



A Park or a Cage?

The “Rat Park” story

“Drugs cause addiction.” This was the conclusion drawn from repeated rat experiments in numerous university research centres in the 1950s and 60s. These studies had involved the use of tiny cages with contraptions that allowed isolated animals to drink drug-laced sugar water or inject drugs by pressing a lever. The rats consumed large amounts of heroin, morphine, amphetamine, cocaine and other drugs, sometimes not eating and dying through neglect. This led scientists to conclude that the drugs had innate powers that made them irresistible to rats and humans alike.

In the late 1970s, Professor Bruce Alexander and his colleagues at Simon Fraser University set out to test this theory. They wanted to know if it was true that drugs themselves caused addiction or if environmental factors might be involved. For their experiment, they had to create a better environment.

This required building a great big plywood box on the floor of our laboratory, filling it with things that rats like, such as platforms for climbing, tin cans for hiding in, wood chips for strewing around, and running wheels for exercise. Naturally we included lots of rats of both sexes, and naturally the place soon was teeming with babies. The rats loved it and we loved it too, so we called it ‘Rat Park’.¹

Alexander’s team observed that the rats living in Rat Park acted differently than rats kept in isolation.

In some experiments, we forced the rats in both groups to consume morphine for weeks before allowing them to choose, so that there could be no doubt that they had consumed enough morphine to be addicted, according to the official view. In other experiments, we made the morphine solution so sweet that no rat could resist it, but we still found much less appetite for the morphine solution in the animals housed in Rat Park. Under some conditions, the rats in the cages consumed nearly 20 times as much morphine as those in Rat Park. Nothing that we tried instilled a strong appetite for morphine or produced anything that looked to us like addiction in the rats that were housed in our approximation of a normal rat environment.²

Recently, Alexander summed up the significance of his study with an interesting question:

Our rats consumed much more morphine when they were isolated. This fact definitely undermined the supposed proof that certain drugs irresistibly cause addiction. But what does cause addiction? Why is there currently a flood of addiction to drugs and many other habits and pursuits? People do not have to be put into cages to become addicted – but is there a sense in which people who become addicted actually feel “caged”??

Instructional strategies

1. Have students read the [Rat Park cartoon](#) (or the [student handout](#)) and then discuss Professor Alexander’s question: “People do not have to be put into cages to become addicted – but is there a sense in which people who become addicted actually feel ‘caged’?”

¹ Alexander, Bruce K. (2010). Addiction: The View from Rat Park. Available from <http://www.brucealexander.com/articles-speeches/rat-park/148-addiction-the-view-from-rat-park>

² Alexander, Bruce K. Towards Controlling the Drugs and Alcohol Problem in Scotland: Going Up the Down Staircase. Available from <http://www.brucealexander.com/articles-speeches/treatmentrecovery/216-scotland-aberdour-1>



2. Watch [Everything You Think You Know about Addiction Is Wrong | Johann Hari | TED Talks](#) together and, as a class, discuss the implications of the ideas Hari presents.
3. Watch the YouTube video, [Addiction and the Rat Park Experiments](#), together and have students discuss the implications of the Rat Park experiments in small groups. Then debrief as a class.
4. After reviewing the Rat Park cartoon (or the student handout or either of the videos), have students develop a cartoon story board that illustrates how someone might become “addicted” and then recover from their addiction. Discuss the factors that might lead to both the addiction and the recovery.

Drug Literacy

Big ideas

- Drugs can be tremendously helpful and also very harmful
- As humans, both individually and as communities, we need to learn how to manage the drugs in our lives

Competencies

- Explore and appreciate diversity related to the reasons people use drugs, the impact of drug use and the social attitudes toward various drugs
- Develop social and communication skills in addressing discourse and behaviour related to drugs

For a complete look at the drug literacy competencies, as defined by the Centre for Addictions Research of BC, see: www.uvic.ca/research/centres/carbc/assets/docs/iminds/hs-pp-drug-curriculum.pdf

Links to Curriculum

First Peoples’ principles of learning

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)
- Learning is embedded in memory, history and story

Physical and Health Education 9

Big idea

- Healthy choices influence our physical, emotional, and mental well-being

Competencies

- Create strategies for promoting the health and well-being of the school and community
- Analyze strategies for promoting mental well-being for self and others
- Assess and evaluate strategies for managing problems related to mental well-being and substance use for others
- Explore and describe factors that shape personal identities, including social and cultural factors

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