

## Bad Correlation Examples

The worst fires have the most firetrucks at them. Therefore if we send less firetrucks we won't have as many bad fires.

Helmets cause head injuries.

At the beginning of World War I, the English did not have helmets as standard-issue. After they introduced helmets to every soldier on the front-lines they saw a significant uptick in the number of men returning from the field with head injuries.

From this we could conclude that giving soldiers helmets caused them to behave more recklessly, a classic case of moral hazard in action.

Except that's wrong. The people returning with head injuries was actually because fewer people were *dying*, the helmets turned what would otherwise be death into a head wound.

i heard a similar story about adding additional armor to planes. They were looking at planes that came back from a run, and instead of adding armor to the places on the plane that got hit the most, they added armor to the places that had been hit the least, as planes that got hit there did not make it back.

I heard about that as well, it's a phenomenon called Survivorship Bias.

First they tried adding armoring the most damaged parts of the returning planes, but that made nearly no difference whatsoever to the return rate, until someone pointed out what was actually going on.

This reminds me of how the incidences of head trauma in boxing matches increased once they started mandating boxing gloves. Before boxing gloves were made, nobody aimed for the head because that's a great way to break your hand. But after boxing gloves protected their hands from damage, they started aiming for the head and causing problems. Or so I've heard, at least.

Women got the right to vote in the U.S. in 1920.

Since 1920, the average temperature has increased by over 1 degree Fahrenheit.

One must conclude that American women voters are directly responsible for global warming.

Rain is caused by umbrellas.