

ACT-SAB

Addictions Counseling Today: Substances and Addictive Behaviors

UPDATE

Addictions Counseling Today Update Newsletter

Volume 1, Issue 1 (Covering May 2019 through August 2020)

Addictions in General

Welcome to the first issue of the ACT-SAB Update! In each issue, I will provide select research highlights, most of which will appear in subsequent editions of ACT-SAB. This issue will focus on addictions in general. The cited references appear on the last page, ensuring your ease of finding the actual reference should this be important to you. The main application to addiction counselors is bolded and *italicized*. Let us begin.

Involve Significant Others in Treatment

Ariss and Fairbairn (2020) conducted a meta-analysis based on 16 independent trials ($n = 2,115$). They found that addicted individuals are likelier to reduce substance use when significant others are involved in their treatment. The effect endures beyond one year.

Utilizing Third-Wave Cognitive Therapy

A special issue was recently published focused on third-wave cognitive and behavioral processes and therapies for addictive behaviors (see Garey et al., 2020).

Mindfulness is Helpful

Mindfulness-based relapse prevention demonstrates effectiveness in helping individuals understand their cravings and change their thoughts toward the same (Vadivale & Sathiyaseelan, 2019).

Review of CRAFT

A systematic review was also published looking at the success of Community Reinforcement Approach and Family Training (CRAFT; Archer et al., 2020).

Spirituality Aids Recovery

Using a national U.S. sample ($N = 39,809$), Kelly and Eddie (2020) found that overall, spirituality but not religion, appears to play a role in aiding recovery, particularly among those with prior treatment or 12-step histories, but women and men, and racial-ethnic groups in particular, differ strikingly in their spiritual and religious identification, and the role these have played in aiding recovery” (p. 116).

Encourage Clients to Develop Robust Alternative Reinforcers Desirable

In their systematic review of substance-free (i.e., alternative) reinforcements, Acuff et al. (2019) concluded that similar to animal studies, when people have robust alternative reinforcers to drug use, substance use behavior diminishes. The application of this finding for addiction counselors is that we should stress with our clients the importance of developing substantive alternative rewards as substitutions for their addictive substances and/or behaviors. Acuff et al. also critically evaluated several substance-free reinforcement measures and surmised that these measures help predict substance use and its severity.

Teach Emotional Regulation Skills

Emotional dysregulation and insecure attachment play a role in many addictive behaviors. Liese et al. (2020) concluded from their study of 712 university students that although attachment styles may be difficult to modify, emotional dysregulation can be treated. Liese et al. suggested that teaching client's emotional regulation skills might help treat substance use disorders (SUDs).

Technology-Based Interventions

Research continues demonstrating the effectiveness of technology-based interventions (TBIs). A recent study found that TBIs are effective for women of childbearing age (Hai et al., 2019).

Impulsivity and Compulsivity Findings

"The gestalt of findings to date suggests that both impulsivity and compulsivity are core constructs linked to addictive behaviors and may not be solely the secondary sequelae associated with the effects of prolonged substance exposure" (Lee et al., 2019, p. 14).

Theory Controversy Continues – Is Addiction a Disease or a Choice?

While neuroscientists continue to find evidence that addiction leads to changes in the brain, choice theorists continue to argue differently. Ross (2020) advanced the idea that because addicted individuals need to *choose* to recover, addiction should be viewed as a "disorder of choice."

MacKillop (2020) critiqued a national study conducted by Kelly et al. (2019). They found that individuals with a substantial alcohol or other drug problem reported that it took an average of five attempts to quit their substance. The median number of attempts was two or three. MacKillop argued that such few attempts were inconsistent with the idea that addiction is "a chronic relapsing condition."

People with SUDs are More Likely to Experience Treatment-Resistant Depression

A population-based, nested case-control study of treatment-resistant depression (TRD) was undertaken by Brenner et al. (2020) in Sweden. The sample consisted of 15,631 individuals defined as having TRD, who were extracted from an overall sample of 121,669 who had taken antidepressants for depression. Brenner et al. concluded that individuals with recent or current SUDs were more likely to have TRD than those without SUDs.

New Measure of Substance Use Motives

Substance Use Motives Measure (SUMM) – A comprehensive eight-factor model for alcohol/drug consumption (Biolcati & Passini, 2019).

Transcranial Electrical and Magnetic Stimulation

Research is emerging that suggests transcranial direct current stimulation might be beneficial in reducing craving among individuals with SUDs (Martinotti et al., 2019). Song et al. (2019)

concluded from their meta-analysis that “non-invasive brain stimulation targeted at dlPFC reduces craving and consumption levels (providing the first meta-analytical evidence for the latter effect in drug addiction), with larger effects in multi-session as compared to single-session interventions” (p. 606). A consensus paper was published recently regarding both transcranial electrical and magnetic stimulation (Ekhtiari et al., 2019).

For Interested Readers of Neuroscience

“Substance use disorders involve long-term changes in the brain that lead to compulsive drug seeking, craving, and a high probability of relapse” (De Sa Nogueira et al., 2019, p. 58).

Maria-Rios and Morrow (2020) reviewed neuroscience research linking PTSD and substance use disorders.

“A higher genetic liability to attention-deficit/hyperactivity disorder appears to be associated with higher risks of substance use disorders in individuals with attention-deficit/hyperactivity disorder” (Wimberley et al., 2020, p. 1368).

Based on a systematic review and meta-analysis, Hammond et al. (2019) concluded that “Cortical and subcortical brain regions involved in cognition, emotion regulation, decision-making, reward, and self-reference are associated with treatment response in addicted youth. These results are consistent with findings in the adult literature and suggest overlapping neural treatment targets across developmental stages” (p. 498).

Hamilton and Nestler (2019) wrote about epigenetics and addiction. They opined that epigenetic adaptations caused by drugs of abuse could induce life-long behavioral abnormalities.

“Stress and anxious, depressed, and irritable mood have high comorbidity with addiction. They may trigger bouts of drug seeking in humans via both negative reinforcement and negative urgency. The neurocircuitry that has been identified in the "dark side" of addiction involves key neuropeptides in the central extended amygdala, including corticotropin-releasing factor” (Zorrilla & Koob, 2019, first page).

“Acute exposure to drugs of abuse disrupts sleep by affecting sleep latency, duration, and quality. With chronic administration, sleep disruption becomes more severe, and during abstinence, insomnia with a negative effect prevails, which drives drug craving and contributes to impulsivity and relapse. Sleep impairments associated with drug abuse also contribute to cognitive dysfunction in addicted individuals” (Valentino & Volkow, 2020, p. 3).

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