

**DEPARTMENT OF THE AIR FORCE
UNITED STATES AIR FORCE TRIAL JUDICIARY**

UNITED STATES	)	
	)	
v.	)	AFFIDAVIT REGARDING
	)	TSGT PAMELA PUMPERNICKEL
TSGT Pamela Pumpernickel	)	
Support Squadron (AFMC)	)	
Davis-Monthan AFB, Arizona	)	26 October 2022

I, Dr. Paul Simpson, after being duly sworn do state the following as true and accurate to the best of my knowledge / belief:

1. I am Dr. Paul Simpson, Ed.D., a Forensic Psychologist. During the past 30 years I have provided inpatient and outpatient treatment for patients struggling with chemical and behavioral compulsions as well as conducting hundreds of psychological evaluations for State, Federal and Military courts. I am recognized by the Supreme Court of the State of Arizona and by Pima County Superior Court to conduct psychological evaluations. I have been licensed as a psychologist by the State of Arizona since 1991, am listed in the National Register of Psychologist, and a member in good standing with the American Psychological Association.

2. It has been explained to me that TSgt Pumpernickel has agreed to plead guilty to the following:

On numerous dates between on or about

3. I have reviewed and relied upon various documents including the following in preparing this affidavit:

Report of Investigation		
Offer for Plea Agreement		
Stipulation of Fact		
Certified Copy of the Enlisted Performance Reports of TSgt Pumpernickel		
Personal Data Sheet		
Written Unsworn Personal Statement of TSgt Pumpernickel		

4. Scientific research demonstrates that relapse/recidivism is a common feature for an individual struggling with cocaine, alcohol and cannabis compulsions, despite increasingly negative life impact. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) is the taxonomic and diagnostic tool published by the American Psychiatric Association (APA). In the United States, the DSM serves as the principal authority for psychiatric diagnoses and treatment recommendations are often determined by DSM classifications.

5. The DSM-5 notes the following regarding general substance use disorders.

The essential feature of a substance use disorder is a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems. An important characteristic of substance use disorders is an underlying change in brain circuits that may persist beyond

detoxification, particularly in individuals with severe disorders. . . The behavioral effects of these brain changes may be exhibited in the repeated relapses and intense drug craving when the individuals are exposed to drug-related stimuli. These persistent drug effects may benefit from long-term approaches to treatment. (page 483)

Social impairment is the second grouping of criteria (Criteria 5–7). Recurrent substance use may result in a failure to fulfill major role obligations at work, school, or home (Criterion 5). The individual may continue substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (Criterion 6). Important social, occupational, or recreational activities may be given up or reduced because of substance use (Criterion 7). . . Risky use of the substance is the third grouping of criteria (Criteria 8–9). This may take the form of recurrent substance use in situations in which it is physically hazardous (Criterion 8). The individual may continue substance use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (Criterion 9). The key issue in evaluating this criterion is not the existence of the problem, but rather the individual's failure to abstain from using the substance despite the difficulty it is causing. (page 483)

Substance intoxication and withdrawal often involve several substances used simultaneously or sequentially. . . Individuals ages 18–24 years have relatively high prevalence rates for the use of virtually every substance. (pages 486-487)

6. The DSM-5 notes the following regarding stimulant use disorder.

Regardless of the route of administration, tolerance occurs with repeated use. Withdrawal symptoms, particularly hypersomnia, increased appetite, and dysphoria, can occur and can enhance craving. Most individuals with stimulant use disorder have experienced tolerance or withdrawal. . . Use patterns and course are similar for disorders involving amphetamine-type stimulants and cocaine, as both substances are potent central nervous system stimulants with similar psychoactive and sympathomimetic effects. (page 563)

Individuals with stimulant use disorder often develop conditioned responses to drug related stimuli (e.g., craving on seeing any white powder-like substance). These responses contribute to relapse, are difficult to extinguish, and persist after detoxification. . . Stimulant smoking and intravenous use are associated with rapid progression to severe-level stimulant use disorder, often occurring over weeks to months. Intranasal use of cocaine and oral use of amphetamine-type stimulants result in more gradual progression occurring over months to years. With continuing use, there is a diminution of pleasurable effects due to tolerance and an increase in dysphoric effects. (pages 564-565) Stimulant-related disorders often co-occur with other substance use disorders, especially those involving substances with sedative properties, which are often taken to reduce insomnia, nervousness, and other unpleasant side effects. Cocaine users often use alcohol, while amphetamine-type stimulant users often use cannabis. (pages 566-567)

7. The DSM-5 notes the following regarding alcohol use disorder.

Because withdrawal from alcohol can be unpleasant and intense, individuals may continue to consume alcohol despite adverse consequences, often to avoid or to relieve withdrawal symptoms. Some withdrawal symptoms (e.g., sleep problems) can persist at lower intensities for months and can contribute to relapse. Once a pattern of repetitive and intense use develops, individuals with alcohol use disorder may devote substantial periods

of time to obtaining and consuming alcoholic beverages. . . Craving for alcohol is indicated by a strong desire to drink that makes it difficult to think of anything else and that often results in the onset of drinking. *School and job performance may also suffer either from the aftereffects of drinking or from actual intoxication at school or on the job*; child care or household responsibilities may be neglected; and alcohol-related absences may occur from school or work. The individual may use alcohol in physically hazardous circumstances (e.g., driving an automobile, swimming, operating machinery while intoxicated). Finally, individuals with an alcohol use disorder may continue to consume alcohol despite the knowledge that continued consumption poses significant physical (e.g., blackouts, liver disease), psychological (e.g., depression), social, or interpersonal problems (e.g., violent arguments with spouse while intoxicated, child abuse). (page 492)

Alcohol use disorder is often associated with problems similar to those associated with other substances (e.g., cannabis; cocaine; heroin; amphetamines; sedatives, hypnotics, or anxiolytics). Alcohol may be used to alleviate the unwanted effects of these other substances or to substitute for them when they are not available. Symptoms of conduct problems, depression, anxiety, and insomnia frequently accompany heavy drinking and sometimes precede it. (page 492)

Alcohol use disorder has a variable course that is characterized by periods of remission and relapse. A decision to stop drinking, often in response to a crisis, is likely to be followed by a period of weeks or more of abstinence, which is often followed by limited periods of controlled or nonproblematic drinking. However, once alcohol intake resumes, it is highly likely that consumption will rapidly escalate and that severe problems will once again develop. Alcohol use disorder is often erroneously perceived as an intractable condition, perhaps based on the fact that individuals who present for treatment typically have a history of many years of severe alcohol-related problems. However, these most severe cases represent only a small proportion of individuals with this disorder, and the typical individual with the disorder has a much more promising prognosis. (page 493)

The diagnostic features of alcohol use disorder highlight major areas of life functioning likely to be impaired. These include driving and operating machinery, school and work, interpersonal relationships and communication, and health. (page 496)

8. The DSM-5 notes the following regarding cannabis use disorder.

Individuals who regularly use cannabis can develop all the general diagnostic features of a substance use disorder. Cannabis use disorder is commonly observed as the only substance use disorder experienced by the individual; however, it also frequently occurs concurrently with other types of substance use disorders (i.e., alcohol, cocaine, opioid). In cases for which multiple types of substances are used, many times the individual may minimize the symptoms related to cannabis, as the symptoms may be less severe or cause less harm than those directly related to the use of the other substances. . . New to DSM-5 is the recognition that abrupt cessation of daily or near-daily cannabis use often results in the onset of a cannabis withdrawal syndrome. . . Although typically not as severe as alcohol or opiate withdrawal, the cannabis withdrawal syndrome can cause significant distress and contribute to difficulty quitting or relapse among those trying to abstain. (page 511)

Milder adult cases may resemble the more common adolescent cases in that cannabis use is not as frequent or heavy but continues despite potential significant consequences of sustained use. . . Many areas of psychosocial, cognitive, and health functioning may be

compromised in relation to cannabis use disorder. Cognitive function, particularly higher executive function, appears to be compromised in cannabis users, and this relationship appears to be dose dependent (both acutely and chronically). This may contribute to increased difficulty at school or work. Cannabis use has been related to a reduction in prosocial goal-directed activity, which some have labeled an amotivational syndrome, that manifests itself in poor school performance and employment problems. These problems may be related to pervasive intoxication or recovery from the effects of intoxication. (page 513-514)

Cannabis has been commonly thought of as a “gateway” drug because individuals who frequently use cannabis have a much greater lifetime probability than nonusers of using what are commonly considered more dangerous substances, like opioids or cocaine. . . Individuals with past-year or lifetime cannabis use disorder have high rates of alcohol use disorder (greater than 50%) and tobacco use disorder (53%). Rates of other substance use disorders are also likely to be high among individuals with cannabis use disorder. Among those seeking treatment for a cannabis use disorder, 74% report problematic use of a secondary or tertiary substance: alcohol (40%), cocaine (12%), meth amphetamine (6%), and heroin or other opiates (2%). . . Cannabis use disorder is also often observed as a secondary problem among those with a primary diagnosis of other substance use disorders, with approximately 25%–80% of those in treatment for another substance use disorder reporting use of cannabis. (page 515)

9. As noted by the DSM-5, there is a strong body of scientific literature that establishes the persistence of abusing cocaine, alcohol and marijuana despite mounting negative life consequences. However, research also demonstrates that recovery efforts and treatment can have increasing benefit despite relapses in substance use. To that end I have attached the abstracts for four research studies regarding relapse in Appendix A of this affidavit and have provided the full articles to TSgt Pumpnickel’s defense team.

10. I thank you for the opportunity to address the court in this matter. I invite the Court to contact me with any questions you might have. I can be reached at (520) 355-1000 (office), (520) 355-2000 (Fax), 2292 W. Magee Rd., Suite 220, Tucson, AZ 85742, doc@psy.law, and www.psy.law.

Paul Simpson, Ed.D.
Arizona Psychologist, #1967

2 October 2022

Appendix A: **Research related to Relapse in Cocaine, Alcohol and Cannabis Use**

Overlooked and underestimated? Problematic alcohol use in clients recovering from drug dependence.

Staiger, Petra K., et al.

Addiction, Vol 108(7), Jul, 2013. pp. 1188-1193.

Abstract:

Aims: Despite recognition of the harms related to alcohol misuse and its potential to interfere substantially with sustained recovery from drug dependency, research evaluating drug treatment outcomes has not addressed the issue comprehensively. It has been overlooked possibly because treatment research has been framed according to the primary drug of choice, rather than investigating the interactions between different combinations of drugs and/or alcohol use. This paper reports on a systematic review investigating whether concurrent alcohol use could impede recovery from illicit drug use in two potential ways: first, alcohol could become a substitute addiction and/or secondly, alcohol misuse post-treatment may place an individual at risk for relapse to their primary drug problem. **Method:** A systematic search of four relevant databases was undertaken to identify peer-reviewed, quantitative drug treatment outcome studies that reported alcohol use pre-, post-treatment and follow-up. **Results:** The search revealed 567 papers, of which 13 were assessed as fulfilling the key inclusion criteria. The review indicated inconsistent and therefore inconclusive support for the substitution hypothesis. However, the data revealed consistent support for the hypothesis that alcohol use increases relapse to drug use. **Conclusions:** (i) The potential negative impact of alcohol misuse on drug treatment outcomes remains under-researched and overlooked; (ii) alcohol consumption post-drug treatment may increase the likelihood that an individual will relapse to their primary drug; (ii) existing evidence regarding the substitution hypothesis is inconclusive, although there was an indication that a subgroup of participants will be vulnerable to alcohol becoming the primary addiction instead of drugs. We argue that future drug treatment outcome studies need to include detailed analysis of the influence of alcohol use pre- and post-drug treatment.

Assessment of inhibitory control in crack and/or cocaine users: A systematic review.

Czermainski, Fernanda Rasch, et al.

Trends in Psychiatry and Psychotherapy, Vol 39(3), Jul-Sep, 2017. pp. 216-225.

Abstract (English):

Objective: Impairments involving inhibitory control have been considered central deficits in drug users, but it appears that dysfunctions may be specific to users' drug of choice. This article aims to review recent findings on inhibitory control impairment in samples of crack and/or cocaine users. **Methods:** Searches were conducted on the PubMed, PsycINFO, and Web of Knowledge databases in two stages according to eligibility criteria. Initially, databases were searched and the titles and abstracts of results were analyzed and then selected articles were read in full. Inclusion criteria were: empirical articles written in English, Portuguese, or Spanish, published in the last ten years and involving the assessment of inhibitory control in crack and/or cocaine users. **Results:** The database searches returned a total of 3,796 titles, 56 of them were selected initially and then a further 20 were excluded. Thirty-six articles were included in this review. In 90% of the studies reviewed the presence of inhibitory control deficits was reported, verified by impaired cognitive processing and response monitoring, as well as high levels of impulsiveness, regardless of the pattern of crack and/or cocaine consumption (recreational or chronic).

Former users showed high levels of impulsiveness even after long periods of abstinence. Conclusions: Crack and/or cocaine users may have inhibitory control deficits, irrespective of different consumption patterns. High levels of impulsiveness can represent a factor of vulnerability to drug use and relapse.

Alcohol use disorder relapse factors: A systematic review.

Sliedrecht, Wilco, et al.

Psychiatry Research, Vol 278, Aug, 2019. pp. 97-115.

Abstract:

A relapsing-remitting course is very common in patients with an Alcohol Use Disorder (AUD). Understanding the determinants associated with alcohol resumption remains a formidable task. This paper examines relapse determinants based on a systematic review of recent alcohol literature (2000–2019). Relevant databases were consulted for articles that contained information about specific relapse determinants and reported statistical significance of each relapse determinant in predicting relapse. Relapse was broadly defined based on the characterization in the included articles. From the initial identified 4613 papers, a total of 321 articles were included. Results encompass multiple relapse determinants, which were ordered according to biopsychosocial and spiritual categories, and presented, using a descriptive methodology. Psychiatric co-morbidity, AUD severity, craving, use of other substances, health and social factors were consistently significantly associated with AUD relapse. Conversely, supportive social network factors, self efficacy, and factors related to purpose and meaning in life, were protective against AUD relapse. Despite heterogeneity in different methods, measures, and sample characteristics, these findings may contribute to a better therapeutic understanding in which specific factors are associated with relapse and those that prevent relapse. Such factors may have a role in a personalized medicine framework to improve patient outcomes.

Risky decision-making in individuals with substance use disorder: A meta-analysis and meta-regression review.

Chen, et al.

Psychopharmacology, Vol 237(7), Jul, 2020. pp. 1893-1908.

Abstract:

Background: This review aims to identify whether risky decision-making is increased in substance users, and the impact of substance type, polysubstance use status, abstinence period, and treatment status on risky decision-making. Methods: A literature search with no date restrictions was conducted to identify case-control studies or cross-sectional studies that used behavioral tasks to measure risky decision-making in substance users. A random-effects model was performed. GRADE criteria was used to assess the quality of evidence. Results: 52 studies were enrolled. The result showed that the difference in risky decision-making performance between user groups and control groups was significant ($SMD = -0.590$; $95\%CI = -0.849$ to -0.330 ; $p < 0.001$; $I^2 = 93.4\%$; Heterogeneity < 0.001). Subgroup analysis showed that users in the subgroups of alcohol ($p < 0.001$), tobacco ($p < 0.01$), cocaine ($p < 0.001$), opioid ($p < 0.001$), mixed group ($p < 0.01$), adult users ($p < 0.001$), small sample size ($p < 0.001$), large sample size ($p < 0.01$), low education ($p < 0.001$), high education ($p < 0.001$), short-abstinence period ($p < 0.001$), long-abstinence period ($p < 0.001$), without current polysubstance dependence ($p < 0.001$), and with treatment ($p < 0.001$) had increased risky decision-making when compared to the controls. On the other hand, elderly substance users with short-abstinence period showed increased risky decision-making. Moreover, current treatment status and polysubstance use

may not influence the level of decision-making in substance users. Conclusions: The results show that substance use is associated with impaired risky decision-making, indicating that interventions targeting risky decision-making in substance users should be developed for relapse prevention and rehabilitation.