

# DRUG & ALCOHOL FINDINGS *Review analysis*

This entry is our analysis of a review or synthesis of research findings considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original review was not published by Findings; click [Title](#) to order a copy. [Links](#) to other documents. [Hover over](#) for notes. [Click to](#) highlight passage referred to. Unfold extra text  The Summary conveys the findings and views expressed in the review. Below is a commentary from Drug and Alcohol Findings.

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## ▶ [Psychosocial interventions for psychostimulant misuse \(Review\).](#)

**Minozzi S., Saulle R., De Crescenzo F. et al.**  
**Cochrane Database of Systematic Reviews, 2016**

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*A review revealing contingency management may be a promising treatment option for problem cocaine and amphetamine use, but unable to answer the big question – ‘is one psychosocial approach more effective than the others and in what circumstances?’*

**SUMMARY** Globally, cocaine and [amphetamines](#) are the two main types of illicit stimulants used recreationally. Amphetamines are second only to cannabis as the most commonly used illicit drug-type worldwide, and more people are estimated to use them than heroin or cocaine.

Both cocaine and amphetamine dependence have been associated with adverse social, physical, and psychological consequences. These include delusions and hallucinations, cardiovascular disease, AIDS and viral hepatitis, and sexually transmitted infections. There is also a close link between illicit drug use (including crack cocaine and amphetamines), and crime, sexual abuse, and interpersonal violence.

Problem cocaine and amphetamine use represent a significant public health problem, and remain a treatment priority because of the highly addictive properties of these substances.

At the present time, there is no widely accepted treatment for stimulant use disorders, and pharmacological treatments do not appear to be effective.

The featured paper reviewed the effectiveness of textbook-recognised, standardised psychosocial interventions including: [cognitive-behavioural therapy](#); [contingency management](#); [motivational interviewing](#); interpersonal therapy; psychodynamic therapies; and facilitated [12-step intervention](#). Not included were clinical management, case management, and drug counselling.

A total of 52 randomised controlled trials (6923 participants) satisfied the criteria for inclusion in the review, and of these, 47 studies for inclusion in a [meta-analysis](#) amalgamating the findings of several studies.

Participants were 18 years and older with a diagnosis of ‘[psychostimulant](#)’ dependence or problematic use, according to the Diagnostic and Statistical Manual of Mental Disorders (third, fourth or fifth edition) or the International Classification of Diseases (ninth or tenth edition). Some participants had additional diagnoses of dependence or problematic use of other substances, such as alcohol or cannabis, and/or co-occurring psychiatric disorders. Some participants were also enrolled in a methadone maintenance scheme for opiate dependence.



### Key points

#### From summary and commentary

At the present time, there is no widely accepted treatment for stimulant use disorders, and pharmacological treatments do not appear to be effective.

The featured paper reviewed the effectiveness of psychosocial interventions including cognitive-behavioural therapy, contingency management, motivational interviewing, interpersonal therapy, psychodynamic therapies, and facilitated 12-step intervention.

The most promising approach was contingency management, but the authors couldn’t report with certainty that this was the most effective overall due to the shortage of studies investigating others.

## Main findings

The vast majority of studies examined contingency management (27) and cognitive-behavioural therapy (19), with far fewer looking at motivational interviewing (5), 12-step (4), interpersonal therapy (3) and psychodynamic therapy (1).

These were grouped according to the types of comparison made in the studies:

- Any psychosocial intervention versus no intervention (32), including studies where the psychosocial interventions were given in addition to treatment as usual, or another intervention received by both groups.

There was moderate-quality evidence that compared to no intervention, as a whole psychosocial treatment reduced the risk of withdrawal from treatment at around nine months based on data from 24 studies and 3393 participants. Subgroup analysis by type of intervention highlighted a significant difference between contingency management and no intervention, with results favouring contingency management. No such difference was evident between no intervention and either cognitive-behavioural therapy, motivational interviewing, 12-step, or psychodynamic therapy.

There was low-quality evidence that compared to no intervention, as a whole psychosocial treatment was associated with more patients being continuously abstinent throughout treatment based on data from eight studies and 1241 participants.

- Any psychosocial intervention versus treatment as usual (6).

There was moderate-quality evidence that psychosocial interventions may help prevent patients leaving treatment early based on data from six studies and 516 participants. Subgroup analysis by type of intervention provided evidence of effect only for cognitive-behavioural therapy.

- Any psychosocial intervention versus an alternative psychosocial intervention (13).

Contingency management was similar to non-contingent reinforcements for treatment drop-out, based on data from four studies in 464 participants, but performed better than non-contingent reinforcements in raising the proportion of patients abstinent at the end of treatment based on data from two studies with 96 participants.

## The authors' conclusions

The **sample sizes** of the studies were small, there were few studies directly comparing different types of psychosocial approaches, and what comparisons there were varied. The most promising and most studied psychosocial approach given in addition to another treatment or to treatment as usual was contingency management, but the possibility cannot be ruled out that other types of treatment showed non-significant results because their samples were too small to be able to register a statistically significant finding, even if the therapy was effective.

**FINDINGS COMMENTARY** The outcomes assessed in the featured paper favoured contingency management over other psychosocial treatments (such as cognitive-behavioural therapy). However, the results couldn't give any indication of the lasting nature of reductions in substance use driven by contingency management because they covered only *during* and *end-of-treatment* outcomes. Other research suggests that such reductions **can be** significant while rewards/sanctions are in place, but then evaporate when they are no longer there.

The review noted that, to date, no pharmacological treatment has emerged as an effective way to approach stimulant use disorders. **Another review**, published in 2008, identified some promising medications for problem cocaine use (initiating abstinence, reducing use and preventing relapse) and methamphetamine use, but concluded that treatment approaches combining efficacious medications and proven behavioural interventions are likely to produce the best results – among which is voucher-based reinforcement therapy, a form of contingency management which rewards patients who achieve predetermined therapeutic goals with vouchers redeemable for goods and services.

Drug counselling is a common approach to addressing problem stimulant use in the UK, but was not assessed by the review. Some studies (for example [here](#)), have found that structured counselling could be just as effective as different psychotherapies.

For further reading, an Effectiveness Bank hot topic has **examined** what happened to the predicted 'explosion' of **crack** and **powdered cocaine** use in Britain, and why beliefs that the substances are uniquely addictive, and their users hard to treat, may be built on a shaky foundation.

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