

PACIFIC INSTITUTE SERIES ON FORENSIC PSYCHOLOGY

# METHAMPHETAMINE USE

*Clinical and Forensic Aspects*

Errol Yudko • Harold V. Hall  
Sandra B. McPherson



**CRC PRESS**

PACIFIC INSTITUTE SERIES ON FORENSIC PSYCHOLOGY

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# **PACIFIC INSTITUTE SERIES ON FORENSIC PSYCHOLOGY**

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She has worked as a consultant to industry, educational institutions, and government. The governmental agencies she has consulted for include the V.A., the FBI, and local police forces. She has published or presented more than 30 professional papers. She is a member of the American Psychological Association and the Ohio Psychological Association, of which she has served as president. She is a former president of the State Board of Psychology.

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# Introduction

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Since 1620, when the Puritans arrived on the *Mayflower*, Americans have been ambiguous in their attitudes and beliefs about drugs. It began with alcohol. A quote from the *Mayflower* log reads, “We could not now take time for further search or consideration, our victuals having been much spent, specifically our beer.” On board ship the Puritans carried 42 tons of beer, 10,000 gallons of wine, and 14 tons of water (Lee, 1963). However, in 1629, the first laws concerning the use of alcohol in the New World were introduced by the Virginia Colonial Assembly (Cherrington, 1920): “Ministers shall not give themselves to excess in drinkinge, or riott, or spending their tyme idellye day or night.” In 1633, Plymouth Colony prohibited the sale of more than 2 pence worth of spirits to “anyone but strangers just arrived.” In 1637, Massachusetts ordered that “no persons shall remain in any tavern longer than necessary occasions.” Despite these laws, by 1640 the first distillery had been built on Dutch-owned Staten Island.

Thus, from our beginnings we have had this love/hate relationship with drugs. The first settlers arrived with tons of alcohol and almost immediately began to legislate against its use. Then they started building distilleries. This ambiguous behavior continued for centuries. The Revenue Act of 1791 called for taxation on whiskey, which incited the Whiskey Rebellion of 1791. The Revenue Act was repealed in 1802. The first temperance movement began in 1826. The basic philosophy was that beer was good and whiskey was bad. The second temperance movement, 1874, decreed that all alcohol is “evil.” Meanwhile, whiskey and brandy were considered by both physicians and the populace as medicinal drinks. Prohibition was enacted in 1920 and repealed in 1933.

## Good vs. Bad Drugs

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Americans have a tendency to see all things in black and white. Drugs are good or bad. In 1874 beer was good, whiskey was bad. In today’s world, natural is good, synthetic is bad. We develop these ideas by listening to our teachers, clergy, parents, politicians, and the media. However, no matter what



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we believe, it's all the same chemicals. There is only one periodic table. The elements combine together to form compounds. It does not matter how they combine; the effect will be the same. In biochemistry, function is determined by shape. If the right shape is present, then a chemical will have some sort of physiological effect.

## **Good vs. Evil States**

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We can observe this phenomenon — our basic desire to label all things as either positive or negative — in our current political dealings with the world. Nations are seen by Americans as either our allies or part of the “axis of evil.” Diplomacy is all but forgotten in our current desire to strike out at the “Evil Doers” of the world. Few stop to think that in the countries that we are currently planning to wage war upon there are those who consider Americans the “Evil Ones.” Few stop to consider that the very same thought patterns (seeing the world in black and white) are what led to a group of terrorists being able to rationalize the attack on American soil that began the current crisis.

## **Objectivity**

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Currently we watch television ads that suggest that illicit drug use supports terrorism. There are a number of fundamental problems with the use of these ads intended to reduce illicit drug use.

First, were the ads ever tested for their effectiveness? The likely answer is that they were not (like the “just say no” and “this is your brain on drugs” ads that came before them). What good could we do if we took the enormous amount of money invested in these ads and put them to use researching how to reduce illicit drug use?

Second, these ads suggest that drugs support terrorism, but what about diamonds and oil? Does not our use of these commodities support terrorism. Bill Mahre, in his new book *When You Ride Alone You Ride with Bin Laden: What the Government Should Be Telling Us to Help Fight the War on Terrorism* seems to be the only member of the media with the courage to address these issues.

Third, who is really being supported by the drug trade? Didn't we learn that it was the U.S. that was trafficking drugs during the Iran-Contra affair? Wasn't it the Taliban who put a stop to the heroin trade in Afghanistan? Hasn't that trade returned since the overthrow of the Taliban?

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Science is an attempt to understand the universe objectively. We cannot afford to look at problems from a single perspective. Both science and politics function better when the practitioners understand their opposition. In politics, it is essential to understand your opponent if you ever hope to reach a compromise with him or her or if you wish to best that opponent in a political arena.

## Effects vs. Side Effects

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In science we must view our world from every possible perspective. We must understand that there may be multiple causes of any phenomenon. Moreover, we must understand that there may be many more *possible* causes of any phenomenon. From that perspective it becomes the job of scientists to design experiments that will allow them to rule out each *possible* cause until only one cause remains.

Thus, the scientist cannot afford to believe in “Good” or “Bad.” The scientist must remain objective. In the case of pharmacology, that means we cannot evaluate a drug as either good or bad. We must evaluate it in terms of its effects vs. its side effects.

All drugs have positive effects and negative side effects. If you watch television for any length of time you will see an ad for a pharmaceutical compound. It may be a drug that will reduce your acne, increase your sex drive, or make your depression go away. Whatever the case, at the end of that advertisement you will be presented with a list of possible negative side effects.

The decision of whether or not a drug should be used needs to be based on a careful evaluation of effect vs. side effect. For example, if a physician considers prescribing amphetamine to treat obesity, that physician needs to consider whether the desired effect (appetite suppression) outweighs the negative side effects (sleeplessness, irritability, addiction, etc.). In most cases of this sort, the physician will likely decide not to prescribe the drug. But that should be the decision of the physician, who is an expert in the drug’s medicinal qualities, not agents of the federal government, who base decisions on the belief that some drugs are good and some drugs are bad.

## Governmental Regulations

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Our government has been in the habit, since the passage of the Harrison Act of 1914, of classifying any drug that it does not understand that has any possibility for abuse as Schedule I. Thus, the government makes research on

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the drug nearly impossible and any medical use out of reach. This behavior has little to do with our scientific understanding of the effects of the drug. Rather, the decision to classify a drug as illegal is almost always an emotional decision. In 1937, a man by the name of Anslinger appealed to Congress to pass legislation to prohibit the use of marijuana based on his unsubstantiated statements that it caused black men to rape white women. This emotional appeal led to the reclassification of marijuana, a substance that is far less harmful than tobacco or alcohol, as an illicit substance with no medical use (a designation that is finally being called into question today).

This emotional decision making of our governmental bodies does not end with the designation of a drug as good or bad. It also extends into how we deal with the drug problems faced by the nation. This is not the place to embark on a lengthy discussion about how the current “war on drugs” makes the problem worse. In brief, upsetting the supply-and-demand equation causes an increase in the value of drugs. This leads to increased incentive to sell illicit drugs and an increase in crime associated with illicit drug use; a lesson that should have been learned during Prohibition. A viable alternative to the current “war” would be to increase our attempts to prevent drug use by dealing with the social causes of drug use (i.e., employment, educational, and family problems). However, even when the government tries to do the right thing and develop substance abuse prevention programs it tends to make the problem worse.

The current trend in substance abuse prevention is to use community coalitions to develop strategies to reduce drug use. The rationale is that if you bring the community together you will inspire politicians to release funds for the cause. However, a recent study (Hallfors et al., 2002) shows that these coalitions can actually make the problem worse. The authors of the paper concluded:

Not only were effects related to community and youth goals null, but coalitions that targeted adults actually did worse on related indicators over time compared to matched controls. Coalitions that were more comprehensive in their strategies did not show any superior benefit; when coalitions focused high doses of funding and staff time on specific strategies, this produced an inverse relationship with desired outcomes (Hallfors et al., 2002).

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One possible solution to this problem would be to allow our experts to do what it is that they do best with minimal interference.

This book is an attempt to evaluate our current knowledge about the effects and side effects of methamphetamine. The use of this drug has been highly politicized in recent years. In a time when the U.S. Drug Enforcement Agency (DEA) and political leaders need to be educated about this drug, they have decided that they are the experts. The DEA and local governments have come together to develop “summits” in which politicians make speeches and spread unsubstantiated information, and in which community members try to brainstorm effective ways to deal with a very complex problem. In this book we attempt to perform this evaluation with little or no bias, which may ruffle some feathers. We attempt to analyze social problems from all possible perspectives. We analyze the effects of methamphetamine from historical, political, clinical, and forensic aspects.

This work is divided into six parts. Section I focuses on the history and epidemiology of methamphetamine use. Section II describes the physiology, effects, and diagnosis of methamphetamine use. Section III analyzes what we know about the effect of methamphetamine on aggression. Section IV examines the interaction between methamphetamine and the criminal justice system. Section V describes issues that pertain to forensic psychologists. Section VI examines the issues regarding treatment and the effectiveness of current treatments.

*Note:* References within the text may be found either in the chapter reference list or in the bibliography at the end of the book.

**Errol Yudko**

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Errol Yudko • Harold V. Hall • Sandra B. McPherson

A man is accused of attempted murder of a former crystal meth addict. He claims he shot in self-defense, responding to the extremely aggressive behavior the victim was exhibiting. How will this play out in court? Most likely, the prosecution and the defense will call various expert witnesses — perhaps neurologists, psychologists, pathologists — each with testimonies based on their own theoretical viewpoints, but none with a truly comprehensive knowledge of the background and effects of methamphetamine (MA) use. This will cause confusion, complexity, and their testimonies may not comply with *Daubert* standards.

Written by a multidisciplinary team of experts, *Methamphetamine Use: Clinical and Forensic Aspects* examines MA use and abuse from clinical, forensic, and criminal justice perspectives. It is the first to cover virtually every aspect, reviewing the history, pharmacology, pathology, physiology, treatment, and evidentiary value of MA and its use. It addresses *Daubert* considerations and victim/witness credibility, competency to confess and to stand trial, criminal responsibility, extreme emotion as mitigation to murder, and dangerousness. It also details statutes and case law to represent perspectives of both the prosecution and the defense.

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- Advises forensic psychologists in their expert witnessing regarding the behavioral effects of methamphetamine
- Addresses MA use in the Middle East
- Presents the most current treatment modalities for MA addiction
- Cites the important cases, articles, and statistics of which anyone working in the forensic aspects of MA should be aware

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