

Deceived by Experience and Observation

By Dave Astar, February 8, 2018

“There is a vast scientific and spiritual desert between data and information, as well as knowledge and wisdom. Few are even aware of its existence.”

Over the last many years, friends, students and family have asked my opinion on a wide variety of subjects. They don't ask me because they like to hear me talk or because I'm some sort of Einstein. They ask me because they know I am a nerd and only care about a few certain subjects. They also know that as a washed up old man with time on his hands, I research subjects that interest me. Yes, that's what old retired nerds like me do when we are not messing with spread sheets or playing video games.

Understand that folks don't ask me about rocket science or the meaning of the universe, and they certainly don't ask about plumbing solutions since I'm known in the family for using duct tape to solve almost every home repair problem. I am an absolute idiot related to things I simply don't care about, but I will always answer questions if I can. If I can't or don't want to take the time to provide a thoughtful answer, I'll often suggest a data gathering process which I hope will help folks reach their own reasonable conclusions.

Fortunately, years ago I was lucky enough to learn about the science of statistical variation and discovered how to study “systems and subjects” effectively enough to turn data into decision worthy information. By sitting in classes and meeting with people like W. Edwards Deming, Russell Ackoff, and many other long-gone geniuses, I was inspired to study systems and statistical concepts which eventually allowed me to develop probabilities of success in the arenas I cared about.

After developing analytical capability and achieving a desired level of success, I often conducted executive seminars associated with the practical decisions that could be made if statistical variation was understood. Many of these sessions were focused on business operations, executive leadership, and root cause problem solving but I would always weave in study examples associated with horse racing, sports gaming, coaching, nutrition, and other random interests I cared about.

I would frequently begin sessions by bringing in the front pages of the day's newspapers, and verbally highlight all the headlines. After briefly discussing them, I would tell the group that we would come back to those headlines at the end of the session to see if anything changed our view of those headlines. Just before the sessions would close I would tape those front pages to the wall and circle the headlines with a marker. The end of the day dialogue that followed was amazing and would often last well into the night through dinner. You see, well over 50% of the headlines were false or entirely manipulative, and once people were armed with the wisdom to ask the right questions, class participants were inspired to share their thoughts!

Today, long retired, I often think back at how much I miss those conversations, though I still do my best to help people find truth and rather than reflecting on newspaper

headlines, (do people still actually buy newspapers rather than reading the same stories online?), here are just a few examples of recent and highly diverse questions I have been asked:

1. Since the market trends are bad should I sell my more volatile stocks?
2. Should I bet on the Vikings to beat the Eagles in the NFC Championship?
3. Should I breed racehorses in Minnesota since the 2018 MN bred stakes purses are going up?
4. Should I go on a high protein/low carb diet to lose weight since I found out that I have type two diabetes?
5. Should I really apply for Medicare Part B since I am healthy?
6. Will stronger gun control laws reduce the homicide rate?

I could spend a full week explaining the data analysis that could apply to these questions, how to turn that data into meaningful information by normalizing it and putting it into a comparative format, and how to produce probabilities for success and failure. With that said however, I simply want to explain how these questions can be indicative of how people are deceived by experience and observation.

To even begin to answer these questions I need to tell you a little more about myself.

I Am Immortal!

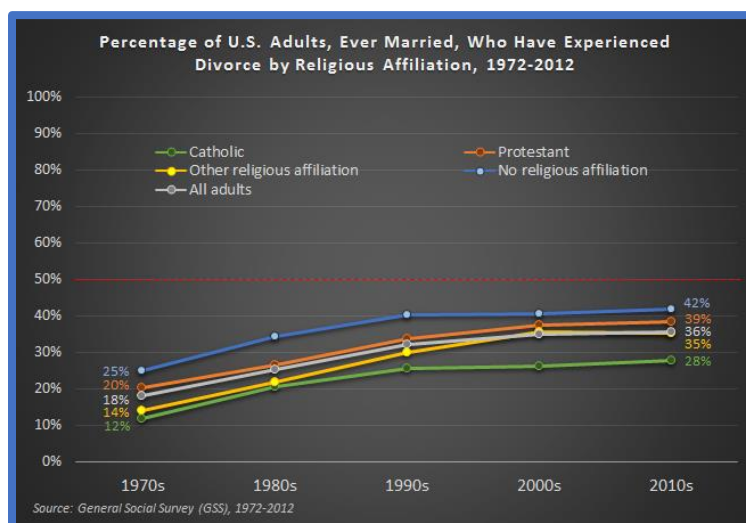
You see, I am 65 years old. I have had 65 birthdays, and those 65 personal observations of life are collectively credible. I take no prescription medication and my doctor's headline might be, "65-Year-Old Healthy as Can Be.... May Live Forever".

Yes indeed, the data is clear, correct? My "trend" is perfectly indicative of my future, and by just looking at those 65 data points anyone should be able to reach the conclusion that I will never die. Better yet, it is "emotionally comforting" to know that I am immortal, so I am certain it is true. Pretty simple, right?

Okay, now before you think I am absolutely nuts, I know I am not immortal. Neither are the other 7.5 billion people living on this Earth. Nevertheless, the same logic that applies to my foolish immortality conclusion applies to thousands of conclusions you, I and deluded self-proclaimed experts reach by mistake every day. Oh yes, self-proclaimed experts surround us as media personalities. Think about a popular former professional football player "expert" telling you who's going to win the Super Bowl, or a former jockey telling you who's going to win the Kentucky Derby, when they wouldn't know a probability curve from a hole in the head.

It is part of the human condition to over value personal experience, or what we see with our own eyes or hear with our own ears, beyond all reason. When those observations intersect with our "emotional" biases, we often reach conclusions that are not only false but damaging. No one would ever deny that emotions play a huge part of our human existence and mental health, but should they really play a big part in financial investments, career decisions, fight or flight encounters, strategic planning or the many other decisions we must make every day to be successful?

Certainly the “feeling” you have for someone is important in relationship decisions, right? I do however wonder if the 1 out of every 3 people who end their marriages in divorce think their emotional decisions were sound. Even people involved in religions that clearly define divorce as a sin, are amazingly wrong about the most important relationship decisions they will ever make.



Now I am not suggesting eliminating emotion from all decision making or dismissing the mental health benefits that come from making emotionally comfortable decisions. What I am suggesting is that an emotional decision to say, buy a nice little jacket in your favorite color that makes you look good, makes next to no sense if you plan to wear it during an Alaskan winter! You see, emotions contribute to being deceived, and an understanding of statistical variation will minimize emotional impacts related to the decision-making process.

Understand that there are people who know how to properly turn data into information, but they are occasionally lackadaisical or distracted. I find myself guilty of this and have often come to regret my laziness. More frequently however, people just do not have any idea that a hidden world of truth exists. For example, I see people spending weeks, months and years learning how to effectively create financial plans, yet they turn around and make financial decisions which can only assure financial mediocrity because they do not understand variation.

It doesn't matter how smart people think they are, how many degrees they may have, whether they are doctors, dentists, executives, lawyers, custodians, politicians, fast food employees, pastors or priests; they are deceived daily. They have never understood how truth requires an investment in knowledge that goes well beyond their suggested subject matter of choice.

After a career in healthcare, I can assure you that healthcare experts, have been constantly deceived by their experience. It's certainly easy to study medical history looking back to 2000-year-old bleeding practices or even the frequent tonsillectomies people my age were subjected to as children. We can also look to recent changes

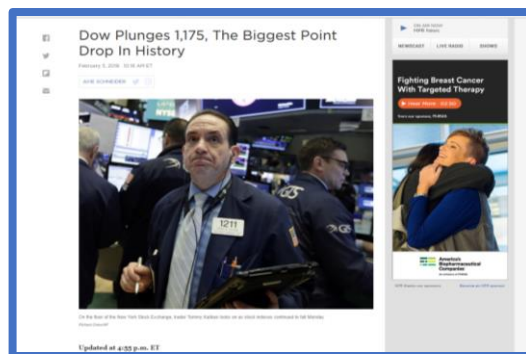
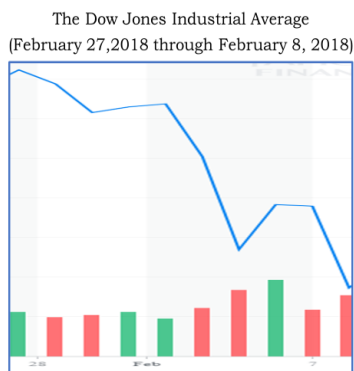
associated with “Evidenced Based Medicine”, which finally modified certain classic practices that were once dominated by physician observations.

Health care myths still exist today and are being slowly dispelled by proper scientific analysis. In the future, non-cannabis related treatments and nutritional recommendations that include the consumption of animal fat will be hilariously laughed at. Statistical science has already proven the needless pain and suffering caused by those recommendations, but politics still support earlier myths!

Let’s take just one question related to “headlines” of the day, to offer a brief practical lesson of how people are unreasonably deceived:

“Since the market trends are bad should I sell my more volatile stocks?”

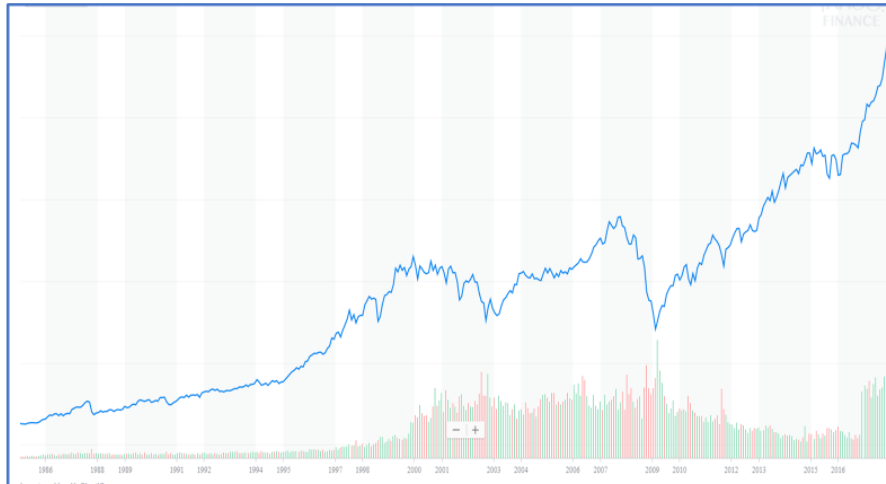
The market trends are bad, aren’t they? After all, every recent financial headline reflects on recent declines and the market drop, and every television anchor seems to comment on the negative market trends. All you must do is look at the data and it’s clear the trends are bad, right? Here is a recent chart and a February 5th headline which verifies the huge problem in the market:



It’s obvious that people should get out of their volatile stock investments before it’s too late, isn’t it? From the DOW high point on January 26th of 26,617, the market has fallen 2,757 points to 23,860 on February 8th. Wow! The current 10-day trend, covered by the media in great and even historic detail, is clear, or is it?

I often wonder if anyone beside old gray beards like me remember the 70’s when a 1000 Dow Jones Industrial average was an important barrier to penetrate? Yes, the one-day decline, referenced in the February 5, 2018 article, was much greater than the entire value of the Dow when I was a smart ass 20 something trying to figure out how to make money in the market!

Let’s take a little time-based 30 plus year look at the DOW, and then I suggest you ask yourself what trend you see.



Hum? Is this a negative market trend? Do I have to provide a progression analysis for you to figure out whether this chart reflects a positive or negative trend? In fact, there isn't even a negative market trend over the most recent 3 months, much less the last year, or decade, or three. Certainly, there have been some "corrections", which is a stupid invented term developed to create a story associated with downward statistical variation. In truth, the statistical rules for properly identifying a trend are far different than the media vagaries associated with claiming trends that rarely exist.

Does this simple stock market lesson help create some understanding of how people are constantly fooled and deceived? How is this different than me claiming I am immortal because I lived for 65 years? Here's the key statement for you to remember every time you reach a conclusion.

You likely need more "timed based comparative" data to determine trends and create information that may lead you to conclusions viable enough to act.

I have found that my exhortation on "timed based comparative data" is universal and applies in every arena. In the market, time periods matter. In sports betting, comparative information matters. In breeding, comparative information beyond state borders is required to answer competitiveness questions. In health arenas, longitudinal information, comparative disease states, population studies and longevity information matters. Related to the homicide rate, population and comparative regulation studies matter, not black and white simplicity. In all cases, individual experiences and observations may be consistent with statistical analysis conclusions, but it is highly likely that they will only fool you!

In closing, there is a hidden world of truth. We will frequently be deceived unless we wisely take the time to open our minds and discover the truth. Being deceived is nothing to be embarrassed about but instead something to learn from. If you want to gain advantage in this difficult world, you can learn more about statistical variation and how to identify it. The difference between "common cause" and "special cause" variation are not just descriptive English language terms. They are defined in statistical terms by rules and formulas.

Those who elect to learn how to understand variation will be able to make much better economic, financial and life decisions. They may come to realize that listening to a sales person and test driving a new car before purchase is far less important than studying credible repair data or independent consumer study reports. They might want to stop watching commercials about the benefits of bovine milk or protein myths, and instead review “The China Study”. In other words, they may want to minimize their chances for being deceived by their experiences, observations and emotional biases. They may also want to begin spending time searching for the truth that an understanding of variation will reveal.

But what does an old nerd know like me know anyway. Now, back to my video games.