

# knowledge snapshot

## ‘Thinking about thinking’ is involved in addiction



### What this article is about

Metacognition refers to “thinking about thinking” – what a person knows or believes about their own thoughts. Metacognition is a deeper level of thinking that includes a person’s awareness of how they understand, adapt, change, control, and use their thought processes. For example, a person recognizes that they have difficulty remembering people’s names, so they use a trick that helps them to remember. Metacognitions can be beneficial or harmful to a person’s wellbeing.

There are three sub-types of metacognitions: (1) generic metacognitions (e.g., “I need to control my thoughts at all times”); (2) positive metacognitions (e.g., “If I worry I will be prepared”); and (3) negative metacognitions (e.g., “I cannot control my deep thoughts”). All three types of metacognitions can result in unhealthy ways of managing stress, including worry, avoidance, or substance use.

Past research has found a strong link between metacognitions and mental disorders, including depression, eating disorders, and anxiety. Other research has also examined the link between metacognitions and alcohol use, tobacco, gambling or problematic Internet use. But, no study in English has summarized all of this research. The current review identifies and presents the current evidence about metacognitions and addictive behaviours.

### What was done?

The researchers searched for published research studies in PsycINFO, PsycARTICLES, and PubMed databases. They also looked for additional reports using ResearchGate and Google Scholar. The

### Why is this article important?

This systematic review found positive associations between dysfunctional metacognitive beliefs and addictive behaviours. It appears that metacognitions promote harmful thinking styles and unhealthy coping strategies, which increase the odds of taking part in addictive behaviours. Almost all of the studies found in the review were cross-sectional; more longitudinal or experimental studies are required to examine the possible causal relationship of metacognition and addiction. Metacognitive therapy could be a promising treatment for people with addiction.

researchers searched for English language articles published between 1994 and 2018. The studies had to be about metacognitions and addictive behaviours.

The researchers screened the titles and abstracts of all of the research studies that their searches yielded. When the research met the researchers’ criteria, they reviewed the full research study.

### What you need to know

The review included 38 studies published between 1999 and 2018. 13 studies explored metacognitions in alcohol use, 6 in nicotine use, 9 in gambling, 8 in gaming and problematic Internet use, 1 in methamphetamine use, and 1 in a mixed sample of addictive behaviours.

The studies reviewed showed that people with addiction had unhealthy generic metacognitions (beliefs about the need to control thoughts), negative metacognitions about addiction-related thoughts (“I

cannot control my addiction”), and metacognitions about craving (“I cannot control my craving”). These metacognitions predicted the severity of addiction and craving and relapse.

Positive metacognitions appear to be involved in the start of addictive behaviour by motivating people to engage in it. Negative metacognitions appear to be involved in the continuation of addictive behaviour. These metacognitions cause people to believe they have no control over their addictive behaviour, which in turn limits their attempts to control it.

Most of the studies included in the review were cross-sectional – they analyzed data from a group of people at a single point in time (i.e., metacognitions and addictive behaviours are measured at the same time). So, it is not possible from these types of studies to determine if metacognitions cause addictive behaviour, or if metacognitions are a consequence of addictive behaviour.

### Who is it intended for?

This review is intended for treatment providers. The results suggest that interventions that target metacognitive beliefs could be beneficial for people with addictive behaviours.

The review is also intended for psychology researchers. Researchers can conduct more longitudinal (i.e., tracking metacognitions and addictive behaviour over time to determine which one leads to the other) or experimental research to confirm the findings of the research studies included in the current review.

### About the researchers

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