

RAT PARK



“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”?³



Professor Bruce Alexander

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>

³ Same.