

## **A systematic review of the impact of adherence on the effectiveness of e-therapies. (review).**

Donkin L; Christensen H; Naismith SL; Neal B; Hickie IB; Glozier N. *Journal of Medical Internet Research* 13(3): e52, 2011. (82 refs.)

Background: As the popularity of e-therapies grows, so too has the body of literature supporting their effectiveness. However, these interventions are often plagued by high attrition rates and varying levels of user adherence. Understanding the role of adherence may be crucial to understanding how program usage influences the effectiveness of e-therapy interventions. Objective: The aim of this study was to systematically review the e-therapy literature to (1) describe the methods used to assess adherence and (2) evaluate the association of adherence with outcome of these interventions. Methods: A systematic review of e-therapy interventions was conducted across disease states and behavioral targets. Data were collected on adherence measures, outcomes, and analyses exploring the relationship between adherence measures and outcomes. Results: Of 69 studies that reported an adherence measure, only 33 (48%) examined the relationship between adherence and outcomes. The number of logins was the most commonly reported measure of adherence, followed by the number of modules completed. The heterogeneity of adherence and outcome measures limited analysis. However, logins appeared to be the measure of adherence most consistently related to outcomes in physical health interventions, while module completion was found to be most related to outcomes in psychological health interventions. Conclusions: There is large variation in the reporting of adherence and the association of adherence with outcomes. A lack of agreement about how best to measure adherence is likely to contribute to the variation in findings. Physical and psychological outcomes seem influenced by different types of adherence. A composite measure encompassing time online, activity completion, and active engagements with the intervention may be the best measure of adherence. Further research is required to establish a consensus for measuring adherence and to understand the role of adherence in influencing outcomes. Copyright 2011, Journal Medical Internet Research.

## **Assessing problematic cannabis use.**

Thake J; Davis CG. *Addiction Research & Theory* 19(5): 448-458, 2011. (50 refs.)

Many cannabis users do not report experiencing harm from use, suggesting that not all use is cause for concern. The objective of this research is to establish a threshold beyond which cannabis use becomes problematic. Thresholds from the cannabis portion of the Alcohol, Smoking, Substance Involvement Screening Test (ASSIST) and the Cannabis Use Disorders Identification Test (CUDIT) were compared against a simple frequency of use question (daily use) for their ability to identify problematic users. Data are drawn from the 2008 Canadian Alcohol and Drug Use Monitoring Survey (n = 16,674). Effectiveness of the thresholds for predicting signs of problematic use was assessed in terms of sensitivity and specificity and in terms of positive and negative predictive values (NPV). The ASSIST (threshold of 8) and the CUDIT (thresholds of 6 and 8) outperformed the frequency measure with regards to sensitivity and specificity; the CUDIT with a threshold of 6 struck the best balance. With regards to positive predictive values, the CUDIT with a threshold of 8 revealed the highest value, whereas the daily use threshold, the CUDIT (threshold of 6 and 8) and the ASSIST (threshold of 8) revealed approximately the same NPV. Rates of harm were low for those using less than daily. Findings suggest that the CUDIT with a threshold of 6 may be best for use in population surveys when there is typically no reason to favor either sensitivity or specificity. Health care professionals may achieve greater precision using a threshold of 8 on the CUDIT. Copyright 2011, Informa Healthcare.

## **Characteristics of problem drinkers in e-therapy versus face-to-face treatment.**

Postel MG; de Haan HA; ter Huurne ED; Becker ES; de Jong CAJ. *American Journal of Drug and Alcohol Abuse* 37(6): 537-542, 2011. (25 refs.)

Background: The availability of online treatment programs offers the potential to reach more problem drinkers. This study compared the client populations of an e-therapy program (asynchronous client-therapist communication via the Internet) and a face-to-face treatment program. Objective: To determine whether

e-therapy and face-to-face groups differed from each other and changed over time. **Methods:** We compared the baseline characteristics of four naturalistic groups (N = 4593): two e-therapy groups (2005-2006 and 2008-2009) and two consecutive series of ambulant face-to-face clients admitted for treatment as usual. The characteristics we were interested in were gender, age, education level, working situation, and earlier treatment for drinking problems. **Results:** The results showed that the baseline characteristics of e-therapy and face-to-face clients differed by gender, education level, work situation, prior alcohol treatment, and age. We also found that both e-therapy groups differed over time by gender, work situation, and prior alcohol treatment. **Conclusions:** The e-therapy program successfully attracted clients who were different from those who were represented in regular face-to-face alcohol treatment services. This indicates that e-therapy decreases the barriers to treatment facilities and enhances the accessibility. However, the e-therapy population changed over time. Although the e-therapy program still reached an important new group of clients in 2008-2009, this group showed more overlap with the traditional face-to-face group of clients probably as a result of improved acceptance of e-therapy in the general population. **Scientific Significance:** Although e-therapy seems to be better accepted in the general population, anonymous treatment seems necessary to reach a broader range of problem drinkers. Copyright 2011, Informa Healthcare.

**Correlates of salvia divinorum use in a national sample: Findings from the 2009 National Survey on Drug Use and Health.**

Ford JA; Watkins WC; Blumenstein L. *Addictive Behaviors* 36(11): 1032-1037, 2011. (26 refs.)

Salvia, a hallucinogenic plant legally available in most of the United States, has become a widely discussed drug in the media. The extant research on Salvia use relies on non-probability samples and studies of college students. There is a clear need for research that identifies the correlates of Salvia use using data from a large sample that is nationally representative. The current study fills this important gap in the literature by using data from the 2009 National Survey on Drug Use and Health. This survey includes data from nearly 70,000 respondents ages 12 and older living in all 50 U.S. states and the District of Columbia. Due to survey design, separate analyses are conducted among adolescents and adults. Findings indicate that 1.66% of adolescents (respondents ages 12 to 17) and 5.08% of adults (respondents ages 18-34) report the use of Salvia at some point in their lifetime. Correlates of use

among adolescents include age, gender, income, peer and parent attitudes toward substance use, and other forms of drug use. Correlates of use among adults include age, gender, race, religiosity, marital status, criminal involvement, and other forms of substance use. Implications of the findings and limitations of the current study are discussed. Copyright 2011, Elsevier Science.

**Diazepam, alcohol use and violence among male young offenders: 'The devil's mixture'.**

Forsyth AJM; Khan F; Mckinlay B. *Drugs: Education, Prevention and Policy* 18(6, special issue): 468-476, 2011. (41 refs.)

**Background:** Diazepam is a benzodiazepine which has a history of usage among problem drug using groups. It has also been linked to aggression in laboratory settings. This article will examine illicit diazepam use and violence amongst predominantly alcohol-orientated offenders. **Methods:** A self-complete survey of male Young Offenders (n = 172) recruited during their induction into Scotland's only Young Offender's Institution was carried out during 2007. Qualitative interviews (n = 30) were conducted during 2008 on another sample recruited in the same way. **Results:** Survey respondents tended to report alcohol, rather than illegal drugs as being related to their offending behaviour. The exception to this pattern was diazepam, which when used in conjunction with alcohol was associated with violence, including weapon use. The 2008 interviews confirmed this and raised further concerns about the way in which diazepam was being mixed with alcohol, in relation to its mode of action, source of supply, dosage and users' beliefs. **Conclusion:** Although it receives little dedicated research, education or media attention, diazepam was a factor in more (violent) crime among this population than any/all other illegal drugs. Copyright 2011, Taylor & Francis.

**Drinking in the presence of underage children: Attitudes and behaviour.**

Raitasalo K; Holmila M; Makela P. *Addiction Research & Theory* 19(5): 394-401, 2011. (35 refs.)

The ambivalent characteristic of the Finnish drinking culture is particularly evident in the context of family life. While drinking to intoxication in the home environment is widely tolerated, attitudes towards drinking in the presence of children appear negative, and there is broad political concern about harms to children. This study aims to both illuminate the attitudes towards drinking and the actual drinking behaviour of parents living with their children. We use

data on 19-59-year old Finns from a general population survey (n = 2046). Respondents were asked about their drinking habits, recent drinking occasions and attitudes to drinking. Men under 40 years of age without underage children at home drank significantly more and more often to intoxication than those who had underage children. In a similar manner, women in all age groups without children at home drank significantly more often to intoxication than those who had children at home. Drinking to intoxication while children are present was almost unanimously considered inappropriate. Yet almost 40% of respondents considered it acceptable to drink to intoxication in the child's company if someone else is looking after the child. There was a significant relationship between these attitudes and actual behaviour among women. The drinking culture in Finland is very permissive, with intoxication often considered suitable for children's eyes as long as their safety is guaranteed. Prevention efforts should continue to target these attitudes and behaviour. Copyright 2011, Informa Healthcare.

**From substance dependence to addiction: Impact of a conceptual shift on therapeutic approaches? (review).**

Reynaud M; Karila L. *Current Pharmaceutical Design* 17(14): 1321-1322, 2011. (15 refs.)

[Editor's note: This change will be incorporated in the DSM-V.] Switching from the concept of substance or alcohol dependence to that of addiction has profoundly modified our ways of approaching, treating and organizing the care of this disease. This more complex and subtle approach gives less importance to the substance and its effects and focuses more on the initiation of pathological behavior. It is important to keep in mind that the addictive process associates a substance (more or less addictive), an individual (more or less vulnerable) and an environment (more or less condoning). Today, it is no longer possible to consider that a drug acts on only one receptor or one system. Current understanding of inner regulation mechanisms integrates the interactions between the various stimulated brain pathways. Addiction treatments which should benefit from advances in genetics, neuropsychology and neuroimaging could be increasingly individualized in the years to come. The "addictology" approach has triggered thinking about other therapeutic approaches such as modification of therapeutic objectives toward "risk reductions" or applying this model to behavioral addictions (food, sex, sport, gaming...). This conceptual shift seems to enrich

clinical analysis, the therapeutic possibilities and the avenues for research. Copyright 2011, Bentham Science Publishing Ltd.

**Online social networking and addiction: A review of the psychological literature. (review).**

Kuss DJ; Griffiths MD. *International Journal of Environmental Research and Public Health* 8(9): 3528-3552, 2011. (122 refs.)

Social Networking Sites (SNSs) are virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests. They are seen as a 'global consumer phenomenon' with an exponential rise in usage within the last few years. Anecdotal case study evidence suggests that 'addiction' to social networks on the Internet may be a potential mental health problem for some users. However, the contemporary scientific literature addressing the addictive qualities of social networks on the Internet is scarce. Therefore, this literature review is intended to provide empirical and conceptual insight into the emerging phenomenon of addiction to SNSs by: (1) outlining SNS usage patterns, (2) examining motivations for SNS usage, (3) examining personalities of SNS users, (4) examining negative consequences of SNS usage, (5) exploring potential SNS addiction, and (6) exploring SNS addiction specificity and comorbidity. The findings indicate that SNSs are predominantly used for social purposes, mostly related to the maintenance of established offline networks. Moreover, extraverts appear to use social networking sites for social enhancement, whereas introverts use it for social compensation, each of which appears to be related to greater usage, as does low conscientiousness and high narcissism. Negative correlates of SNS usage include the decrease in real life social community participation and academic achievement, as well as relationship problems, each of which may be indicative of potential addiction. Copyright 2011, MDPI AG.

**Substance use among persons with traumatic brain injury: A review. (review).**

West SL. *NeuroRehabilitation* 29(1): 1-8, 2011. (72 refs.)

This paper provides a review of the current literature in the area of substance use and traumatic brain injury (TBI). Collectively, these studies demonstrate that substance use and SUD are common in the TBI population both pre- and post-injury, are a frequent causative factor in injury acquisition, complicate the rehabilitation process, and have substantial negative

impact on individual health and well being. Further, individuals with a demonstrated SUD and concurrent TBI are likely to be severely limited in their ability to access SUD care due to physical barriers. This literature is reviewed and then considered in terms of its general weaknesses. Finally, a brief outline of future research needs is provided. Copyright 2011, IOS Press.

**The DSM Guided Cannabis Screen (DSM-G-CS): Description, reliability, factor structure and empirical scoring with a clinical sample.**

Alexander D; Leung P. *Addictive Behaviors* 36(11): 1095-1100, 2011. (35 refs.)

Clinicians need cannabis-specific diagnostic screens compatible with DSM-IV-TR and proposed DSM-5. A clinical sample (n = 174) completed the DSM-Guided-Cannabis Screen (DSM-G-CS) 21 and 11 criteria versions and three drug comparison measures. DSM-G-CS descriptive statistics, reliabilities, three factor analyses, and eight ROC and discriminant analyses evaluated construct validity and empirical scoring. DSM-G-CS reliabilities are .88 (21-items) and .85 (11-criteria). Factor analyses (FA) with varimax rotation derived six and three factors explaining 62% to 60% of variances for the DSM-G-CS 21 and 11 respectively, with  $\geq 400$  loadings supporting retention of all items. Cannabis withdrawal subscale reliability .952 (10-items) and FA supported one factor composite item. ROC and discriminant analyses supports DSM-G-CS 1.5 to 2.5 scoring cutoffs as empirically sound, based upon sensitivity-specificity maximums, accuracy probabilities, confidence levels and correctly classified percentages, optimal with Marijuana Screening Inventory (MSI) comparisons. Results support DSM-G-CS construct validity, empirical scoring and compatibility with DSM-IV-TR cannabis abuse or dependence and proposed DSM-5 cannabis use disorder diagnostic models. Clinically, DSM-G-CS scores of two to three (or more) suggest probable cannabis-use disorder, deserving assessment to determine diagnostic accuracy. Copyright 2011, Elsevier Science.

**The trouble with morality: The effects of 12-step discourse on addicts' decision-making.**

Frank D. *Journal of Psychoactive Drugs* 43(3): 245-256, 2011. (41 refs.)

Since its development in the 1960s, researchers have extensively scrutinized methadone maintenance treatment (MMT) as a medical response to heroin addiction. Studies consistently find that MMT is more successful than other treatment models in the reduction

of opiate/opioid misuse, the transmission of diseases like HIV/AIDS and hepatitis C, and criminal arrest and conviction rates. Nonetheless, a significant portion of active and former heroin addicts view MMT negatively and-perhaps as a result-MMT is vastly underused. This study examines the effects of 12-Step discourses on the opinions and treatment decisions of active heroin addicts, addicts in MMT, and addicts in 12-Step treatment programs. The study finds the abstinence/morality based discourse of drug addiction and treatment is pervasive among addicts and their non-drug using relations and peers alike; moreover, addicts have internalized this narrative, oftentimes despite their own knowledge of MMT's success and positive personal experiences. The findings suggest that the dominance of abstinence/morality narratives contributes to MMT's poor reputation among, and low use rate by current and former heroin addicts and that the power of the dominant discourse is such that it produces a desire to buy into its values and tenets even when it is against the individual's interests to do so. Copyright 2011, Haight-Asbury Publishing.

**Therapists' big five personality traits and interpersonal functioning in the substance abuse field: A cluster-analytic study.**

Saarnio P. *Journal of Substance Use* 16(5): 348-358, 2011. (40 refs.)

Background: Considerable differences exist between therapists in the outcomes of psychotherapy and substance abuse treatment. There is no clear understanding of the extent to which these differences can be explained by the personality traits or interpersonal functioning of the therapists. Aims: This study seeks to shed some light on their personal qualities. The aim was to group Finnish substance abuse therapists (N = 97) based on their personality traits and interpersonal functioning. Methods: Personality traits were measured using a test based on the five-factor model and interpersonal functioning with a vignette task. Results: The cluster analysis yielded a three-group model. The first two groups differed considerably in their personality traits, yet their interpersonal functioning was on almost the same level. The personality traits of the third group were close to standard average. Their interpersonal functioning was clearly on a lower level than that of the other two groups. The groups also differed from each other with respect to some background variables and therapeutic orientation. Conclusions: In the future, the grouping should be linked to treatment processes and outcomes. The results are also of interest with an

eye to student selection, recruitment of therapists, and supervision at work. Copyright 2011, Informa Healthcare  
**Mephedrone (4-methylmethcathinone; 'meow meow'): Chemical, pharmacological and clinical issues. (review).**

Schifano F; Albanese A; Fergus S; Stair JL; Deluca P; Corazza O et al. *Psychopharmacology* 214(3): 593-602, 2011. (62 refs.)

Recently, those substances deriving from the active ingredient of the Khat plant, cathinone, have been rising in popularity. Indeed, 4-methylmethcathinone (mephedrone; 'meow meow' and others) has been seen by some as a cheaper alternative to other classified recreational drugs. We aimed here at providing a state-of-the-art review on mephedrone history and prevalence of misuse, chemistry, pharmacology, legal status, product market appearance, clinical/management and related fatalities. Because of the limited evidence, some of the information here presented has been obtained from user reports/drug user-orientated web sites. The most common routes for mephedrone recreational use include insufflation and oral ingestion. It elicits stimulant and empathogenic effects similar to amphetamine, methylamphetamine, cocaine and MDMA. Due to its sympathomimetic actions, mephedrone may be associated with a number of both physical and psychopathological side effects. Recent preliminary analysis of recent UK data carried out in 48 related cases have provided positive results for the presence of mephedrone at postmortem. Within the UK, diffusion of mephedrone may have been associated with an unprecedented combination of a particularly aggressive online marketing policy and a decreasing availability/purity of both ecstasy and cocaine. Mephedrone has been recently classified in both the UK and in a number of other countries as a measure to control its availability. Following this, a few other research psychoactives have recently entered the online market as yet unregulated substances that may substitute for mephedrone. Only international collaborative efforts may be able to tackle the phenomenon of the regular offer of novel psychoactive drugs. Copyright 2011, Springer.

**Twelve-Step program attendance and polysubstance use: Interplay of alcohol and illicit drug use.**

Tonigan JS; Beatty GK. *Journal of Studies on Alcohol and Drugs* 72(5): 864-871, 2011. (38 refs.)

Objective: The primary aim of this study was to advance understanding of the efficacy of 12-step

programs by determining the temporal relationships between alcohol and illicit drug use among 12-step program affiliates. Method: A total of 253 early 12-step affiliates without extensive histories of Alcoholics Anonymous (AA) attendance were recruited from substance use treatment and community-based AA. A majority of the sample met criteria for a diagnosis of alcohol dependence, reported lifetime use of illicit drugs, and reported illicit drug use in the 90-day period before recruitment. After informed consent, participants were interviewed at intake and in 3-month increments for 1 year. Results: Preliminary analyses indicated that 12-step attendance was predictive of reductions in substance use and that such reductions were not moderated by illicit substance use disorder diagnosis or alcohol problem severity. Lagged hierarchical linear models indicated that illicit drug use was a robust predictor of later use of alcohol, although the frequency and intensity of drinking were contingent on whether participants sustained 12-step program affiliation. Alcohol use did not predict later illicit drug use among participants who sustained 12-step program participation. Conclusions: Findings suggest that 12-step participation may serve as a protective factor after substance use occurs. Although our results suggest that the initiation of illicit drug use may undermine efforts to achieve and sustain abstinence from alcohol, our findings do not suggest that alcohol use necessarily mobilizes relapse across different substances among 12-step program affiliates. Copyright 2011, Alcohol Research Documentation.

**Unraveling the relative contributions of his, her, and their drinking to the likelihood of arrest in intimate partner violence cases.**

Hirschel D; Hutchison I. *Journal of Interpersonal Violence* 26(15): 3050-3079, 2011. (74 refs.)

The nexus between substance abuse and intimate partner violence has been studied in depth. The interrelationship between drinking, intimate partner violence, and an officer's decision to make an arrest has not received as much attention. The issue is complicated by the fact that either or both of the involved parties may have been drinking and the effects may vary depending on who has been drinking. In this article, the authors examine the relative contributions of his, her, and their drinking to the likelihood of arrest. Copyright 2011, Sage Publications.