

# The big swindle: In lotteries, the poor are the biggest losers

By David R. Just

updated 5:52 PM EST, Wed December 18, 2013

*Editor's note: [David R. Just](#) is Associate Professor of Behavioral Economics at Cornell University's Dyson School of Applied Economics and Management and an expert on how psychology and economics influence how people make choices.*

(CNN) -- With at least two winners sharing a prize of more than a half-billion dollars, Tuesday's Mega Millions lottery may have drawn more players than any previous drawing.

But they may be the lucky ones, in more ways than you think.

Most of those who play know they have little chance of winning anything. Ever. And most of them probably can't afford to play, anyway.

Still, they line up to place their dollars on the counter, all for a snowball's chance at an instant miracle, even as that miracle has gotten harder to attain.

Lotteries and games of chance such as the Mega Millions, or more traditional casinos, have come in vogue among politicians seeking to raise revenues without raising taxes.

This seems like a net win all around — players receive the entertainment of playing and we all enjoy the benefits of higher funding for schools or other public works.

Unfortunately the reality is not so rosy.

Those in poverty or near poverty not only are more likely to play the lottery than those with greater means, they also spend a larger percent of their money on average on these games of chance.

Some have argued that this may not be such a bad thing if the poor basically play the lottery as a cheap form of entertainment.

However, when we look for the telltale signs of entertainment behavior, they are absent.

We don't see evidence that changes in the availability or price of other entertainment, movies for example, lead to changes in lotto purchases.

Rather, we find there are big jumps in lottery purchases when the poverty rate increases, when unemployment increases, or when people enroll on welfare.

Lottery playing among the poor is a Hail Mary investment strategy — a small ray of hope among the hopeless.

But this false hope is, by design, an attempt to lure the emotional decision-maker. Recent changes in the Mega Millions lottery have reduced the chances of winning in order to increase the size of the jackpot.

By changing the range of the six possible numbers drawn -- [from between 1 and 56 to between 1 and 75](#) -- the already improbable odds of 1 in 176 million have diminished to a virtually impossible 1 in 259 million. Fewer big winners means larger jackpots, more hype and more players.

And more money for the lotteries.

Such changes have occurred as the lottery commissions have become expert in swindling players out of their money. Humans aren't particularly good at dealing with risks and gambles. We tend to believe that rare events are more common than they truly are.

Moreover, we don't discern between small changes in very low probabilities. Thus, few will have noticed that the odds of winning the lottery reduced from 0.000000006 to 0.000000004 for any given ticket.

But our eyes are drawn to the steadily increasing prizes—prizes that are now designed to eventually exceed \$1 billion. Such astronomical amounts draw in even those who consider themselves very prudent.

When the prizes get this large, many start to rationalize the purchase of a ticket. In the end, there are few who win money, and many who simply lose a few dollars with nothing to show for it.

But those few dollars add up.

For example, the average annual [per capita spending on lottery tickets in Massachusetts](#) is nearly \$800. That is \$800 being spent for every man, woman and child in the state. That is more than six times the average per capita food stamp benefit. Some of this \$800 goes to schools, constituting about 1-2% of school budgets in many states.

The majority of this \$800, however, goes to a very small number of lucky winners who take home what seems like infinite wealth that is sure to change their life forever. Or not so much.

Approximately one third of lottery winners will declare bankruptcy. This happens primarily because new winners are so unfamiliar with the magnitude of the money they have won, that they simply overestimate the purchasing power. How could I ever need to budget when I have several hundred million in the bank?

The overwhelming majority of lottery winners don't believe they are better off for having won. One study finds that recent lottery winners have lower levels of happiness than do those who have recently become quadriplegic.

Apparently, winning the lottery is not what the hype would have you believe. Personally, I would probably prefer an \$800 tax.