

# Search Results

## Table of Contents

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Search History .....	page 2
1. Factors associated with substance use treatment completion in residential facilities. ....	page 3
2. Educational interventions: equipping general practice for youth mental health and substance abuse. A discussion paper. ....	page 3
3. Parental attitudes to children's pain and analgesic drugs in the United Kingdom. ....	page 3
4. Participating in mobility: People with schizophrenia driving motorized vehicles. ....	page 4
5. Impact of childhood adversities on the short-term course of illness in psychotic spectrum disorders. ....	page 4
6. Recovery definitions: Do they change? .....	page 5
7. Recent trends in children's exposure to second-hand smoke in England: cotinine evidence from the Health Survey for England. ....	page 5
8. Risk factors for concurrent use of benzodiazepines and opioids among individuals under community corrections supervision. ....	page 6
9. Hyperactivation to pleasant interoceptive stimuli characterizes the transition to stimulant addiction. ....	page 6
10. Pleiotrophin modulates morphine withdrawal but has no effects on morphine-conditioned place preference. ....	page 7
11. Quantitative determination of n-butane metabolites in three cases of butane sniffing death. ....	page 7
12. The role of decision-making in cannabis-related problems among young adults. ....	page 8
13. Self-reported impulsivity is negatively correlated with amygdalar volumes in cocaine dependence. ....	page 8
14. Neural activation during risky decision-making in youth at high risk for substance use disorders. ....	page 9
15. Addiction resistance: Definition, validation and association with mastery. ....	page 9

## Search History

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1. Medline; exp SUBSTANCE-RELATED DISORDERS/; 227764 results.
2. Medline; addict\*.ti,ab; 43919 results.
3. Medline; "substance abuse".ti,ab; 18133 results.
4. Medline; exp GREAT BRITAIN/; 304814 results.
5. Medline; "united kingdom".ti,ab; 26086 results.
6. Medline; "great britain".ti,ab; 9532 results.
7. Medline; England.ti,ab; 34265 results.
8. Medline; Scotland.ti,ab; 12228 results.
9. Medline; Ireland.ti,ab; 74448 results.
10. Medline; UK.ti,ab; 71147 results.
11. Medline; Wales.ti,ab; 17002 results.
12. Medline; GB.ti,ab; 7764 results.
13. Medline; exp IRELAND/; 13420 results.
14. Medline; "British Isles".ti,ab; 2006 results.
15. Medline; "Channel Islands".ti,ab; 114 results.
16. Medline; 1 OR 2 OR 3; 251476 results.
17. Medline; 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14; 461662 results.
18. Medline; 16 AND 17; 9274 results.

**1. Factors associated with substance use treatment completion in residential facilities.**

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- Citation:** Drug and alcohol dependence, Sep 2015, vol. 154, p. 291-295 (September 1, 2015)
- Author(s):** Mutter, Ryan; Ali, Mir M; Smith, Kelley; Strashny, Alex
- Abstract:** Individuals in residential treatment often face many challenges, which can include limited education, unstable housing, difficulty participating in the workforce, and severe substance use problems. We analyzed factors associated with substance use treatment completion. We focused on factors that can be influenced by health care system changes resulting from the Affordable Care Act (ACA). We used the 2010 Treatment Episode Data Set - Discharges (TEDS-D), which is made available by the Substance Abuse and Mental Health Services Administration (SAMHSA). We analyzed factors associated with substance use treatment completion using logistic regression. Individuals in residential treatment were often unemployed or not in the labor force, had prior substance use treatment episodes, used more than one substance, and were uninsured. Factors associated with treatment completion included older age, greater education, employment, criminal justice referral, not being homeless, and private insurance. The expansion in private insurance coverage as a result of the ACA may result in more treatment completion in residential settings. Changes to the Medicaid program resulting from the ACA, including coverage of substance use treatment as an essential health benefit and greater support for housing, education, and employment, may also contribute to more residential discharges ending in treatment completion. Published by Elsevier Ireland Ltd.
- Subject Headings:** [Index Medicus](#)
- Source:** Medline
- Full Text:** Available from *Elsevier* in [Drug and Alcohol Dependence](#)

**2. Educational interventions: equipping general practice for youth mental health and substance abuse. A discussion paper.**

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- Citation:** Irish journal of medical science, Sep 2015, vol. 184, no. 3, p. 577-582 (September 2015)
- Author(s):** O'Regan, A; Schaffalitzky, E; Cullen, W
- Abstract:** Youth mental health issues and substance abuse are important causes of morbidity and mortality in Ireland. General practice is a frequent point of contact for young people, however, reluctance amongst this population group to disclose mental health issues and a lack of confidence amongst GPs in dealing with them have been reported. Focussed training interventions with formal evaluation of their acceptability and effectiveness in achieving learning, behavioural change and impact on clinical practice are needed. This paper aims to examine the literature on general practice in youth mental health, specifically, factors for an educational intervention for those working with young people in the community. This review paper was carried out by an online search of PubMed on the recent literature on mental health and on educational interventions for health care workers in primary care. A number of papers describing educational interventions for GPs and primary care workers were found and analysed. Key areas to be addressed when identifying and treating mental health problems were prevention, assessment, treatment, interaction with other services and ongoing support. Important elements of an educational intervention were identified. Several barriers exist that prevent the identification and treatment of these problems in primary care. An educational intervention should help GPs address these issues. Any intervention should be rigorously evaluated. With the shift in services to the community in Irish health policy, the GP with appropriate training could take the lead in early intervention in youth mental health and addiction.
- Subject Headings:** [Index Medicus](#)
- Source:** Medline

**3. Parental attitudes to children's pain and analgesic drugs in the United Kingdom.**

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- Citation:** Journal of child health care : for professionals working with children in the hospital and community, Sep 2015, vol. 19, no. 3, p. 402-411 (September 2015)

**Author(s):** Twycross, Alison M; Williams, Anna M; Bolland, Rachael E; Sunderland, Robin

**Abstract:** Many children experience treatable moderate to severe pain following surgery. Increasingly, children undergo surgery as day cases, and, as such, parents are more likely to be responsible for managing pain post-operatively. Research in the United States and Finland has found parents fear the side effects of analgesics; think they are addictive; and that children should receive as little analgesia as possible. Little is known about parental attitudes in this context in the United Kingdom. This study set out to explore parental attitudes towards children's pain and analgesic drugs to contribute to existing knowledge about parental attitudes elsewhere so that the information provided to parents can be tailored effectively. A convenience sample of parents (n = 108) at one hospital in South West London completed the Parental Pain Expression Perceptions and the Medication Attitudes Questionnaires. Although many parents have a good understanding of the ways in which children express pain, a substantial proportion of parents hold misconceptions regarding how children express pain and concerns in relation to analgesic drugs. This may impact on the quality of the pain management provided to children post-operatively and needs taking into account when preparing parents in this context. © The Author(s) 2014.

**Subject Headings:** [Nursing](#)

**Source:** Medline

#### 4. Participating in mobility: People with schizophrenia driving motorized vehicles.

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**Citation:** Psychiatry research, Aug 2015, vol. 228, no. 3, p. 719-723 (August 30, 2015)

**Author(s):** Steinert, Tilman; Veit, Fabian; Schmid, Peter; Jacob Snellgrove, Brendan; Borbé, Raoul

**Abstract:** Participation of people with schizophrenia in individual mobility is an important aspect of inclusion according to the UN convention of human rights of persons with disabilities. However, driving motorized vehicles can be dangerous due to positive, negative, and cognitive symptoms, side effects of antipsychotic drugs and concomitant substance abuse. The objective of this study was to explore the patterns of individual mobility in a representative patient population, to determine predictors for active use of motorized vehicles, and to compare the results with data of the general population in the respective region. We interviewed N=150 participants with schizophrenia or schizoaffective disorder, 66 in-patients and 84 out-patients, in different types of out-patient services. A questionnaire developed for this purpose was used in interviews. 64% of the participants had a driving licence, 32% had driven a motorized vehicle in the past year, 31% owned a car, 2% a motor bike. The driving licence had been withdrawn from 24.7% of participants, 32.7% reported having been involved in a road accident. Participants drove considerably less in time and distances than the general population. Significant variables determining the chance of active use of motorized vehicles in a logistic regression model were Global Assessment of Functioning (GAF) (OR 1.04 per each point), number of previous admissions (OR 0.52 per admission), and history of driving under alcohol or drugs (OR 0.18). Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)

**Source:** Medline

**Full Text:** Available from *Elsevier* in [Psychiatry Research](#)

#### 5. Impact of childhood adversities on the short-term course of illness in psychotic spectrum disorders.

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**Citation:** Psychiatry research, Aug 2015, vol. 228, no. 3, p. 633-640 (August 30, 2015)

**Author(s):** Schalinski, Inga; Fischer, Yolanda; Rockstroh, Brigitte

**Abstract:** Accumulating evidence indicates an impact of childhood adversities on the severity and course of mental disorders, whereas this impact on psychotic disorders remains to be specified. Effects of childhood adversities on comorbidity, on symptom severity of the Positive and Negative Syndrome Scale and global functioning across four months (upon admission, 1 and 4 months after initial assessment), as well as the course of illness (measured by the remission rate, number of re-hospitalizations and dropout rate) were evaluated in 62 inpatients with psychotic spectrum disorders. Adverse experiences (of at

least 1 type) were reported by 73% of patients. Patients with higher overall level of childhood adversities (n=33) exhibited more co-morbid disorders, especially alcohol/substance abuse and dependency, and higher dropout rates than patients with a lower levels of adverse experiences (n=29), together with higher levels of positive symptoms and symptoms of excitement and disorganization. Emotional and physical neglect were particularly related to symptom severity. Results suggest that psychological stress in childhood affects the symptom severity and, additionally, a more unfavorable course of disorder in patients diagnosed with psychoses. This impact calls for its consideration in diagnostic assessment and psychiatric care. Copyright © 2015 The Authors. Published by Elsevier Ireland Ltd.. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Psychiatry Research](#)

#### 6. Recovery definitions: Do they change?

**Citation:** Drug and alcohol dependence, Sep 2015, vol. 154, p. 85-92 (September 1, 2015)  
**Author(s):** Kaskutas, Lee Ann; Witbrodt, Jane; Grella, Christine E  
**Abstract:** The term "recovery" is widely used in the substance abuse literature and clinical settings, but data have not been available to empirically validate how recovery is defined by individuals who are themselves in recovery. The "What Is Recovery?" project developed a 39-item definition of recovery based on a large nationwide online survey of individuals in recovery. The objective of this paper is to report on the stability of those definitions one to two years later. To obtain a sample for studying recovery definitions that reflected the different pathways to recovery, the parent study involved intensive outreach. Follow-up interviews (n=1237) were conducted online and by telephone among respondents who consented to participate in follow-up studies. Descriptive analyses considered endorsement of individual recovery items at both surveys, and t-tests of summary scores studied significant change in the sample overall and among key subgroups. To assess item reliability, Cronbach's alpha was estimated. Rates of endorsement of individual items at both interviews was above 90% for a majority of the recovery elements, and there was about as much transition into endorsement as out of endorsement. Statistically significant t-test scores were of modest magnitude, and reliability statistics were high (ranging from .782 to .899). Longitudinal analyses found little evidence of meaningful change in recovery definitions at follow-up. Results thus suggest that the recovery definitions developed in the parent "What Is Recovery?" survey represent stable definitions of recovery that can be used to guide service provision in Recovery-Oriented Systems of Care. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Drug and Alcohol Dependence](#)

#### 7. Recent trends in children's exposure to second-hand smoke in England: cotinine evidence from the Health Survey for England.

**Citation:** Addiction (Abingdon, England), Sep 2015, vol. 110, no. 9, p. 1484-1492 (September 2015)  
**Author(s):** Jarvis, Martin J; Feyerabend, Colin  
**Abstract:** To examine changes in children's exposure to second-hand tobacco smoke in England since 1998. Repeated cross-sectional surveys of the general population in England. The Health Survey for England. A total of 37 038 children participating in surveys from 1998 to 2012, 13 327 of whom were aged 4-15 years, had available cotinine and were confirmed non-smokers. The proportion of children with smoking parents; the proportion of children living in homes reported to be smoke-free; the proportion of children with undetectable concentrations of cotinine; linear and quadratic trend estimates of geometric mean cotinine across years. By 2012, 87.3% of children lived in a home that was

smoke-free {97.2% [95% confidence interval (CI) = 95.9-98.1] when parents were non-smokers, 61.3% (95% CI = 55.5-66.8) when one or both parents smoked}. A total of 68.6% (95% CI = 64.3-72.6%) of children had undetectable cotinine in 2012, up from 14.3% (95% CI = 12.7-16.0%) in 1998. There was a highly significant linear trend across years (with a small but significant quadratic term) to declining geometric mean cotinine in all children from 0.52 ng/ml (95% CI = 0.48-0.57) in 1998 to 0.11 ng/ml (95% CI = 0.10-0.12) in 2012. Children from routine/manual backgrounds were more exposed, but experienced similar gains across years to those from non-manual backgrounds. In England, children's exposure to second-hand smoke has declined by 79% since 1998, with continuing progress since smoke-free legislation in 2007. An emerging social norm in England has led to the adoption of smoke-free homes not only when parents are non-smokers, but also when they smoke. © 2015 Society for the Study of Addiction.

**Subject Headings:** [Index Medicus](#)

**Source:** Medline

#### 8. Risk factors for concurrent use of benzodiazepines and opioids among individuals under community corrections supervision.

**Citation:** Drug and alcohol dependence, Sep 2015, vol. 154, p. 152-157 (September 1, 2015)

**Author(s):** Cropsey, Karen L; Stevens, Erin N; Valera, Pamela; Brendan Clark, C; Bulls, Hailey W; Nair, Parvathy; Lane, Peter S

**Abstract:** The use of heroin and prescription opioids has increased over the past decade. The concurrent use of opioids with other depressants such as benzodiazepines increases the risk of overdose death compared with use of either drug alone. This study examined factors associated with concurrent use of opioids and benzodiazepines in a criminal justice sample in the state of Alabama. The Addiction Severity Index (ASI) and urine drug screen results from 28,570 individuals who were under community corrections supervision from 2002-2012 were examined for independent or concurrent opioid and benzodiazepine use. Multinomial logistic regression analyses were conducted to determine associations between socio-demographic characteristics and drug use. Concurrent use was detected in 11.5% of the sample. Concurrent use of opioids and benzodiazepines or use of either drug alone was associated with being White, female, married, prescribed psychiatric medications, having seen a physician in the past two years, cannabis use, and having a drug-related offense. Concurrent users were more likely to be unemployed or disabled and have received counseling, and less likely to have completed college, live with relatives or friends, have a history of hallucinations, or have an offense against a person relative to nonusers. While significant overlap of risk factors exists between individuals with concurrent use versus sole use of opioids or benzodiazepines, individuals with concurrent use generally have more social dysfunction than individuals who tested for either substance alone. Concurrent users may need more psychosocial resources and intensive treatments to promote recovery. Published by Elsevier Ireland Ltd.

**Subject Headings:** [Index Medicus](#)

**Source:** Medline

**Full Text:** Available from *Elsevier* in [Drug and Alcohol Dependence](#)

#### 9. Hyperactivation to pleasant interoceptive stimuli characterizes the transition to stimulant addiction.

**Citation:** Drug and alcohol dependence, Sep 2015, vol. 154, p. 264-270 (September 1, 2015)

**Author(s):** Stewart, Jennifer L; May, April C; Tapert, Susan F; Paulus, Martin P

**Abstract:** Altered interoception, how the brain processes afferents from the body, may contribute to the urge to take drugs, and subsequently, the development of addiction. Although chronic stimulant dependent individuals exhibit attenuated brain responses to pleasant interoceptive stimuli, it is unclear whether this deficit exists early-on in the process of transition to stimulant addiction. To this end, we compared problem stimulant users (PSU; n=18), desisted stimulant users (DSU; n=15), and stimulant naïve comparison subjects (CTL; n=15) during functional magnetic resonance imaging (fMRI) while they

anticipated and experienced pleasant soft touch (slow brushstroke to the palm and forearm). Groups did not differ in behavioral performance or visual analog scale ratings of soft touch stimuli. fMRI results indicated that PSU exhibited greater right anterior insula, left inferior frontal gyrus, and right superior frontal gyrus activation than DSU and CTL during the anticipation and experience of soft touch. Moreover, during the experience of soft touch, PSU demonstrated higher bilateral precentral gyrus/middle insula and right posterior temporal gyrus activation than DSU and CTL. In contrast to chronic stimulant dependence, individuals who have recently developed stimulant use disorders show exaggerated neural processing of pleasant interoceptive stimuli. Thus, increased processing of body-relevant information signaling pleasant touch in those individuals who develop problem use may be a predictive interoceptive biomarker. However, future investigations will need to determine whether the combination of probing pleasant interoception using neuroimaging is sufficiently sensitive and specific to help identify individuals at high risk for future problem use. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Drug and Alcohol Dependence](#)

#### 10. Pleiotrophin modulates morphine withdrawal but has no effects on morphine-conditioned place preference.

**Citation:** Neuroscience letters, Sep 2015, vol. 604, p. 75-79 (September 14, 2015)  
**Author(s):** Gramage, Esther; Vicente-Rodríguez, Marta; Herradón, Gonzalo  
**Abstract:** Pleiotrophin (PTN) is a neurotrophic factor with important functions in addiction and neurodegenerative disorders. Morphine administration induces an increase in the expression of PTN and Midkine (MK), the only other member of this family of cytokines, in brain areas related with the addictive effects of drug of abuse, like the Ventral Tegmental Area or the hippocampus. In spite of previous studies showing that PTN modulates amphetamine and ethanol rewarding effects, and that PTN is involved in morphine-induced analgesia, it was still unknown if the rewarding effects of morphine may be regulated by endogenous PTN. Thus, we aim to study the role of PTN in the reward and physical dependence induced by morphine. We used the Conditioned Place Preference (CPP) paradigm in PTN genetically deficient (PTN<sup>-/-</sup>) and wild type (WT) mice to assess the rewarding effects of morphine in absence of endogenous PTN. Second, to study if PTN may be involved in morphine physical dependence, naloxone-precipitated withdrawal syndrome was induced in PTN<sup>-/-</sup> and WT morphine dependent mice. Although the increase in the time spent in the morphine-paired compartment after conditioning tended to be more pronounced in PTN<sup>-/-</sup> mice, statistical significance was not achieved. The data suggest that PTN does not exert an important role in morphine reward. However, our results clearly indicate that PTN<sup>-/-</sup> mice develop a more severe withdrawal syndrome than WT mice, characterized as a significant increase in the time standing and in the total incidences of forepaw licking, forepaw tremors, wet dog shake and writhing. The data presented here suggest that PTN is a novel genetic factor that plays a role in morphine withdrawal syndrome. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline

#### 11. Quantitative determination of n-butane metabolites in three cases of butane sniffing death.

**Citation:** Forensic science international, Sep 2015, vol. 254, p. 180-184 (September 2015)  
**Author(s):** Sasao, Aki; Yonemitsu, Kosei; Ohtsu, Yuki; Mishima, Satoko; Nishitani, Yoko  
**Abstract:** Butane is an addictive volatile substance like toluene. We report three forensic autopsy cases of sudden death that occurred while sniffing n-butane and isobutane from portable gas cartridges. n-Butane and isobutane were detected in all three cases. In cases 1-3, n-butane concentrations in heart blood were 54.3, 25.5, and 30.7 µg/mL, respectively. These concentrations were considered fatal according to the previous reports. In addition,

n-butane metabolites (2-butanol and 2-butanone) were detected in cases 1 and 3 but not in case 2. Blood levels of 2-butanol and 2-butanone were 6.5 and 1.8µg/mL, respectively, in case 1, and 6.3 and 5.6µg/mL, respectively, in case 3. According to the police investigation, the decedent in case 1 had misused butane gas for more than 6 months in the period leading up to death. The decedent in case 3 also had a history of chronic misuse of butane gas. There was no history of chronic misuse of butane gas by the decedent in case 2. It was suspected that he attempted suicide via inhalation of butane gas using a plastic bag, leading to a rapid death. The presence or absence of n-butane metabolites might reflect the way of butane inhalation, such as the frequency and duration. Although additional experimental and case studies are necessary to establish the forensic applications of n-butane metabolite detection, it may be a useful method to understand the decedents' pattern of butane sniffing before death. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Forensic Science International](#)

## 12. The role of decision-making in cannabis-related problems among young adults.

**Citation:** Drug and alcohol dependence, Sep 2015, vol. 154, p. 214-221 (September 1, 2015)  
**Author(s):** Gonzalez, Raul; Schuster, Randi M; Mermelstein, Robin M; Diviak, Kathleen R  
**Abstract:** Deficits in decision-making and episodic memory are often reported among heavy cannabis users, yet little is known on how they influence negative consequences from cannabis use. Individual differences in decision-making may explain, in part, why some individuals experience significant problems from their cannabis use whereas others do not. We hypothesized that poor decision-making would moderate relationships between amount of cannabis use and problems from cannabis use whereas episodic memory performance would not. Young adult cannabis users (n=52) with cannabis as their drug of choice and with minimal comorbidities completed semi-structured interviews, self-report questionnaires, and measures of neurocognitive functioning, with decision-making accessed via the Iowa Gambling Task (IGT), episodic memory via the Hopkins Verbal Learning Test - Revised (HVLT) and problems from cannabis use with the Marijuana Problems Scale. Strong relationships were observed between amount of cannabis use (lifetime, 12-month, and 30-day) and problems reported from use, but only among participants with low (impaired) decision-making ( $R(2)=.39$  to  $.51$ ;  $p<.01$ ). No significant relationships were observed among those with better (low average to high average) decision-making performance ( $p>.05$ ). In contrast, episodic memory performance was not a significant moderator of the relationship between amount of cannabis use and cannabis problems ( $p>.05$ ). Cannabis users with poor decision-making may be at greater risk for experiencing significant negative consequences from their cannabis use. Our results lend further support to emerging evidence of decision-making as a risk factor for addiction and extend these findings to cannabis users. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Drug and Alcohol Dependence](#)

## 13. Self-reported impulsivity is negatively correlated with amygdalar volumes in cocaine dependence.

**Citation:** Psychiatry research, Aug 2015, vol. 233, no. 2, p. 212-217 (August 30, 2015)  
**Author(s):** Mei, Songli; Xu, Jiansong; Carroll, Kathleen M; Potenza, Marc N  
**Abstract:** Although impulsivity has been associated with cocaine dependence and other addictive behaviors, the biological factors underlying impulsivity have yet to be precisely determined. This study aimed to examine relationships between impulsivity and volumes of the amygdala and hippocampus in cocaine-dependent and healthy comparison individuals. The Barratt Impulsiveness Scale (BIS-11) was used to assess impulsivity.

FreeSurfer was used to assess amygdalar and hippocampal volumes from high-resolution structural magnetic resonance images. Relative to healthy comparison subjects, cocaine-dependent individuals scored higher on all three subscales of BIS-11 but did not differ from healthy comparison subjects in amygdalar or hippocampal volumes. Cocaine-dependent individuals showed significant negative correlations between amygdalar volumes and scores on the BIS-11 Attentional subscale, and this relationship differed significantly from the non-significant relationship in healthy comparison subjects. As individual differences in amygdalar structure may contribute to the high impulsivity observed in cocaine-dependent individuals, the findings suggest that future studies should assess the extent to which therapies that target impulsivity in cocaine dependence may operate through the amygdala or alter its structure or function. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Psychiatry Research](#)

#### 14. Neural activation during risky decision-making in youth at high risk for substance use disorders.

**Citation:** Psychiatry research, Aug 2015, vol. 233, no. 2, p. 102-111 (August 30, 2015)  
**Author(s):** Hulvershorn, Leslie A; Hummer, Tom A; Fukunaga, Rena; Leibenluft, Ellen; Finn, Peter; Cyders, Melissa A; Anand, Amit; Overhage, Lauren; Dir, Allyson; Brown, Joshua  
**Abstract:** Risky decision-making, particularly in the context of reward-seeking behavior, is strongly associated with the presence of substance use disorders (SUDs). However, there has been little research on the neural substrates underlying reward-related decision-making in drug-naïve youth who are at elevated risk for SUDs. Participants comprised 23 high-risk (HR) youth with a well-established SUD risk phenotype and 27 low-risk healthy comparison (HC) youth, aged 10-14. Participants completed the balloon analog risk task (BART), a task designed to examine risky decision-making, during functional magnetic resonance imaging. The HR group had faster reaction times, but otherwise showed no behavioral differences from the HC group. HR youth experienced greater activation when processing outcome, as the chances of balloon explosion increased, relative to HC youth, in ventromedial prefrontal cortex (vmPFC). As explosion probability increased, group-by-condition interactions in the ventral striatum/anterior cingulate and the anterior insula showed increasing activation in HR youth, specifically on trials when explosions occurred. Thus, atypical activation increased with increasing risk of negative outcome (i.e., balloon explosion) in a cortico-striatal network in the HR group. These findings identify candidate neurobiological markers of addiction risk in youth at high familial and phenotypic risk for SUDs. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

**Subject Headings:** [Index Medicus](#)  
**Source:** Medline  
**Full Text:** Available from *Elsevier* in [Psychiatry Research](#)

#### 15. Addiction resistance: Definition, validation and association with mastery.

**Citation:** Drug and alcohol dependence, Sep 2015, vol. 154, p. 236-242 (September 1, 2015)  
**Author(s):** Kendler, Kenneth S; Myers, John  
**Abstract:** For given levels of psychoactive substance use, symptoms of substance use disorder (SUD) can vary widely. The concept of addiction resistance (AR) seeks to capture this variation so we can understand its causes. In a population-based twin sample, AR was defined as the deviation in the number of reported SUD criteria for a given substance from that predicted from the level of maximal consumption. Therefore, subjects with strong AR demonstrate few symptoms of SUD even at high levels of consumption. Twin modeling was performed by Mx. We assessed AR for alcohol, nicotine and cannabis. Heritability was assessed at two occasions thereby correcting for measurement error and ranged from 35 to 52% with no evidence for shared environment. ARs for alcohol, nicotine and cannabis were relatively stable over time and were substantially predicted by

parental history of SUD, early adversity, comorbidity with both internalizing and externalizing disorders, personality and especially by the trait of mastery. AR, which assesses individual variation in sensitivity to the development of SUD for a given level of drug exposure, may be a useful concept for addiction research. As applied to common psychoactive substances, AR is moderately heritable, relatively stable and predicted by family history, comorbidity and personality. The relationship with mastery is of particular interest in that it may reflect an ability to resist the progression of the addictive process into key life domains and to avoid loss of control of intake, even when consuming at high levels. Copyright © 2015 Elsevier Ireland Ltd. All rights reserved.

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Medline

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