Addiction and change: Voices of sustained recovery

Author: Roeske, Michael C.


Abstract: While substance use disorders are common in the United States, and prevalent in clinical settings, there are different types that require different treatment approaches. The more severe forms are chronic, relapsing conditions that necessitate a complete, continuous disruption of use. Abstinence, though, is considered a necessary but insufficient response. In order to see improvements, individuals often have to enter into a process known as recovery. Unfortunately, there is little research beyond simple or short-term measures about this undertaking. This study hoped to add to the literature by exploring the lived experience of 12 recovering individuals who escaped the confines of an alcoholic or addicted life at least fifteen years earlier. Using a phenomenological design, data was gathered by use of an interview and questionnaire. The results were coded and organized into 10 themes and further grouped into four larger domains. The participants revealed recovery was a winding, deepening journey with no end. As well, it was a process that had to stave off one's tendencies toward emotional isolation and benefited greatly from being around other recovering individuals. Recovery also had two distinct phases, Early and Late. Interestingly, both were precipitated by the emergence of distress and ultimately resulted in character change, humility, and an increase in spirituality. Moreover, the described developmental changes appeared analogous to those found in the object-relations tradition of psychoanalysis. Therefore, additional research is needed to explore the nature of phases in recovery and whether the results have direct clinical application from a psychoanalytic perspective.

Subject: Behavioral psychology; Clinical psychology; Physiological psychology

Classification: 0384: Behavioral psychology; 0622: Clinical psychology; 0989: Physiological psychology

Identifier / keyword: Psychology, Addiction, Alcoholism, Long-term recovery, Phenomenology, Stages of recovery, Sustained recovery

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Translational examination of risk-related decision-making as an endophenotype for alcohol use disorders
Abstract: Alcohol use disorders, a cluster of symptoms centered around a loss of control over alcohol use resulting in negative consequences on health and well-being, continue to cause worldwide suffering and economic loss. While decades of research have advanced our understanding of the genetic and brain-based causes of alcohol use disorders, the complexity of the symptom cluster and the corresponding intricacy of the implicated neural circuitry complicates the development of interventions. Thus, instead of focusing on the disorder as a whole, psychiatric research has placed research emphasis on intermediate phenotypes, or ‘endophenotypes’ that lie between the genetic basis and the disorder as a whole (Ducci & Goldman, 2008, 2012; D. Goldman, Oroszi, & Ducci, 2005; Manji, Gottesman, & Gould, 2003). A number of endophenotypes have been explored, most notably craving or incentive sensitization (Robinson & Berridge, 2001, 1993), affect or mood (Ahmed & Koob, 2005; G. F. Koob & Le Moal, 1997), and aspects of executive function (R. Goldstein & Volkow, 2011) including impulse control (Jentsch & Taylor, 1999). Related most closely to executive function, this dissertation examines biases in risk-related decision-making as having explanatory value for understanding alcohol dependence at its various stages: from alcohol use initiation, to acquisition of the clinical syndrome, to recovery and abstinence. Data presented herein was drawn from both human clinical populations, and animal models, leveraging a translational approach. First, the neurobiology and genetics of addiction are examined, as is the methods used to measure risk-related decision-making, and how this phenotype might conceptually relate to alcohol use disorders. Next, two analyses of risk-taking data from a clinical and sub-clinical sample demonstrate that, counter to initial predictions, risk-taking as assessed by the Balloon Analogue Risk Task [BART; (C. Lejuez et al., 2002)] is negatively related to clinical symptomatology. The nature of this relationship is further probed, revealing that differences in alcohol problem severity predict differences in loss reactivity, such that those with greater severity take less risk after a big loss than those with lesser severity. Next, the effects of acute and sub-chronic alcohol dosing regimens are explored in an rodent analogue of the BART. Results indicated that acute alcohol dose dependently decreased risk-
taking in the rat-BART, an effect partially consistent with the human literature where alcohol and other drugs are shown to have few effects on behavior in the human task (Peacock, Bruno, Martin, & Carr, 2013). Furthermore, six weeks of sub-chronic administration of alcohol (versus a saline control) did not significantly alter performance of the rat-BART. Suggestions for future studies are explored. Finally, one component of the definition of an endophenotype is that it is heritable, and thus regulated by genes (Ducci & Goldman, 2008, 2012; D. Goldman et al., 2005; Manji et al., 2003). In order to assess the heritability of risk-related decision-making, a panel of inbred strains was phenotyped, revealing that about 55% of the variability in performance is attributable to genetic effects. An attempt is made to identify regions of the rat chromosomes that are linked with rat-BART performance using an F2 intercross strategy and quantitative trait loci (QTL) analysis. Preliminary results indicated a candidate region on Chromosome 1 (between approximately 90.99 Mb and 129.99 Mb). However, these results should be interpreted with caution as higher density trait mapping is required to more narrowly define the QTL region, and this significant result was only found in one of six variants of the rat-BART subject to analyses. In sum, the data presented here, in the context of the broader literature, indicated that future research must address differences in behavioral metrics of risk-related decision-making, as results obtained can be contradictory depending on the task used. Additionally, there are areas where future research is more likely to be clinically influential than others. In particular, more work should be done to examine risk-taking during adolescence, at recovery and during treatment. Interventions at those stages appear most likely to improve outcomes for alcohol dependence.

A Non-Experimental Study of Factors That Influence Family-Related Substance Abuse Counseling

Author: Taylor, Christopher J.
Abstract: The purpose of this quantitative non-experimental study was to determine if there is a relationship between the education level, years of experience, or caseload size (predictor variables) of employed alcohol and substance abuse professionals and the involvement of families in client counseling (criterion variable). The study utilized a quantitative research method and a non-experimental design. The target population was employed alcohol and substance abuse counselors who were current members of the Addiction Professional group on LinkedIn®. Multiple linear regression analysis showed that none of the predictor variables were statistically significant; years of experience, education level and caseload do not explain any of the variance in family involvement scores. Thus there was no evidence to suggest the involvement of family in counseling is associated with alcohol and substance abuse professionals’ education level, years of experience or caseload. A limitation of this study was the relatively small sample size (n = 116), which may have been related to the sample group and method of data collection. A different approach to data collection (i.e. visiting agencies and directly surveying counselors) may yield a greater number of participants. Responses by participants indicate that some form of family involvement is occurring in their treatment with clients; however, 62.1% reported that their agency does not have a formal family program. Future research that focuses on programs, whether indirectly or directly, could provide important insight into this topic.

Parent emotion socialization and emotion regulation in substance abusing families

Author: Shadur, Julia Madeleine

Abstract: The current study examined emotion socialization behaviors among mothers in addiction treatment and explored risk mechanisms that may explain emotion regulation deficits in young children of substance-abusing mothers. Variability within the sample was explored in order to evaluate who is at risk (i.e., those with greater severity of drug use) and when they are at risk (i.e., while using) for engaging in less effective emotion socialization behaviors. On average, mothers reported engaging in emotion coaching styles of socialization involving more consistent and supportive reactions and fewer non-supportive reactions to children’s emotions, consistent with general population studies. However, the context
of drug use negatively impacted how well mothers balanced these types of reactions: mothers engaged in significantly higher levels of non-supportive and inconsistent reactions during periods of problematic drug use compared to periods of sobriety. Findings support a mediated risk mechanism such that more severe impairment related to maternal substance use predicted higher levels of non-supportive reactions to children's negative emotions which, in turn, predicted poorer child emotion regulation. Implications for prevention and treatment suggest that non-supportive emotion socialization behaviors may be an appropriate target for supporting emotion regulation within contexts of maternal drug use.


Subject: Clinical psychology

Classification: 0622: Clinical psychology

Identifier / keyword: Psychology, Addiction, Emotion regulation, Emotion socialization, Parenting, Substance use
Method matters: Contextual factors related to attention bias among smokers attempting to quit smoking

Author: Yeh, Vivian M.

Abstract: Attention bias, or increased attention to smoking relative to neutral cues, may be a useful marker for relapse risk; however, attention bias has not been consistently documented in continuing smokers which limits its utility for treatment planning. This study assessed attention bias in continuing smokers experiencing a mild stressor. Attention narrowing, or increased attention to smoking relative to other positive cues, was also studied to assess the specificity of distress effects on attention to smoking cues. Analyses also explored the degree to which attention bias and narrowing predicted smoking lapses. In addition, because the mild stressor used was somewhat novel, we tested the degree to which unpredictable noise induced attention bias toward negative cues and subjective distress relative to control. Data were collected in two similar study designs in smokers preparing for a quit attempt. Designs differed in the control conditions against which stress was compared within subjects (Design 1 = predictable noise, Design 2 = silence). Attention was assessed using a modified Stroop task with neutral, negative, positive, and smoking words. Design, Stress Order (whether unpredictable noise was presented first or last), and Word Order (whether smoking words were presented first or last) were included in analyses to explore their potential effects on attention.
Results indicated that attention bias effects were greater in Design 1 than Design 2 and when stress was presented first rather than last, although attention bias toward smoking cues was small in magnitude in all conditions. No evidence for attention narrowing was found. Attention bias and narrowing under mild stress were not related to later smoking lapses. Although the stress manipulation did not increase distress relative to control, it corresponded with a negative bias as anticipated. The magnitude of this effect varied across study designs. Overall findings suggest attention bias effects are not robust among continuing smokers experiencing unpredictable noise stress, and effect sizes vary as a function of design elements in important ways. Further research is necessary to determine the optimal context to reliably assess attention bias in continuing smokers.


Subject: Clinical psychology

Classification: 0622: Clinical psychology

Identifier / keyword: Psychology, Attention bias, Smoking cessation, Stress
Abstract: The ability of bacterial species to transform complex chemical substances has been well documented. Some of these species are native to the human gastrointestinal tract and play an active role in the postmortem decomposition process. These species have potential to cause biotransformations that affect compound-to-metabolite ratios within the human body, especially after death. Postmortem changes such as these have rarely been evaluated or taken into consideration but they have potential to supply valuable information, especially concerning compound identification and confirmation. The purpose of this research was to investigate the effects of Escherichia coli, Bacteroides fragilis, and Clostridium perfringens on drugs of abuse, and to compare these metabolites to those produced during normal human metabolism. To analyze and quantify these effects, a novel liquid chromatography triple quadrupole tandem mass spectrometry method was developed for diazepam, flunitrazepam, and metabolites in Reinforced Clostridial Medium. Reinforced Clostridial Medium is a complex matrix designed to provide the nutrients necessary to promote growth of bacterial species, particularly Clostridia, other anaerobes, and specimens in clinical samples. To date, similar methods of extraction, quantitation, and analysis of drugs of abuse in a nutrient medium matrix have not been published. After validation, the
method was applied to assess the specific effects of human gastrointestinal species on the targeted drugs of abuse. Experiments explored the effects of individual bacterial species as well as a mixed culture on the benzodiazepine compounds under anaerobic conditions. Diazepam and flunitrazepam were selected for biotransformation studies because of their potential for abuse and prevalence in analysis of both clinical and forensic specimens. Additionally, the human metabolites for these compounds had been previously identified and reference standards were commercially available. A series of bacterial blanks were prepared in Reinforced Clostridial Medium and incubated under experimental conditions. None of the bacterial specimens produced interferences with the target analytes that satisfied peak shape, retention time, ion ratio, and limit of quantitation requirements. Analyte blanks were also prepared for analysis. Investigation of analyte blanks and the mass balance for the reaction suggested that diazepam performed a partial, unassisted degradation when incubated under experimental conditions. However, neither nordiazepam, oxazepam, nor temazepam registered an increase between pre- to post-incubation concentrations. The degradation product was therefore unable to be identified under current experimental conditions. In biotransformation studies, diazepam showed a decrease in concentration between pre- and post-incubation for the Escherichia coli and Bacteroides fragilis series of samples, while changes were minimal for Clostridium perfringens and the mixed culture. Findings suggested that Escherichia coli and Bacteroides fragilis were acting on diazepam; however there was no increase in concentration for the human metabolites monitored. The discrepancy in mass balance was potentially indicative of a unique bacterial metabolite not produced during normal human metabolism. Analysis of the flunitrazepam drug blanks likewise exhibited a decrease in concentration. Unlike what was observed in the diazepam blank experiments however, there was a corresponding increase in concentration for the 7-aminoflunitrazepam metabolite in post-incubation samples. This accounted for some of the flunitrazepam conversion. In biotransformation studies, samples incubated with Escherichia coli demonstrated a greater decrease in flunitrazepam concentration than what was seen in analyte blank samples, while Bacteroides fragilis, Clostridium perfringens, and the mixed culture resulted in nearly complete conversion of flunitrazepam. Increased 7-aminoflunitrazepam concentrations accounted for the majority of the conversion, however data suggested production of a minor metabolite that was not monitored in the current analysis. These experiments served as a pilot study and proof of concept. Unlike previous research, animal models
were not required for experimental purposes, which eliminated the ethical considerations and guidelines required for animal research. Frozen stock cultures of bacterial samples provided a theoretically endless supply of specimens for transformation studies, reducing cost. The streamlined methodology allowed for quantities of experimental variations to be performed in unison, conserving time. Extraction procedures, a narrow bore column, and low flow rate for instrumental analysis minimized solvent consumption and hazardous waste production, making analysis both cost-effective and environmentally friendly. The presented experimental methodology serves as a template and can be adapted and applied to a realm of possibilities including investigation of natural products, biodegradation of agricultural and environmental contaminants, isolation and repurpose of native bacterial enzymes, as well as further studies on pharmaceutical compounds and drugs of abuse. An additional method was developed and validated for quantitation of cocaine, fentanyl, and metabolites in Reinforced Clostridial Medium, which will be applied in similar fashion. The applications can easily be expanded to include alternative bacterial species as well. Ultimately, this methodology would be ideal to study compounds that are too toxic or lethal for animal and human metabolic investigations. This would be particularly useful in military explorations of exposure to incapacitation and chemical warfare agents.


Delay discounting rates, relapse, and treatment satisfaction in young adults

Author: Jones, Chris

Abstract: The present study was designed to examine differences in young adults' (18-25) post-substance abuse treatment on impulsivity using the delay discounting task (DDT) and on treatment satisfaction questionnaires based on relapse occurrence. The mean age of the 101 participants was
They were 90% White, 62% male, and the most abused substance was alcohol (57%). Each completed brief demographic and relapse questionnaires, the Client Satisfaction Questionnaire-8 (CSQ-8) and Service Satisfaction Questionnaire-30 (SSS-30) and a binary forced-choice delay discounting task. There were no statistical differences on the DDT measure based on relapse occurrence or a relationship between DDT and treatment satisfaction results. On the CSQ-8, there was no difference between the groups; however, the group not reporting relapse did score significantly higher on the SSS-30 and its Perceived Outcome subscale. A better understanding of post-treatment impressions and behaviors will help lead to the development of improved monitoring and interventions during and after treatment for this population.
Predicting the initial lapse using a mobile health application after alcohol detoxification

Author: Chih, Ming-Yuan

Abstract: The prediction and prevention of the initial lapse--which is defined as the first lapse after a period of abstinence--is important because the initial lapse often leads to subsequent lapses (within the same lapse episode) or relapse. The prediction of the initial lapse may allow preemptive intervention to be possible. This dissertation reports on a predictive modeling study of the initial alcohol lapse after patient left residential care. The data were collected via a mobile health application, Addiction-Comprehensive Health Enhancement Support System (A-CHESS). A-CHESS was designed to offer ongoing support to alcohol addiction patients who have returned to their own community after completing inpatient treatment programs. Patients may access A-CHESS services at any time anywhere to help them cope with the recovery. In addition to the first chapter as the introduction of the problems and context, this dissertation consists of the other three chapters; each chapter presents a study to address different challenges faced in the development of such a predictive model in A-CHESS. The first challenge is the validation of a survey instrument used in the A-CHESS Weekly Check-in; the second challenge is
the study of A-CHESS use behavior before the initial lapse; and the third challenge is to develop a comprehensive predictive model of the initial lapse. The steps taken in this dissertation to address these challenges have been fruitful. The major findings are practical and can be implemented in A-CHESS.


Subject: Industrial engineering; Public health; Information science

Classification: 0546: Industrial engineering; 0573: Public health; 0723: Information science

Identifier / keyword: Communication and the arts, Applied sciences, Health and environmental sciences, Alcoholism, Informatics, Relapses, System use, Residential treatment

Title: Predicting the initial lapse using a mobile health application after alcohol detoxification
Neurovascular dysregulation contributes to methamphetamine-induced dopaminergic pathology

Author: Kousik, Sharanya Meenakshi


Abstract: Methamphetamine can induce neurotoxicity, especially in the striatum, which can lead to neurodegeneration. Given the rise in methamphetamine abuse, and the apparent increased risk for Parkinson's disease associated with methamphetamine abuse, it is important to identify the pathogenic course that links the two. Clinical studies report localized neurovascular dysregulation (i.e., reductions in cerebral blood flow) in the striatum of detoxified human methamphetamine abusers. Neurovascular dysregulation likely leaves the striatum vulnerable to the neurotoxic effects of methamphetamine leading to Parkinson's disease-like pathology. There is a critical gap in our knowledge about the specific factors involved in methamphetamine-induced neurotoxicity and the pathology that occurs even after abstinence from methamphetamine abuse. Studies in this dissertation addressed these important knowledge gaps. Using rats trained to self-administer methamphetamine followed by periods of forced abstinence, we found that methamphetamine produced neurovascular dysregulation resulting in regionally selective IV blood brain barrier breakdown as well as selective vasoconstriction. While the blood brain barrier appeared to recover by 10 days after self-administration, vasoconstriction and vascular dysregulation in the striatum persisted for up to 28 days. Persistent neurovascular dysregulation likely leads to hypoxia and accumulation of toxins in the striatum that can trigger neurodegeneration. We identified several vasoregulators (e.g., ET A R, nNOS, GSK3β, and HIF1α) associated with methamphetamine-induced
vasoconstriction and hypoxia. As dopamine receptors are neurovascular regulators, we also ascertained that the dopamine D2 receptors are responsible for the vasoconstricting effects of methamphetamine. To determine if selective striatal neurovascular dysregulation correlated with Parkinson's disease-like pathology, we assessed nigrostriatal dopaminergic pathology in the same methamphetamine self-administering rats. We observed progressive dopaminergic pathology starting in the striatal terminals and retrogradely leading to nigral neuron loss, similar to the neurodegenerative pattern observed in Parkinson's disease. The "limbic-motor interface" of the mesolimbic dopamine pathway also showed dopaminergic pathology occurring in a retrograde manner from the nucleus accumbens core to the lateral ventral tegmental area cell bodies. Collectively, these data suggest that methamphetamine-induced neurovascular dysregulation, mediated by D2 receptors, may lead to persistent dopaminergic loss in pathways linked to motor function consistent with a trajectory for developing PD.

Faculty attitudes toward addressing mental health conditions and substance abuse among college students

Author: O'Connor-Merrigan, Mary L.

Abstract: The continued prevalence of mental health conditions and substance abuse among students enrolled in institutions of higher education is a significant and progressing concern, with marked impact on retention, academic success, graduation rate, and alarming personal consequences. Yet, many institutions struggle with successfully addressing these concerns. Resiliency theory offers a framework through which instructions can transition away from compartmentalization and random policies toward collaboration among the entire campus community to effectively address mental health conditions and substance abuse on campus. This level of collaboration among the entire campus community includes faculty. However, research on the benefits of faculty participation is limited. The purpose of this study was to determine faculty members’ perceptions of their knowledge and attitudes toward identifying, approaching, and referring students with mental health conditions and substance abuse to appropriate services; and if perceptions were
influenced by faculty's personal characteristics. Data were collected from 339 full-time faculty at a Great Plains university using a modified survey instrument developed by Marion Becker, utilizing a five-point Likert-type scale to examine faculty perceptions. The data (25.9% return rate) were analyzed through the calculations of means and standard deviations, t tests, and one-way analyses of variance (ANOVARAs) with a post hoc Tukey's test (p < .05). The results of the study indicated a wide range of faculty attitudes and perceptions. Faculty (91.0%) agreed they can play a significant role in supporting students with mental health conditions and substance abuse. Faculty (96.0%) also agreed that students can recover and be successful. Faculty's perceptions of their knowledge in identifying specific symptomology were noteworthy yet, faculty were reluctant to directly approach a student and make a referral. Academic discipline strongly influenced faculty perceptions. Faculty in Medicine/Health Science with formal education on mental health conditions and substance abuse perceived themselves as more knowledgeable and comfortable than did faculty without formal education. Therefore, professional development can be tailored toward refining the skills of formally educated faculty and more comprehensively train faculty with less formal education on mental health and substance abuse. Faculty (67.0%) respondents indicated a significant willingness to participate in profession development to enhance knowledge.

Intracellular mechanisms of cocaine-memory reconsolidation in the basolateral amygdala and dorsal hippocampus

Author: Wells, Audrey Marie

Abstract: The ability of cocaine-associated environmental contexts to promote relapse in abstinent humans and reinstatement of cocaine-seeking behavior in laboratory animals depends on the formation and maintenance
of maladaptive context-response-cocaine associative memories, the latter of which can be disrupted by manipulations that interfere with memory reconsolidation. Memory reconsolidation refers to a protein synthesis-dependent phenomenon whereby memory traces are reincorporated back into long-term memory storage following their retrieval and subsequent destabilization. To elucidate the distinctive roles of the basolateral amygdala (BLA) and dorsal hippocampus (DH) in the reconsolidation of context-response-cocaine memories, Experiments 1-3 evaluated novel molecular mechanisms within each structure that control this phenomenon. Experiment 1 tested the hypothesis that activation of the extracellular signal-regulated kinase (ERK) in the BLA and nucleus accumbens core (NACc - a substrate for Pavlovian cocaine-memory reconsolidation) would critically control instrumental cocaine-memory reconsolidation. To determine this, rats were re-exposed to a context that had previously been used for cocaine self-administration (i.e., cocaine memory-reactivation) and immediately thereafter received bilateral intra-BLA or intra-NACc microinfusions of the ERK inhibitor U0126 or vehicle (VEH) and were subsequently tested for drug context-induced cocaine-seeking behavior (non-reinforced lever responding) ~72 h later. Re-exposure to the cocaine-paired context at test fully reinstated cocaine-seeking behavior, relative to responding in an alternate, extinction context, and post-reactivation U0126 treatment in the BLA, but not the NACc, impaired cocaine-seeking behavior, relative to VEH. This effect was associated with a temporary increase in ERK2, but not ERK1, phosphorylation in the BLA and required explicit reactivation of the target memory trace (i.e., did not similarly manifest when U0126 was administered after exposure to an unpaired context), suggesting that ERK in the BLA plays a critical role in restabilizing contextual cocaine-related memories. Next, Experiment 2 evaluated the hypothesis that the transcription factor (TF) nuclear factor-κB (NF-κB) would also critically mediate instrumental cocaine-memory reconsolidation in the BLA. Remarkably, the NF-κB inhibitor, sulfasalazine (SSZ), administered bilaterally into the BLA following cocaine-memory reactivation, did not significantly alter subsequent cocaine-seeking behavior, relative to VEH, despite producing an observable trend for an enhancement in this behavior. Future studies will be needed to further examine this relationship, but the present findings may suggest that NF-κB TFs acts as negative regulators of cocaine-memory reconsolidation. Finally, Experiment 3 tested the hypothesis that members of the Src family of tyrosine kinases (SFKs) are obligatory for instrumental cocaine-memory reconsolidation. Consistent with our hypothesis, PP2, a nonspecific inhibitor of SFKs, administered
bilaterally into the DH after cocaine-memory reactivation, attenuated subsequent drug-context induced motivation for cocaine, relative to VEH, in a memory reactivation-dependent manner. This effect was associated with a preferential disruption of SFK-mediated phosphorylation of the NR2a N-methyl-D-aspartate receptor (NMDAR) subunit. Together, these findings begin to illuminate how the BLA and DH may subserve the long-term stability of maladaptive cocaine-related memories that underlie contextual stimulus control over cocaine-seeking behavior.


Subject: Behavioral psychology; Nanoscience; Physiological psychology

Classification: 0384: Behavioral psychology; 0565: Nanoscience; 0989: Physiological psychology

Identifier / keyword: Applied sciences, Psychology, Basolateral amygdala, Cocaine, Dorsal hippocampus, Molecular mechanisms, Reconsolidation, Reinstatement
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Dissertation/thesis number: 3606786
Neural substrates underlying cocaine-cue memory

Author: Alaghband, Yasaman


Abstract: Relapse into drug seeking is frequently precipitated by exposure to contexts previously associated with the drug of abuse. Recent findings suggest that the stabilization and long-term persistence of these associations require NMDA receptor activation. However, there have been few direct comparisons using the same drugs, doses, and training/testing procedures exploring the role of NMDA receptors in both drug-cue memory consolidation and reconsolidation. The studies in Chapter 2 report my investigation of the role of NMDA receptors in both the consolidation and reconsolidation of cocaine-cue memories using the CPP model. The data shows that NMDA receptors are required for consolidation and reconsolidation of cocaine-cue memories. CPP is the most widely-used paradigm to study memory reconsolidation underlying drug-seeking. However, CPP is a complex behavior that involves motivation and decision-making components. Unlike CPP, the CA behavioral model is simpler, relying on behavior that is independent of drug-seeking or decision making. A comparison of results using both models should allow for identification of the neural mechanisms common between them, i.e., those involved in the reconsolidation of drug-cue memories. In Chapter 3, I investigated whether NMDA receptors also play a role in memory-maintenance in the CA model. As in my earlier CPP results, I found that NMDA receptors are required in
the CA model for reconsolidation of drug-cue memories. My initial findings showed that NMDA receptors are essential for drug-cue memory reconsolidation. This implies that NMDA receptors contribute to memory stabilization through their downstream effects on gene expression. In Chapter 4, I use the immediate-early gene Arc as a neuronal activity marker, since it is dependent on NMDA receptor activation and tightly coupled to learning and memory processes. The results in Chapter 4 examine the activity of the neural circuitry underlying drug-cue memories in the CPP and CA models. I show that there is a significant increase in Arc immunoreactivity in the PrL, IL, and BLA as a result of exposure to an environment previously paired with cocaine in both models. Cumulatively, my findings on the neurobiological basis of drug-cue memories provide insights into other disorders involving persistent or exaggerated memories, including post-traumatic stress disorder.


Subject: Neurosciences

Classification: 0317: Neurosciences

Identifier / keyword: Biological sciences, Addiction, Drug-cue memory,
NMDA receptor, Reconsolidation

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Committee member: Guzowski, John F., Wood, Marcelo A.

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Dissertation/thesis number: 3605172
Abstract: Alcohol and nicotine are the two most concurrently used recreational drugs. Most people begin drinking alcohol and smoking tobacco as teenagers. However, very little research has focused on co-use of alcohol and tobacco. The majority of preclinical studies focus on either alcohol (EtOH) or nicotine (Nic) only, ignoring that people use both drugs concurrently. I hypothesized alcohol and nicotine in combination (EtOH+Nic) would be more reinforcing than either drug alone. To test this hypothesis, I established a novel intravenous self-administration paradigm and found adolescent, but not adult, males find EtOH+Nic reinforcing. I also found that concurrent Nic increased EtOH intake in adolescents, whereas concurrent EtOH decreased Nic intake in adults. I then used these same animals and tested their alcohol preference with a drinking in the dark, 2-bottle choice paradigm. I found that Nic use during adolescence, not adulthood, increased subsequent oral alcohol drinking in adulthood. Clinical and preclinical studies have reported significant sex differences in EtOH and Nic reward. Furthermore, clinical data suggest smoking has opposite effects on alcohol drinking in men and women. I then hypothesized females rats would show the same age differences seen in male rats. To test this, I allowed adolescent and adult females to self-administer EtOH, Nic, or EtOH+Nic under the same paradigm used with males. I did not find significant age
differences on EtOH+Nic reinforcement with females, suggesting alcohol and nicotine interactions are age- and sex-dependent. To address the age difference in EtOH+Nic reward found with males, I pharmacologically tested the role of kappa-opioid receptor (KOR) in acquisition of EtOH, Nic, and EtOH+Nic self-administration with a specific KOR antagonist (norBNI) and agonist (U50,488H). Blockade of KOR with norBNI increased EtOH reinforcement in adolescent males and adult females, it also robustly increased EtOH+Nic reinforcement in adult males, and decreased self-administration of Nic in adult females; suggesting age- and sex-dependent interactions of EtOH and Nic with KOR. Finally, epidemiological studies report teenagers drink and smoke to relieve anxiety. I therefore tested the effect of EtOH, Nic, and EtOH+Nic on anxiety-like locomotor behavior in a novel open field. I hypothesized adolescents would be more sensitive to locomotor and anxiolytic effects of EtOH+Nic than adults. I found Nic and EtOH+Nic induced locomotor behavior in adolescents, but not adults, of both sexes. Furthermore, adolescent, but not adult, males find EtOH+Nic anxiolytic, whereas adolescent females were more sensitive to anti-anxiety effects of Nic. I hypothesized that KOR activation may be inhibiting anti-anxiety behavior in adult males treated with EtOH+Nic. After blocking KOR activation with norBNI, adult males show an anxiolytic effect to EtOH+Nic. Both behavioral paradigms support the idea that EtOH and Nic age-dependently interact at KOR. This dissertation suggests adolescents are more vulnerable than adults to initiate drinking and smoking because they are less sensitive to KOR inhibition of reward and anti-anxiety behavior.


Alcohol Self-administration and Relapse-like Behavior: A Functional Role for Enhanced Activity at AMPA Receptors

Author: Cannady, Reginald D.

Abstract: Mechanisms underlying excessive alcohol drinking behavior and relapse are not fully understood and are critical for mapping the pathological course of alcohol use disorders (AUD). Long-term ethanol consumption results in strengthened excitatory neurotransmission and increased AMPA receptor signaling in animal models. However, the mechanistic role of enhanced AMPA receptor activity in ethanol-
reinforcement and alcohol-seeking behavior remains unclear. Thus, the experiments in this dissertation sought to elucidate the behavioral and molecular mechanisms that underlie AMPA receptor-mediated ethanol reinforcement processes and relapse to ethanol-seeking behavior using a preclinical model of high alcohol preference, the alcohol-preferring (P-) rat. Enhancement of AMPA receptor signaling by systemically administered aniracetam (AMPA receptor positive allosteric modulator) significantly increased ethanol self-administration in a reinforcer-specific manner. Moreover, aniracetam potentiated cue-induced reinstatement in P-rats, which suggest that enhanced activity at AMPA receptors promotes reinforcement and ethanol-seeking behavior. Experiments further characterized enhanced AMPA receptor signaling in modulating operant self-administration and relapse-like behavior by examining neuroanatomical contributions to AMPA receptor-mediated alterations in ethanol reinforcement. Since AMPA receptor activity is potentiated by post-translational modification (e.g. phosphorylation of GluA1 subunits), immunohistochemistry was used to examine neuroadaptive changes in pGluA1 in limbic brain regions after a history of ethanol self-administration. Increased pGluA1 immunoreactivity was observed in sub-nuclei of the amygdala and nucleus accumbens of ethanol self-administering P-rats relative to the sucrose controls. Guided by immunohistochemistry results, the effects of aniracetam on ethanol self-administration were examined via site-specific microinjections in the amygdala and nucleus accumbens. Intra-amygdala, but not intra-accumbens, aniracetam increased ethanol self-administration in a reinforcer-specific manner. Furthermore, coadministration of intra-amygdala aniracetam and myristilated AIP (CaMKII peptide inhibitor) blocked aniracetam-induced increased ethanol self-administration; which demonstrates a critical role for amygdala CaMKII activity in AMPA receptor-mediated potentiation of ethanol reinforcement. These data suggest that enhanced amygdala AMPA receptor activity promotes drinking and ultimately could contribute to alcohol use disorders. In contrast, intra-amygdala aniracetam did not significantly alter cue-induced reinstatement; which suggest that enhanced AMPA receptor activity in this region may not significantly contribute to promoting cue-induced ethanol-seeking. Collectively, key experimental results provide novel insight into AMPA receptor-related mechanisms in excessive alcohol drinking behavior and vulnerability to relapse.

Subject: Neurosciences; Behavioral psychology; Pharmacology

Classification: 0317: Neurosciences; 0384: Behavioral psychology; 0419: Pharmacology

Identifier / keyword: Biological sciences, Psychology, Health and environmental sciences, Addiction, Alcohol abuse, AMPA receptors, Glutamate, Relapses, Self-administration

Title: Alcohol Self-administration and Relapse-like Behavior: A Functional Role for Enhanced Activity at AMPA Receptors

Number of pages: 148

Publication year: 2013

Degree date: 2013
Animal-assisted stress reduction group therapy in a community mental health setting: A pre-experimental evaluation of treatment effectiveness

Author: Kearney-Parker, Kathryn J.


Abstract: Animals have psychological, emotional, mental and physical therapeutic impact on the lives of humans, leading to increased interest in many health care fields. Thus far animal therapy has been an underutilized, and consequently, an under researched therapeutic strategy. A new community mental health program, housed within a methadone clinic in the Tenderloin district of San Francisco, developed a weekly animal assisted stress reduction therapy group. The facilitators administered Likert scale perceived stress measures pre- and post-group to determine if the group was achieving the desired result: lowered perceived stress for the participants. Participants in the group were all adults who joined and completed the questionnaires for the group on a purely voluntary basis. The purpose of this study was to examine if this type of intervention warrants a full experimental design based on the data collected at these weekly groups. Participants ranged in ages, ethnicities, and gender, but all were of low socioeconomic status and were considered dually diagnosed (at least one Axis I iv per the inclusion criteria of the mental health program) in addition to a substance abuse or dependence diagnosis. All participants reported that they had experienced significant life stress, both in the past and currently, with their residence in a dangerous and poverty-stricken neighborhood great contributing greatly to that stress. Many participants lived in Single Room Occupancy (SRO) and could not have a companion animal live with them. Results indicated that the group reduced participants' perceived stress. Results suggest that the perceived stress of participants was significantly lowered post intervention and had a large effect size of 1.84 (J. Cohen, 1988). The treatment effectiveness for this particular group was evaluated to promote a possible new stress reduction treatment as well as to demonstrate alternate applications and populations that could benefit from the incorporation of animals in therapy.
An examination of frame of reference and self-control in alcohol and drug addicts

Author: Scott, Sarah


Abstract: Although the criminal justice system is often responsible for diagnosing and treating substance-use disorders, we have a poor understanding of the complicated processes underlying these issues. The present study was conducted in an attempt to determine what (1) local preferences (2) global preferences and (3) self-control can contribute to explanations of substance use-disorders. Sixty-four participants completed a questionnaire about their drug and alcohol histories, their short and long-term preferences for using these substances, and their levels of self-control. The results indicate that individuals with substance-use disorders generally prefer to use drugs or alcohol at discrete points in time but prefer abstinence over longer periods of time. Self-control also appears to be related to greater levels of substance involvement.


Subject: Criminology

Classification: 0627: Criminology

Identifier / keyword: Social sciences, Self-control, Alcohol addiction, Drug addiction, Substance abuse, Decision making, Distributed choice

Title: An examination of frame of reference and self-control in alcohol and drug addicts

Number of pages: 149

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Advisor: Stafford, Mark C.

University/institution: Texas State University - San Marcos

University location: United States -- Texas

Degree: Ph.D.
Document 17 of 29

Trajectories of depressive symptomatology among people living with HIV/AIDS: A growth mixture model analysis

Author: Shiu, ChengShi

Abstract: For three decades HIV/AIDS (Human Immunodeficiency Virus infection/Acquired Immunodeficiency Syndrome) has remained a major public health crisis in the United States. With the advent of Highly Antiretroviral Therapy (HAART) in 1997, people are now living longer with the diagnosis of HIV/AIDS, and HIV/AIDS now considered a chronic disease. However, with increased longevity, people living with HIV/AIDS (PLWHA) have to contend with other challenges such as depression in addition to compromised physical health. This study applied Growth Mixture Modeling to explore the structure of the depressive symptomatology among a group of HIV-positive population (N = 946), and used Pseudo-Class Draws techniques and multivariable multinomial regression to test the
relationship between these trajectories of depressive symptomatology and key demographic, biological-clinical, and psychosocial factors. The selection of the key demographic, biological-clinical, and psychosocial factors was driven by stress and coping theory and developmental psychopathology theory. The results showed that there were three distinct trajectories of depressive symptomatology among this group of PLWHA, including Low-Depression, Chronic High-Recovery, and Decrease-Relapse groups. A few baseline demographic and biological-clinical factors were significantly related to the trajectory groups, including participants' sexual orientation, substance use, incarceration during study, strengths of the immunity, and number of HIV related symptoms. More importantly, when PLWHA had higher levels of perceived stress at the beginning, they were more likely to follow the two trajectories characterized by high levels of depressive symptomatology. However, when they had higher levels of perceived stress during the following months they would only have higher probability to have the Decrease-Relapse trajectory. Additionally when PLWHA had higher emotion-focused coping efficacy at the beginning, they had lower probability for the two less favorable depressive trajectories. In contrast, the initial levels of problem-focused coping efficacy were not associated with the depressive trajectories, but the subsequent changes in the levels of coping efficacy did relate to the trajectories of depressive symptomatology. Implications for clinical social work practice will also be discussed.

Subject: Mental health; Social work; Clinical psychology

Classification: 0347: Mental health; 0452: Social work; 0622: Clinical psychology

Identifier / keyword: Social sciences, Psychology, Health and environmental sciences, Depression, Growth mixture model, Hiv/aids, Stress and coping, Trajectories

Title: Trajectories of depressive symptomatology among people living with HIV/AIDS: A growth mixture model analysis

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Advisor: Voisin, Dexter

Committee member: Hans, Sydney, Simoni, Jane

University/institution: The University of Chicago

Department: Social Service Administration
Nurse addiction---An unexpected journey: A phenomenological study of nurses in recovery

Author: Burton, Karen Lee

Abstract: Abuse of drugs and alcohol occurs across all cultures, generations, and occupations, including nursing. Nurse addiction is a topic of serious concern that is often dismissed or ignored in the profession. Impaired nurses can become dysfunctional in their ability to provide safe, appropriate patient care. This qualitative study explored the lived experience of nurses who were addicted to substances. Knowledge of this
phenomenon may help guide nurses, nurse educators, and nursing students more accurately understand the reality of substance use disorder in the profession. In this qualitative study, 14 nurse addicts in recovery were interviewed about their experiences and risk perceptions. Five themes were identified from the study: (a) Fear was a significant part of the experience of being a nurse who was addicted; (b) Shame and guilt were felt by nurses who were addicted; (c) Poor coping: Addicted nurses reported having underdeveloped coping skills; (d) Control: Addicted nurses felt an increased need to control their environments; and (e) A core problem inherent in nurses who were addicted was a belief that addiction would never happen to them. Discussion of the five identified themes was followed by a discussion about addiction risk, prevention, and suggestions for application in nursing education. Participants discussed their experience with nurse addiction in their nursing education experiences and offered suggestions for more effective ways to teach the subject in nursing school. Implications for nursing education were then discussed, including using peer educators, namely, recovering nurse addicts, as teachers of this subject. Finally, the overall theme identified was that addicted nurses often felt misunderstood and judged, and they desired to be accepted among others in the profession.


Evaluation of the use of electric cigarettes in a rural smoking cessation program

Author: Ely, Jona

Abstract: The purpose of this DNP capstone project was to evaluate a structured rural smoking cessation program that integrated electric cigarettes as an additional option to other standard interventions. The aims of the program evaluation were to develop an evaluation design and methodology to guide data collection and analysis, analyse findings, and provide recommendations regarding the current program and future usage or changes. The Donabedian and Bridge Evaluation Models provided the framework to evaluate the smoking cessation program, make recommendations for future applications, potential improvements, and determine elements of the program that should be continued in its current
state. After obtaining IRB approval, forty four participants were recruited to participate in the smoking cessation program evaluation. The results indicated 14 (32 percent) quit smoking, and seven (16 percent) switched to e-cigarettes. Of the remaining 23 participants 13 (thirty percent) successfully cut down to less than half of their starting tobacco use level with the use of e-cigarettes. Of the 14 participants that quit, 10 used e-cigarettes exclusively and the other four were also using bupropion (2) or chantix (2). Of the 7 that switched to e-cigarettes, 3 were only using e-cigarettes, and 4 were using e-cigarettes and bupropion. Of the 13 participants that cut down to less than half of starting amount of tobacco cigarettes, 7 were only using e-cigarettes and 6 were using e-cigarettes and bupropion. Program participants success rate at cessation or switching to e-cigarettes exclusively was double both the national and state averages of 21-24%, resulting in a significant harm reduction for patients and families. Recommendations from the evaluation include: continuing the program with modifications to educational materials and follow up strategies, using different types of staff for implementation, and using the program as a model for other agencies or organizations.

Subject: Nursing
Classification: 0569: Nursing
Identifier / keyword: Health and environmental sciences, Electric cigarettes, Smoking cessation, Smoking cessation program
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Advisor: Dingley, Catherine
Committee member: Squires, Rhonda, Kinder, Pamela
University/institution: University of Northern Colorado
Department: Nursing
University location: United States -- Colorado
Degree: Ph.D.
Source type: Dissertations & Theses
Le processus de retablissement des adolescents en traitement de la toxicomanie présentant des comportements suicidaires

Author: Ledoux, Cinthia

Abstract: Les problèmes de consommation de substances psychoactives (SPA) et les comportements suicidaires (idéations suicidaires et tentatives de suicide) constituent deux problématiques qui surviennent parfois en concomitance chez les adolescents. Malgré que différents modèles explicatifs existent afin d'aider à mieux comprendre les interrelations entre celles-ci, il y a peu de connaissances à propos des liens entre la problématique suicidaire et le processus de rétablissement de la toxicomanie. Cette thèse s'inscrit dans le cadre d'une étude longitudinale plus large, menée en milieu naturel, ayant pour objectif d'évaluer les programmes de traitement de la toxicomanie pour les adolescents. L'objectif général de cette thèse, présentée par articles, est de décrire et de mieux comprendre, de façon multidimensionnelle, le processus de
rétablissement d'adolescents en traitement de la toxicomanie présentant des comportements suicidaires. Le premier article porte sur le volet quantitatif et vise à comparer l'évolution de jeunes en traitement de la toxicomanie, en ce qui a trait à la gravité des problèmes de consommation de SPA et biopsychosociaux associés, selon qu'ils présentent ou non des comportements suicidaires dans les 30 jours précédant leur admission en traitement de la toxicomanie. À cette fin, des analyses ont porté sur un échantillon de 181 adolescents de 13 à 18 ans qui ont répondu à l'Indice de gravité d'une toxicomanie pour adolescents (Landry, Guyon, Bergeron, & Provost, 2002). De cet échantillon, 25 jeunes composent le sous-groupe suicide. Le volet qualitatif a été réalisé à l'aide d'entretiens qualitatifs en profondeur semi-structurés analysés selon une approche phénoménologique. Le second article, présentant ce volet, documente l'expérience pluridimensionnelle de huit adolescents en traitement de la toxicomanie qui présentent des comportements suicidaires avant leur entrée en traitement ou au cours des six mois suivants, en ce qui concerne leur processus de rétablissement au cours de la période de six mois suivant l'admission en traitement. En vue d'en dégager les particularités, leur expérience est contrastée à celle de 19 jeunes en traitement de la toxicomanie sans problématique suicidaire. L'intégration des résultats de ces volets montre une diminution de la gravité des problèmes de consommation de drogues, autres que l'alcool, chez les deux sous-groupes comparés. Par rapport aux autres adolescents, les jeunes présentant la double problématique se caractérisent par une persistance de leurs difficultés psychologiques. L'isolement social et la difficulté à rompre les liens avec leurs amis consommateurs sont des obstacles à leurs relations interpersonnelles. Un autre élément important à noter est la présence de comportements suicidaires au cours de leur vie ou au cours du processus de traitement et de rétablissement, tant chez certains jeunes présentant la double problématique que chez certains adolescents présentant qu'un problème de consommation. Cela rend encore plus important le dépistage régulier des comportements suicidaires chez tous les jeunes en traitement de la toxicomanie. Ces éléments appuient des pistes pour l'intervention auprès des adolescents présentant la double problématique toxicomanie / comportements suicidaires. Par exemple, le développement de traitements intégrés ciblant les comportements suicidaires et la toxicomanie, s'attardant au développement des habiletés sociales, devrait favoriser le maintien des progrès réalisés sur le plan de la consommation de SPA tout en diminuant la récurrence de la problématique suicidaire et des difficultés psychologiques.
Le processus de retablissement des adolescents en traitement de la toxicomanie présentant des comportements suicidaires

Number of pages: 258

Publication year: 2013

Degree date: 2013
Sinners, Saints and Sophists: Marijuana Discourse and Policy in the United States, 1970-2010
Author: Malizia, Stefan


Abstract: I study the evolution of public discourse and policy surrounding the use of marijuana in the United States between 1970 and 2010, focusing on the interactions of activists, public officials, and broader cultural and political contexts involved in social change. My goal is to explain the continuities and breaks between earlier debates on the decriminalization of recreational uses of marijuana, and more recent debates on the legalization of medical marijuana. I gather data primarily from a sample of articles from two prominent U.S. newspapers, collected for a content analysis of public discourse; and also from several archival sources of statistics, collected to model state-level passages of medical marijuana laws. My findings suggest a democratization of the discourse over time, such that actors excluded from decriminalization debates as deviants are able to `come to voice' as credible authorities in medicalization debates, transforming public perceptions of marijuana and influencing the passage of liberalized state-level marijuana laws. More broadly, my findings suggest a greater role played by cultural contexts than is currently afforded by dominant theories of movements and social change.


Modulation of Human Rhinovirus-Induced Epithelial Responses by Cigarette Smoke

Author: Hudy, Magdalena Hanna

Abstract: Human rhinovirus (HRV) is the major viral pathogen associated with exacerbations of asthma and chronic obstructive pulmonary disease (COPD). Cigarette smoke is the predominant risk factor for the development of COPD and approximately 25% of asthmatics smoke. Moreover, smokers experience longer and more severe respiratory tract infections compared to non-smokers, but the mechanisms responsible have not been delineated. Since the airway epithelial cell is the only cell type shown to be infected with HRV in vivo, and is one of the first cells in contact
with cigarette smoke, the aim of this thesis was to investigate if and how cigarette smoke modulates epithelial responses to HRV infection using an in vitro tissue culture model system in conjunction with HRV and cigarette smoke extract (CSE). HRV-induced expression of CXCL10, a chemokine linked to antiviral immunity, was potently inhibited by CSE via multiple mechanisms. CSE suppressed HRV-induced transcription of CXCL10 via inhibition of nuclear factor-κB (NF-κB), interferon regulatory factor (IRF)-1 and signal transducer and activator of transcription (STAT)-1 pathways. CSE also suppressed HRV-induced expression of the viral sensors melanoma differentiation-associated protein 5 (MDA5) and retinoic acid-inducible gene-I (RIG-I), but only MDA5 was shown to be directly involved in HRV-induced CXCL10 production. CSE also suppressed HRV-induced chromatin accessibility around the CXCL10 transcriptional start site. By contrast, epithelial production of the neutrophil chemoattractant CXCL8, was induced by CSE or HRV infection alone, and was further enhanced by the combination of these stimuli. This enhancement was mediated via mRNA stabilization and involved the mRNA stabilizing protein human antigen R (HuR). This study provides the first demonstration that CSE differentially modulates HRV-induced chemokine responses in airway epithelial cells and provides insights into the underlying mechanisms of altered chemokine production. HRV-induced CXCL10 was suppressed by CSE via a combination of multiple mechanisms, while CXCL8 enhancement was mediated via mRNA stabilization. These results provide potential insights into how cigarette smoke alters HRV-induced inflammatory responses in vivo and how this could lead to more severe clinical outcomes in COPD patients and asthmatics who smoke during HRV-induced disease exacerbations.

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Locus of control, self-efficacy, and spiritual coping style among members of Alcoholics Anonymous

Author: Linquist, Michelle D.

Abstract: Alcoholics Anonymous (AA) is an organization that seeks to help its members achieve recovery from alcoholism through participation in the AA fellowship and adherence to a 12 step program. Reliance upon a Higher Power is a key tenet of AA, which could suggest a more externally-oriented locus of control. However, research has shown that a more internally-oriented locus of control is associated with longer sobriety. Abstinence self-efficacy and positive religious coping have also been associated with enhanced recovery from substance use disorders. The purpose of this study was to examine locus of control, abstinence self-efficacy, and spiritual coping style in a community sample of AA members. The relationship of locus of control and abstinence self-efficacy to length of sobriety was also examined. The participants were 76 subjects who were recruited from AA meetings in Northern California and the state of Washington. There were 43 females (57%) and 33 males (43%), with a mean age of 39.29 years, and a mean of 3.41 years of sobriety. Participants completed a research questionnaire regarding demographic data, AA involvement, addiction history, and religious and spiritual beliefs. They also completed the Drinking-Related Locus of Control Scale (DRIE), the Alcohol Abstinence Self-Efficacy Scale (AASE), and the Brief RCOPE, a measure of religious coping style. The results indicated that this sample endorsed a relatively internal locus of control, a fairly high level of abstinence self-efficacy, and a more positive than negative religious coping style. Support was found for several of the researcher's hypotheses: internal locus of control and positive religious coping were associated with higher abstinence self-efficacy; positive religious coping was associated with internal locus of control; and internal locus of control and higher levels of abstinence self-efficacy were associated with longer sobriety. Negative religious coping was not associated with lower abstinence self-efficacy, nor did it correlate with external locus of control. The results suggested that belief in a Higher Power and participation in AA were not incompatible with the constructs of internal locus of control and abstinence self-efficacy for this sample. Other findings, clinical implications, limitations, and suggestions for future research are also explored.

Perceptions of Assertive Community Treatment Staff on Neighborhood
Abstract: Assertive Community Treatment (ACT) programs provide psychiatric treatment and other support services to treatment resistant seriously and persistently mentally ill (SPMI) individuals in their place of residence or other environments (i.e., homeless shelters, park bench or coffee shop). In New York City (NYC) ACT program staff members often have to navigate significant neighborhood challenges (poverty, high rates of crime and drug activity) in their provision of services and treatment outcomes. Furthermore, in recent decades many research studies have been conducted on how these neighborhood characteristics affect the physical health and mental health of its residents. Some of these studies' findings suggest that certain neighborhood characteristics affect resident's physical and mental health. However, few studies have explored the effect of neighborhood characteristics on ACT programs' provision of services and their treatment outcomes. This study is important to the social work profession, other health and mental professionals, seriously mentally ill patients and their families, other governmental and policy makers and ACT workers. The study's findings and observations contribute additional knowledge to the field mental and the social work profession. This study utilized the qualitative multi-site case study approach to explore the perceptions of staff members of three NYC ACT programs and key neighborhood informants on how the neighborhood characteristics (social supportiveness, trust, poverty, crime, drugs, and other social problems) affects the provision of ACT services and their treatment outcomes (Creswell, 1998 & 2009). Qualitative data were gathered from ACT staff members and neighborhood key informants through the use of semi-structured telephone interview protocols and a neighborhood quality survey. Additional neighborhood characteristics data were obtained from the US 2010 census and other NYC neighborhood social indicators sources for the three neighborhoods studied. The study sample of 38 consisted of 29 ACT staff members and 9 neighborhood key informants. Qualitative data were analyzed utilizing qualitative data analysis and the case study approach as defined by Creswell (1998 & 2009). Other quantitative data on neighborhood social indicators and New York State Office of Mental
Health's (NYS OMH) ACT program treatment outcome data were analyzed. The study was guided by the social capital theoretical framework (Coleman, 1998) which posits that neighborhoods with higher levels of social support and cohesion and trust amongst residents have higher levels of social capital and can accomplish better neighborhood outcomes. The findings and observations reported by ACT staff members suggest that certain neighborhood characteristics (crime and poverty) negatively affect the provision of ACT program services and treatment outcomes. Specifically, ACT staff members expressed concerns about the dangerousness of the neighborhood and their personal and ACT client's safety and how these neighborhood problems affect their service delivery and treatment outcomes. However, NYS OMH ACT treatment outcome data for the three ACT programs revealed that those programs were equally successful at achieving their treatment outcomes. The study's findings, observations, and opinions will provide increased knowledge and understanding to the social work profession and other stakeholders on the challenges ACT programs and clients encounter in the neighborhood. The expressed concern by all ACT program staff members on the dangerousness of the neighborhood and for their personal and ACT client's safety are significant study findings. These observations are important for social workers, mental health administrators; policy makers, ACT clients and their families, and advocacy groups to consider with development of future ACT programs, and on how to develop systems to support existing ACT program staff and clients mitigate these neighborhood challenges. This small scale study is a first attempt to explore the effects of neighborhood characteristics on ACT programs and their service provision and treatment outcomes. The observations and findings should help inform larger more comprehensive studies on the topic.

Perceptions of stigma and management strategies in the lives of mothers with histories of substance use and incarceration

Author: Gunn, Alana Janell

Abstract: According to Scott Burris (2008), stigma "is a cruel form of social control that turns the individual into his own jailor and own chorus of denunciation" (p. 476). For formerly incarcerated mothers in recovery for substance use problems, the stigmas they experience upon reentry may
imprison them in ways not fully researched or examined. Using grounded theory as the analytic framework, the study drew from semi-structured interviews with 30 women in residential substance use treatment. The findings revealed that study participants perceived both gendered and racialized stigmas attached to their experiences with substance use, incarceration, sex work and mothering. Stigmas were perceived in the context of both familial and romantic partner relationships as well as encounters within the residential treatment context. The participants' narratives revealed that they used traditional strategies of withdrawal and education, as well as strategies of selective and restorative engagement to combat perceived stigmas from their relationships. The study illuminates how women navigate relationships that share collective histories and were also shaped by women's past challenges. Additionally, the study explores the complexities of managing relationships which create the potential for stigma as well as support. Alternative models of stigma-informed gender specific treatment can further promote holistic healing and recovery for women with complex experiences of trauma and illness.


The Perception of Emergency Department Physicians Regarding Economic and Regulatory Factors Impacting Management of Drug Seeking Patients

Author: Kelley, Sharon S.

Abstract: Physicians in the emergency department (ED) are facing a number of unique challenges in the currently changing healthcare and economic climates. Dramatic increases in ED patient volumes have been noted nationwide with visits related to prescription opioid abuse and misuse alone having increased by 111% between 2004 and 2008. Ironically, several challenges ED physicians are facing arise from regulatory and economic initiatives which were originally designed for the protection of patients. Regulatory requirements to address pain as the fifth vital sign, along with entities utilizing patient satisfaction based reimbursement, have inadvertently created an environment conducive to exploitation by the prescription opioid abuser. A literature review revealed an informational gap with regard to the impact economic and regulatory factors exert on the management of patients, exhibiting drug seeking behavior, by ED
physicians. The lack of available information is the basis for this original research. A descriptive, cross-sectional, non-experimental study was conducted over a two month period (October - November, 2013) to elicit opinions of ED physicians regarding the management of opioid seeking patients. Respondents were asked to include opinions on factors perceived to impact treatment of this patient population. Of the ED physicians surveyed, 71% reported a perceived pressure to prescribe opioids to avoid administrative and regulatory criticism and 98% perceive patient satisfaction scores as being too highly emphasized by reimbursement entities as a means of evaluating healthcare quality. Rising patient volumes and changes in the healthcare climate were also cited as factors impacting management practices when treating patients exhibiting drug seeking behavior. Emergency department physicians have a unique role in providing unrestricted access of care for the public. This role, in conjunction with the aforementioned concerns, has served to create an environment conducive to the potentiation of prescription opioid misuse and abuse.


Alcohol-cued implicit approach/avoidance tendencies for smoking

Author: Batien, Bryan D.

Abstract: The study aimed to examine the approach tendencies towards smoking following alcohol cues. The study examined whether an alcohol prime would significantly affect the approach tendencies across two different smoking groups, light occasional smokers, commonly referred to as "chippers" and non-smokers. It was hypothesized that there would be a significant interaction between the auditory prime, visual stimulus, and group status for approach tendencies towards smoking. The hypothesized form of the interaction was that the alcohol cue would have the strongest positive effect on approach tendencies towards smoking for the chipper group, followed by the non-smoking group. A mixed random effects model was used to test the hypotheses in a sample of 97 college students. Results indicated non-smokers exhibited an approach bias to visual art stimuli
compared to visual smoking stimuli. Chippers, on the other hand, did not exhibit an approach bias towards visual smoking stimuli compared to visual art stimuli. The comparison between chippers and non-smokers suggested that non-smokers exhibited a stronger approach bias towards art stimuli compared instead of smoking stimuli compared to non-smokers. Alcohol primes facilitated the approach bias towards visual smoking stimuli for chippers. However, this effect generalized to non-smokers and art pictures, suggesting alcohol cues may have activated a generalized implicit appetitive motivational state, which impacts the approach bias for all following stimuli.


Subject: Psychology; Clinical psychology

Classification: 0621: Psychology; 0622: Clinical psychology

Identifier / keyword: Psychology, Explicit processes, Avoidance tendencies, Alcohol, Approach tendencies, Implicit processes, Smoking

Title: Alcohol-cued implicit approach/avoidance tendencies for smoking
Obesity as an expression of addiction: A neurobiological view on the effectiveness of treatment for obesity as substance dependence

Author: Flanigan, Melissa

Abstract: Abstract not available.

A study of the psychodynamics of chemical dependency among attorneys

Author: Brascia, Sondra

Abstract: Abstract not available.
Subject: Physiological psychology

Classification: 0989: Physiological psychology

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Document type: Dissertation/Thesis

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Adverse Childhood Experiences among Delinquent Youth and Substance Use Disorders in Emerging Adulthood

Author: Bassett, Elena D.

Abstract: This study examines the number of adverse childhood experiences among juvenile justice youth and the cumulative impact on substance use disorders in emerging adulthood. We used data from the Northwestern Juvenile Project, a large-scale longitudinal study examining the health needs and outcomes of 1,829 youth sampled upon intake to juvenile detention from 1995-1998. The present study assessed adverse childhood experiences using data collected at interviews when participants were 18 years old and younger. To assess substance use disorders, we used data from follow-up interviews when participants were close to age 25. We chose to examine substance use disorders during emerging adulthood because this is a critical developmental period, when substance use problems can significantly interfere with social role development. This study shows that multiple types of adverse childhood experiences are prevalent among delinquent youth, with males experiencing an average of 6 types of childhood adversity and females experiencing 7.3 types, significantly more than males. Across both genders, non-Hispanic white youth had significantly higher numbers of adverse childhood experiences. Number of adverse childhood experiences predicted risk for substance use disorders among females, but not among males. Females with more types of adverse childhood experiences were at increased risk for past-year drug use disorder in emerging adulthood, as well as lifetime alcohol and drug use disorders. Given the high risk for childhood adversity and substance use disorders among delinquent youth, it is important to prevent adverse childhood experiences from accumulating and to provide comprehensive assessment strategies across service systems. Early intervention could prevent additional accumulation of adversities and could reduce risk for the development of substance use disorders, especially among females. Special attention must be paid to the unique needs of females involved in the juvenile justice system who have experienced childhood adversity, as
they are particularly at risk for negative outcomes.


Subject: Clinical psychology; Criminology

Classification: 0622: Clinical psychology; 0627: Criminology

Identifier / keyword: Social sciences, Psychology, Adverse childhood experiences, Childhood trauma, Emerging adulthood, Juvenile justice, Substance use disorders, Delinquency

Title: Adverse Childhood Experiences among Delinquent Youth and Substance Use Disorders in Emerging Adulthood

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