

"The MI model in particular seems to fit really well with older adults because it supports autonomy in decision-making, something that is often ignored among older adults seeking health care," Woodhead said, adding that the intervention can be effective in just a few sessions in a primary or integrated care setting.

Working with families can be a key part of the solution because well-meaning adult children often make decisions that rob older adults of their dignity and autonomy, Burton said. Keeping people engaged in their communities—for example, empowering dad to take a woodworking class, even if there's some risk involved—is a healthy way to offer meaning and entertainment that can take the place of substances.

That individualized approach requires persistence and creativity on the part of families and providers, but experts say it is worth the effort. When Burton's grandmother, a lifelong painter, lost her vision, she became addicted to alcohol and pain medication.

"Had I known then what I do now, I would have said, 'I get that this macular degeneration really sucks, but we need to find a way to keep you connected with art,'" for instance, by volunteering to teach children about the joy and mechanics of painting, Burton said.

NEW RESEARCH INSIGHTS

Adapting proven interventions for substance misuse can help older adults, but emerging research also points to additional ways to support this group. Using alcohol and other drugs can increase the risk of cognitive problems, including spurring the transition from mild cognitive impairment to Alzheimer's disease (Xue, H., et al., *Comprehensive Psychiatry*, Vol. 78, 2017). Padula, who studies the neurocircuitry of substance use, is applying for funding to explore the brain circuits that underlie the link between alcohol use and dementia.

"Most older adults are concerned about their attention, memory, and cognitive function," Padula said. "If we can demonstrate that removing alcohol and substances might actually protect your brain, that would be a really impactful intervention."

More research is also needed to explore the neurological effects of cannabis in older adults and to determine what interventions can help reduce problematic cannabis use, Satre said. Clinical researchers can also help identify substance use interventions that work best with various subgroups, such as women versus men.

"We really want to encourage researchers to bring us their best ideas on how to fine-tune treatment," Compton said, emphasizing that preventing and treating substance use in older adults is an important topic for research.

Ultimately, treatment that respects the autonomy of older individuals while supporting them in making healthy choices based on scientific evidence is what is likely to succeed.

"We should be paying attention to any substance use as people get older, especially drinking, where the risks clearly outweigh the benefits," Blow said. "That's a message, supported by literally thousands of studies, that clinicians and the public need to understand." ■

FURTHER RESOURCES

Substance use disorder in older adults: Mini review
Jaqua, E. E., et al.
Addiction & Health, 2022

Medical cannabis use among older adults in Canada: Self-reported data on types and amount used, and perceived effects
Tumati, S., et al.
Drugs & Aging, 2022

How does marijuana affect the brain? Psychological researchers examine impact on different age groups over time
Stringer, H.
Monitor on Psychology, June 2023

RESOURCES

Treatment Improvement Protocol (TIP) 26: Treating substance use disorder in older adults
SAMHSA, 2020

Guidelines for psychological practice with older adults
APA, 2024

E4 Center of Excellence for Behavioral Health Disparities in Aging
Rush University

AMERICAN PSYCHOLOGICAL ASSOCIATION

Enhancing Learning through Commitment to Change

Greg J. Neimeyer, Ph.D.

The rapid proliferation of new knowledge in psychology has placed renewed demands on professional practitioners to keep pace with ongoing advances. Overall, knowledge may remain current in professional psychology for as little as about 6-7 years, with more rapidly diminishing durability in key areas of practice, such as psychopharmacology, child health, forensics, substance use, or neuropsychology, among others (Neimeyer, Taylor & Rozensky, 2014). This means that, in the absence of a commitment to ongoing professional development, many practitioners may begin to experience knowledge obsolescence even while they are still in the early stages of their career (Neimeyer, Taylor & Rozensky , 2012).

BEST PRACTICES

In response, the field of professional psychology, together with other allied health professions, have redoubled their efforts to formulate sets of "best practices" that can enhance learning and the translation of that learning into practice (Institute on Medicine, 2010; Taylor and Neimeyer, 2017). The collective objective of these best practices is to enhance the comprehension, retention, and application of new knowledge in support of ongoing professional competence. Some of these practices focus on the value of adapting the learning strategies to individuals' unique learning styles, presenting information multiple times utilizing different media, and providing opportunities for individuals' input, application and behavioral rehearsal of the material, in addition to receiving peer, or instructor, review and feedback (Neimeyer & Taylor, 2014; Taylor and Neimeyer, 2017).

In addition to identifying current best practices, the allied health fields have long dedicated themselves to the development and evaluation of novel mechanisms for enhancing new learning, as well, drawing from a wide range of literatures with common objectives. Research within the science-of-learning, adult education, and performance enhancement literatures have been particularly productive in identifying and assessing novel methods of learning and facilitating the translation of that learning into practice. *Benchmarking* and *self-assessment* are two examples of educational practices that have arisen as mechanisms designed to facilitate quality assurance and ongoing professional development (Neimeyer and Taylor, 2014).

Benchmarking and Self-Assessment. *Benchmarking* refers to the express comparison of one's own work with the work of other professionals in the field. Benchmarking can be understood as the systematic process of evaluating work based on best practices and using evidence-based practice (EBP) to improve performance. In a typical benchmarking procedure, a psychologist might be given videotapes of peers who are conducting a procedure, such as a substance use screening. The videos are pre-determined to depict varying levels of quality. They might range from depicting relatively poor, informal questioning through more thorough, systematic, structured interviews. The psychologist is then asked to evaluate his or her screenings in relation to those he or she has seen, and given information about key components that are present, and absent, in each of the video "benchmarks." Benchmarking provides an anchor against which psychologists can compare themselves, increasing the accuracy of their self-assessment and incorporating elements of the "higher" benchmarks into their own practice.

Research has demonstrated the effectiveness of benchmarking in relation to improving the accuracy of self-assessment, which is a critical pre-condition for evaluating current clinical skills and needs. Lane and Gottlieb (2004), for example, found that when medical residents viewed videotapes of their performance, their self-assessment accuracy increased significantly. And their accuracy increased still more when they watched the videos with a faculty member. Similarly, Martin et al., (1998) found that comparing one's own performance to the performance of others increased the accuracy of self-assessment. In their study, these researchers invited family practice residents to conduct mock interviews with a mother suspected of physically abusing her child. The residents were then asked to rate their performance. Next, residents watched their videotaped interview, in addition to watching four benchmark interviews depicting varying levels of competence. After watching the benchmark interviews, the relationship between the residents' self-ratings and the independent ratings of the supervisor was significantly stronger.

Self-assessment can take many different forms. All forms share in common express efforts to reflect upon, and evaluate, one's own current skills and/or future professional needs and interests. The Quality Assurance Program in Ontario, Canada, is one example of a well-articulated program of self-assessment (Morris, 2011). The Quality Assurance Program requires that each psychologist undertakes a self-review every other year, though the completion of a stipulated Self-Assessment Guide and a Continuing Professional Development Plan. Through a series of questions, psychologists critically evaluate their strengths, growth areas, and gaps in their learning. After conducting the self-assessment, they develop their own personal plan to remediate areas of identified weakness and to enhance their overall professional competence, sharing their plans with a colleague who reviews it and provides input. The Continuing Professional Development Plan is designed to 1) promote continuing competence and quality improvement, 2) remedy gaps in knowledge and skills identified in the self-assessments, 3) address changes in practice environments and workplace needs, and 4) incorporate evolving standards of practice and advances in technology. These Continuing Professional Development Plans are subject to peer review by members of the College of Psychology of Ontario according to stipulated regulatory requirements.

Both benchmarking and self-assessment reflect the considerable effort that can accompany efforts designed to promote professional growth and development. Facilitating new learning, and the translation of that knowledge or skill into practice can be an effortful process, requiring reflection, formulation and deliberate application. Transitioning new learning to practice often requires an individual to reflect on how new knowledge or skills may apply to their own experience and to formulate ways in which the new material can be modified, adapted, or utilized within their own professional contexts or workplace environments. If the value of this effort is justified by the anticipated improvement or outcomes that may follow from it, then individuals are more prone to commit themselves to changes in what they do, or how they go about doing it.

Although some mechanisms for triggering change are designed to be intensive and may require considerable time, others are designed as brief reflective exercises that can occur immediately after, or even during, a learning event. A longstanding literature on the concept of a Commitment to Change illustrates the value of utilizing this simple technique in the service of generating greater learning and the translation of that learning into actual practice (Mazmanian & Mazmanian, 1999).

COMMITMENTS TO CHANGE (CTCS)

CTCs have been the subject of attention for the last few decades, but only recently have they been imported into the fields of allied heath, or more recently still within psychology. CTCs are generally generated following an educational event such as attending a lecture, participating in a workshop, or reading an article (Wakefield, 2004). To complete a CTC, participants are asked to identify a set of possible changes they would like to make in their own practice based on the educational event. They are asked to formulate these changes in specific, behavioral form, which requires them to reflect on the relevance and applicability of the new information, and to adapt its application to their own interests and experience. They are then asked to indicate a level of commitment to each of the changes they have formulated, utilizing a rating scale that reflects their commitment to change, from low (1) to high (5). In the Commitment to Change procedure, participants are often reminded of their commitments 1-2 months later, and asked to indicate if they actually enacted, or attempted to enact, each of their stipulated CTCs and to describe their experience or outcomes.

The effectiveness of the CTC procedure seems to be related to its three steps. The timing of the administration, immediately after the learning event, provides the participant an opportunity to reflect on the most salient elements of the material and to formulate it in terms that are most relevant to their own experience, interests, or needs. Rating the level of commitment provides a concrete mechanism for reflecting on the importance or value of the change, and anchors the individual in a level of expectation about completing it. And the subsequent follow-up provides a sense of accountability and the opportunity to reflect on the translation of the material into practice, or the barriers that may have impeded or prevented that translation.

THE BACKGROUND ON CTCS

CTCs have been the subject of attention in relation to the organizational change literature for several decades, as a tool for facilitating critical shifts in organizational structure, processes or style. Within the allied health literatures, medicine was among the first to explore the utility of CTCs as a mechanism for facilitating the translation of new knowledge into actual clinical practice. Within this literature, the actual performance of CTCs varies widely, from 47-87% (Wakefield, 2004), based on a number of identified factors. These factors include the extent to which individuals feels as if the CTCs are relatively easy to do, and the extent to which they feel as though they have personal control over completing them (Fidler et al., 1999, Lockyer et al., 2001). The greater the environmental or institutional constraints, the less likely individuals are to be able to follow through on their commitments and accomplish the behavioral changes they have formulated (Parochka and Paprockas, 2001). A number of studies have demonstrated that the CTC procedure can trigger actual changes in practice-related behavior, including the specific prescriptions that physicians write following educational programs (Wakefield et al., 2003), and the specific interventions utilized by occupational therapists over the course of their work with their clients (Lowe, Rappolt, Jaglal, & Macdonald, 2007).

The precise mechanisms involved in triggering this translation into practice are not fully known, but recent work has begun to address them. Herbert, Lowe and Rappolt (cited in Lowe, Hebert & Rappolt, 2009), for example, wondered whether reflection alone at the end of a new learning experience was sufficient to promote practice change, or whether the express formulation of a commitment of change was an essential element. Reflection has long been a key component of ongoing professional development programs, as reflected in the Mann et al., (2009) systematic review of reflection within continuing medication education courses. In their study, Hebert et al. (2009) asked half of their participants to complete CTCs while the other half were prompted to reflect on the workshop using the Critical Incident Questionnaire (CIQ). Two months following the workshop, there was a modest difference favoring the CTC group over the reflection-only group. The percentage of those who demonstrated significant change was significant in both groups, but it favored those who had formulated specific commitments to change. Overall, 67% of the individuals who used CTCs made changes in practice, compared to 50% of those in the CIQ group who reported doing likewise.

A recent study of the relationship between reflection and behavior change in continuing medical education provides further evidence in this regard (Ratelle, et al., 2017). In a cohort study of attendees at a national hospital continuing medical education course, 223 participants provided reflection scores for each presentation they attended, and formulated commitment-to-change statements at the conclusion of each course. Reflection scores consisted of ratings, on a 5-point scale, about the extent to which the presentation had prompted reflection, re-consideration, deliberation or critical re-evaluation of their practices. A 3-month post-course survey was conducted to determine whether planned CTCs were successfully implemented, and whether they were related to higher levels of reflection.

Overall, participants indicated that 65.5% of the CTC statements were implemented. Reflection scores correlated significantly with the number of planned CTC statements ($r=.65$, $p<01$), suggesting the potential role of the CTC procedure in enhancing reflection and, potentially, translation into actual practice. In addition, higher reflection scores were related to the greater availability of opportunities for audience response and the use of clinical case illustrations. The researchers concluded that, "we found that reflection strongly correlates with CTC" and that "continuing education "curricula that stimulate reflections may actually promote positive patient care behaviors" (Ratelle et al., 2017, p. 166).

SUMMARY

Educators or learners who are interested in enhancing learning, and the translation of that learning into practice, may increase the retention and translation of material by incorporating CTCs into their programs. Although the overall effectiveness of CTCs as a tool to enhance the integration of new learning into practice is still under study, the current evidence is promising. The incorporation of simple reflective questions into a learning experience may itself be useful, as when the psychologists asks, "How can I use this new knowledge?", "How does this apply to my practice and to what I do?", or "What might I do differently based on what I have learned today?" Although simple reflection itself appears to facilitate both learning and the translation of that learning into practice, the express formulation of potential changes and a commitment to those changes may add further value (Lowe et al., 2009). Overall, the formulation of CTCs represents a relatively simple mechanism for promoting reflection, anchoring expectations regarding adoption, and leveraging new learning into novel practice behaviors. Simple extensions to the CTC procedure that may provide additional benefit include conducting surveys of post-course behaviors to assess compliance with the CTCs, encouraging reports to colleagues or other peers regarding CTCs in order to build in additional elements of accountability, or establishing timelines for the completion of CTCs. With continued utilization and examination, Commitment-to-Change procedures may join the ranks of other processes, procedures and techniques that jointly constitute what has increasingly come to be recognized as the set of "Best Practices" in the field of ongoing professional education and continuing professional competence.

ABOUT THE AUTHOR

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