

# Review of: "Addiction"

Clive Bates

**Potential competing interests:** The author(s) declared that no potential competing interests exist.

This definition of addiction is well specified. In particular, the inclusion of a requirement for serious net harm within the definition and the rationale for this provided in the comment are valuable clarifications of language that is often used casually and inconsistently. This creates an operationally useful definition.

## **Definition (addiction)**

*A mental disposition towards repeated episodes of abnormally high levels of motivation to engage in a behaviour, acquired as a result of engaging in the behaviour, where the behaviour results in risk or occurrence of serious net harm.*

## **Comment**

*This entity focuses on abnormal motivation to engage in a behaviour and includes serious net harm as a feature. The reason is to limit the class to things that merit a treatment and public health response. It is a quantitative entity and a fuzzy set because there can be varying thresholds set for degree of harm and strength of motivation. As a result, it is essential to operationalise the term for it to be meaningful*

I have one suggestion to improve the entry as it appears in [AddictO: addiction](#) - that it to remove the word *Dependence* under the heading "Synonyms". This is confusing because the definition of dependence, [AddictO: substance dependence](#) is usefully distinct from the definition of addiction, meaning that they should not be considered synonyms in an ontology.

## **Definition (substance dependence)**

*A bodily disposition which is realised as impaired functioning following reduction or termination of use of a psychoactive substance.*

This definition highlights the role of negative reinforcement through withdrawal but does not *require* the serious net harm in the addiction definition. In other words, it provides a useful two-tiered structure of meaning. All addictions involve dependence, but not all dependence is an addiction. The difference is the extent of serious net harm.

This is relevant in the case of nicotine where there are varying degrees of dependence according to the pharmacokinetics of possible through the delivery system and orders of magnitude difference in harm according to whether combustion of tobacco and inhalation of smoke are involved.