

## Poker Vocation vs. Avocation: Poker is Too Hard -- Poker is Amazing

by Brian Space

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Poker is just too hard to do as the only vocation for an entire lifetime for almost anyone. I can provide some possible future guidance for young professionals. I am a professional scientist and professor in my early fifties. I play poker at a professional level and can provide perspective.

In order to survive as an academic scientist, as a physical chemist, I have to compete successfully with literally the brightest and often hardest working people in the world. My grant proposals compete with National Academy members and Nobel Prize winners and success rates are often in the single digits. Nonetheless, poker is harder than science.

I think the main reason is the human brain is programmed for loss aversion. The wins rarely feel as good as the losses hurt. Losses linger; wins wane. This is magnified when one's primary vocation is poker. It is very hard to feel positive about yourself when your results are not great or even good over a period of time. Conversely, when you are doing well, you are just a professional that is doing what they are supposed to do. It is a maddening trap that I think most, if not all, humans are programmed to face.

Further, downswings can lead to self-doubt. Luck plays a huge role in all aspects of life that is hard to disentangle from performance. The difference is that science, for example, is a highly positive sum game and poker is not. The worst professional scientists can have a huge positive effect on the world by simply spreading the scientific method to many young minds. Just successfully accomplishing this can have a bigger impact on the world than even an Einstein can through individual discoveries. The science world is mostly a healthy intellectual environment where everyone contributes through open discourse. Knowledge builds incrementally and people work collectively to make world changing discoveries. It is easy to sleep at night as a scientist.

Poker is often a cut-throat environment where people rarely share their knowledge and are literally fighting for survival. If I have a bad month at work as a professor, my pay check still arrives and my students still grow and make progress. I have a body of work to look back upon, many papers published, and former students flourishing in the world. If I make mistakes in poker, or just lose a few large pots in live poker, my entire year of "accomplishments" may be at risk. There is often little to show tangibly for a body of work in poker other than perhaps some highly fungible currency or a misunderstood tournament performance.

Poker is just too hard to do as the only vocation for an entire lifetime for almost anyone. I am not sure I have met a successful professional that did not want to get out of poker in one way or another. They might have a number in mind to "retire" or want another profession so poker can be supplemental income. Worse, we generally see the luckiest folks in poker as our role models. Those who have been fortunate can't share that magic with anyone. That is not to say that the amazing minds and people that play at the highest level are not remarkable. They are among the best and the brightest. Poker is incredibly fortunate to have people like Phil Galfond, Ben Sulsky, Tyler Forrester, Doug Polk and other comparably thoughtful and bright folks sharing their thoughts on training sites or forums. People like Joey Ingram provide podcast content and long form interviews shining light into the behind the scenes lives of top pros. There is some sense of community and shared experience.

Still, luck plays a role in all professions. In poker, because only monetary results define success, there is almost no other metric so the top of the heap will also be among the luckiest, at least at some part of their journey. Luck is out of anyone's control and it is more important than skill. Don't get me wrong; skill keeps you afloat long enough to get lucky, if you get lucky. This is magnified in live poker where one never achieves much of a sample size vs. an opponent or even in any particular game.

The issue is that one cannot improve their luck by force of will. This makes poker especially hard because there will always, by definition, be the luckiest folks playing around you acting as they are on top of the world. Roughly 5-10% of any player pool will have exceptional results each year. It is unlikely to be you in any given year and over a lifetime may never be. Someone else might be above average in fortune every year. This is how the law of large numbers works; things are normally distributed with significant groups of positive and negative outliers. In poker, we don't see the negative outliers as they disappear. This makes for a tough way to make a living.

Making things more difficult, I am the kind of person that always feels like they need to get better. This is common among high achievers and successful poker players. We are programmed to focus on things we need to improve on perpetually. I talk to my therapist (something I recommend for all serious poker players) about the asymmetry in personal perception. If I am asked how good I am at something, I see my deficiencies. This is not the same as not having a substantial ego or even a realistic view of the world. If I am asked about another accomplished scientist or poker player that I may be better than in some ways, I can see that clearly and answer honestly. Nonetheless, if I am asked, e.g., how that poker player plays, I would answer sincerely that I admire how they play and handle themselves, while still considering my play needs a lot of work. There can be significant logical fallacies in perception that are rooted in our emotions; I can believe that others are terrific, I need a lot of work, and I am somewhat better than they are at the same time.

Another difficulty is that poker variance results in income that varies dramatically over time. This is hard for people to adapt to and causes stress and confusion. Remember, even people with a regular, defined income often struggle with their finances. This is another significant challenge.

All this said, poker is the most personally fascinating activity I have ever found. It requires intellectual insight and exquisite emotional control. One sees the best and worst of most people at the poker table at some point, as fate drags our emotions up and down. Poker requires a continuous struggle for objectivity and an insane ability to perform at the table. One has to make the next right decision under the duress of distraction, adulation, dejection and boredom. Further, you can always grow as a poker player and I find when I do, I improve as a person too.

Life is short. Anyone who is thoughtful and disciplined enough to be successful at poker can be hugely successful in any number of professions. To those in their twenties and thirties especially, I recommend working on developing skills for another vocation to enrich your life. Like scientists, I believe most successful poker players are drawn to the job by more than the money. The personal and intellectual freedom are alluring. Poker is not a way to get rich – if that is your goal and you can win at poker over time, then you are making a serious mistake as there are many far easier paths for the talented, dedicated and ambitious. Lastly, I have not seen that the poker environment can sustain many for a lifetime without seeking other reliable income producing and wellness inducing activities as a supplement.

### **Aside**

As an aside, I have an interest in poker theory. I believe that the nature of the optimal solutions is not yet completely understood. It seems to me from an information theoretic perspective that bet sizing should draw from distributions, providing information hiding. Solver work suggests this might be right. I also see an analogy between (statistical) mechanical energy and expected value in that the solution space of poker is a surface of constant expected value. Lastly, I have noted that the game theoretical optimal strategy is the one that requires no information of the opponents play suggesting a Shannon entropy tie in. All of this suggests to me a statistical mechanical approach to poker solutions that I have not formulated. If anyone is interested pursuing this, feel free to get in touch.

*Brian Space is a scientist and professor seeking people to play Quantum Statistical Mechanics for money. He plays poker in the Tampa Bay Florida area.*