

Twitter Thread by [Shravan Venkataraman](#) ■■■



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[@theBuoyantMan](#)



Have you ever had 4-5 profitable trades in a row, and you bet all your profits on your next trade feeling "in the zone" only to lose it all?

That's called as "hot-hand fallacy" bias.

I ran a poll recently to outline two classic biases we have as humans.

Thread below ■■

Let's say you see a cricketer hit four 6's in a row.

If you have to bet on the next ball's outcome, what would you bet on?

— Shravan Venkataraman \U0001f525\U0001f680\U0001f4b0 (@theBuoyantMan) [December 30, 2020](#)

1/ *Hot-Hand Fallacy* first had its origin in the game of basketball.

If a player shoots few baskets in a row, people generally predict that the next shot will also be a basket.

This is ignoring the fact that each shot is independent of the ones that came prior.

2/ In this poll, 41.1% people voted that the batsman who hit 4 sixes in a row, will hit a sixer in the 5th ball also.

This is classic hot-hand fallacy.

Each ball's outcome is independent.

The probability is not 50% FYI (number of outcomes is not 2).

These 148 people who voted that the next ball will also be a sixer, did so because they believe that the batsman is on a hot streak, and that his streak would continue.

This is an emotional bias and is usually attached to human performance related events only.

3/ 45.3% (162) people voted that the 5th ball would be a dot ball, meaning the batsman wouldn't score anything.

These people displayed the classic "negative-recency" bias, which is also called the "Gambler's Fallacy".

When someone displays gambler's fallacy, they typically predict that the opposite of the previous outcome would happen.

This is more pronounced if the previous few outcomes are the same.

This is like predicting a tail in the next toss if the last few coin tosses were heads.

4/ Generally people do not believe that inanimate objects can become "hot".

This is why they display the traits of gambler's fallacy with objects and games that are typically not attached to human performance (ex: roulette).

5/ Also, human performance is typically not perceived as random.

People tend to believe that a streak is likely to continue when a person is on a hot successful streak.

6/ This is exactly why you see VCs funding entrepreneurs who recently sold/listed a business successfully. Classic hot-hand fallacy doing its work.

From [@kunalb11](#) to the Bansals, there are many beneficiaries of this fallacy.

7/ What do these two fallacies mean for your trading/investing?

Generally when a trader has had 4 or 5 successful trades in a row, they get a bit more brash, and over-bet on their 6th trade even though the 6th trade is completely independent of the previous trade outcomes.

For such traders, the 6th trade that they overbet on, turn out to be a loser, taking most of their profits away.

8/ There are other types of traders who when they have had 4-5 successful trades, think the next is most likely to be a losing trade, and avoid that trade.

What could happen is that the next trade goes on to be a banger of a winning trade.

Those who avoided that trade thinking it would end up being a loser, generally turn out to be the suckers.

9/ Typically what you should do to avoid these two fallacies?

Follow a well tested system for betting with whatever strategy you trade. Position sizing is of paramount importance, and dynamic betting is far more complex in trading, and more often than not fails.

10/ Dynamic betting in casinos is usually betting more when a win is highly probable, and less when a loss is highly probable.

It may sound appealing on paper, but determining whether a win or a loss is highly probable in the next trade is not an easy task.

11/ Trading is a game where you stand alongside the law of large numbers and let the system do its work over a large number of trades.

Dynamically breaching the tested betting system because you "feel" or "instinctively know" the potential outcome of the next trade is bad.

12/ The first or second time you do the discretionary breaching, may end up favoring you.

The third time, you'll have the hot-hand fallacy playing within the fallacy. You'll be further emboldened to risk more, and it usually ends up disastrous.

13/ When you let these biases creep in, you expose yourself to the *risk of ruin* - where you either blow your account, or blow just enough to bring the capital to an un-tradeable level.

14/ One may think that long term investors are immune to these.

But they are not.

In fact, since they take 100x fewer bets than regular traders do, they are the ones most exposed to the risks associated with these two fallacies.

15/ For ex:

Some day sooner or later, someone looking at bitcoin doing all this crazy bull run is going to ditch most of his portfolio and put the proceeds into bitcoin.

And bitcoin is going to bomb.

And this particular investor is going to lose everything.

16/ This isn't applicable to experienced investors who limit their bet size to 1/10th or 1/20th of their total available capital per bet.

This is more applicable to newbies and experienced players who let irrationality creep in once (and that one time turns out disastrous).

17/ Have you experienced something similar in your trading/investing?

Share your story in the comments below.

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Going to be doing more of these in 2021.