

Effects of Ambient Odors on Slot-Machine Usage in a Las Vegas Casino

Alan R. Hirsch

Smell & Taste Treatment and Research Foundation, Ltd.

ABSTRACT

Studies have shown that ambient aromas impact on consumers' behavior. To further investigate such effects, for one weekend, two slot-machine areas in a Las Vegas casino were odorized, each with a different aroma. A third slot-machine area served as an unodorized control. The amounts of money gambled in slot machines located in the three areas were measured and compared for the weekend of the odorization and for the weekends before and after as well, to control for extraneous variables. Our data show that the amount of money gambled in the slot machines surrounding Odorant No. 1 during the experimental weekend was greater than the amount gambled in the same area during the weekends before and after the experiment by an average of 45.11% ($p < 0.0001$). Further, the amount of the increase appeared greater on Saturday when the concentration of odorant was higher: mean increase on Saturday was 53.42% ($p < 0.0001$) versus mean increase on Sunday of 33.66% ($p < 0.003$). The amounts of money gambled in the slot machines surrounding Odorant No. 2 and in the control area did not change significantly compared to the previous weekend and the weekend following the experiment. The likely mechanism of action of the effective odorant and the implications of these results are discussed. © 1995 John Wiley & Sons, Inc.

From conditioned-reflex experiments with animals not known to possess conscious processes, it seems clear that consciousness is not