Mitigating Problem Gambling and Improving the Poker Community with a "Live HUD"

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ABSTRACT

The interesting thing about gambling is that making a bad play can result in short-term success. Casinos (and skilled poker players) depend on the short-term luck, because without it, the bad players wouldn't play for long. This software will help bad players recognize the extent of their losses by analyzing the expected value of their play and describe the loss in a way that affects the user in a personal way.

1. INTRODUCTION

Gambling is a huge industry in the U.S. One can see anecdotal evidence at any casino, dog track, or card room. What most people don't realize is that gambling represents a $40 billion dollar industry that "generates more revenue than movies, spectator sports, theme parks, cruise ships and recorded music combined." [1] Who contributes to that substantial figure? It's estimated that roughly one percent of the population are problem gamblers, with five percent of the adult population being at risk of developing a problem. [2]

Though legislators in the U.S. have cracked down on online poker on the grounds of this moral threat, it's well-known that inexpensive software called "Heads up Displays" (or HUDs) are available to track every single hand a player is involved in, giving them impartial and accurate feedback of their performance. In addition to giving insight to opponent tendencies and informing a player's decision-making in the middle of a game, it's also an easy way to track losses and wins. Live poker doesn't have a reliable, easy-to-use solution like this.

2. DESCRIPTION OF PROBLEM

Often at the poker table, there is at least one player who is clearly putting the last dollar of money he can't afford to gamble on the felt for the dealer to change into chips. He will fold until he picks up a reasonably strong hand, then push these few chips into the pot. Because it's such a small amount, anyone else at the table with a decent hand will call. Then, the short-stacked will either get lucky and win (which only delays the inevitable), or they lose immediately and leave completely tapped. It's not just uncomfortable for the skilled players, who have no choice but to take that money (the only alternative is to stop playing altogether), it's devastating to the problem gambler and those close to him. Most poker players take no pleasure in seeing someone's recreational gambling become compulsive, and it's safe to say everyone would appreciate the existence of better tools to help these problem gamblers have a moment of clarity before this happens.

What's more, anyone who plays poker on a recreational basis has the potential to become a problem gambler to some degree. Without a reliable means of tracking wins and losses, a player is left to rely on his or her own memory, which is susceptible to biases toward remembering wins and glossing over or mentally minimizing losses. Every player, no matter how bad they are, believes they are a winner or "about break-even." Even confessed bad players underestimate how much they truly lose at the tables. Worse yet, they are wont to attribute their losses to bad luck, when bad play is almost always the root cause.

3. DESCRIPTION OF SOLUTION

Many players have some sort of electronic device like an iPad or a smartphone to keep themselves occupied after they have folded and they're waiting for the next game. An easy-to-use app could help these players punch in the results of their hands to see the overall expectation of their play. Spending the few minutes between hands with an app that tells the effect of their poor results -- both in the short term and in aggregate -- could make the critical difference between losing a small, reasonable amount of money, and walking away completely empty-handed.

A "live HUD," as it were, would require much of the same functionality as its fully digital counterpart. However, the key weakness in this strategy of loss mitigation is the user's propensity to skip entering hands, so it is of paramount importance that the application's interface be intuitive, user-friendly, and extremely responsive.

Complimenting EV with utility

A mistake might be profitable in the short term and give a bad player an unjust reward, leading to misplaced confidence (i.e. "It must be a good play, because it won the pot!"). That is, a play might win but have terrible EV. Showing the utility cost may might a difference. This software will help bad players recognize the extent of their losses by analyzing the expected value of their play and describe the loss in a way that affects the user in a personal way. For example, it would explain that a bad play from the user would only win some small percentage of the time. The software could then multiply the size of the pot by this value and compare it to something the gambler is interested in. In hard numbers, it might look like this:

"Your pocket Jacks (JJ) ran into pocket Kings (KK). You can only expect to win in that situation 20% of the time. Since the pot was $300, the EV of your play was $-60. If you'd folded instead of called, you could have bought a PS4 game or taken your girlfriend out to dinner."

Comprehensive Hand History

As with most online HUDs, this system would track all hands played and organize them by rank. It is a statistical inevitability that pocket Aces will show a great profit and "junk hands" like Seven-Deuce offsuit will be big losers over time. Most poker players are aware that it's rational to throw away bad hands and only play good ones, but it is natural for recreational players to get bored by playing disciplined, "correct" poker, and consequently, they end up betting on these junk hands. Sometimes, these junk plays will win a big pot through sheer luck and, consequently, the player develops an attachment to it.

The true net loss of a bad hand in hard numbers may help the player accept what he logically knows to be true, but was previously too blinded by superstition or sentimentality to see.

The application will show that a player's "lucky junk hand" isn't so lucky after all.

On the other hand, a player might find confidence in knowing his loss with a premium hand was simple bad luck -- and continue to play well with the app's immediate positive feedback

Faithful Track Record Keeping

Many players lose perspective on their overall skill because they tend to overestimate their wins and downplay (or "forget") their losses. Interestingly enough, this is counter to (or perhaps, because of) the "misery index," which is essentially a subjective but highly observable truth that losses impact an individual more negatively than wins affect them positively.

Recreational players typically do not keep written track of their wins and losses after each session, and are instead prone to simply observe how much money they are leaving the table with (though this can be deceptive because players have the option of buying more chips while still sitting at the game). Furthermore, they are more likely to informally count their winning sessions against their losing sessions and consider themselves long-term winners if they have more of the former than the latter. The problem, of course, is that they may have won very little from each winning session, and lost greater sums at losing sessions. This is the exact opposite of the objective of poker!

The program will keep a running tally of all sessions -- winning, losing, and break-even -- and show a comprehensive breakdown of profit and loss for each.

Stop-Loss/Stop-Win Reminder

Stop-Loss and Stop-Win conditions are exactly what they sound like: when a player reaches a certain profit or loss amount, they quit the game. This is a standard measure recreational players (and even some professionals) use to avoid going "on tilt," which is a colloquial expression meaning to play at a suboptimal level because of psychological factors. After losing a certain amount of money in a single session, some players find it prudent to step away and come back after the loss is no longer impacting their decision-making.

Unfortunately, some players are given to ignore their self-imposed limit, or "miscalculate" their losses and continue playing even though they are almost certainly playing at a greater disadvantage than usual.

The inverse, the Stop-Win, is less likely to be necessary for a casual player, but it is useful all the same. Any experienced poker player knows the frustration of amassing a great chip stack and losing a substantial portion (even all of it!) because he didn't leave the game early enough.

The application can assist by notifying the user that they have crossed that threshold. Of course, when upset, the user could avoid this like hitting snooze button on an alarm clock. Therefore, the user could leave a custom message to their "future selves" that they believe will cause them to observe the warning.

Range Adjustment by Position

Bad players don't give enough thought to position -- a cardinal sin in all forms of poker. To paraphrase esteemed poker theorist and author Tommy Angelo, position is important to poker as speed is to racing and water is to swimming.[3]

The program will warn the player to tighten up (i.e. play only premium hands, or speculative hands that have some post-flop equity if other conditions are favorable) after the button (i.e. the most favorable position in the game) has long-since passed them and the blinds (i.e. the least favorable positions in the game) approach.

Discretion Button

As opposed to most games where a player is inclined to exhibit their skill, it's curious that poker players often seek to appear less skilled than they truly are. Additionally, they may work toward the image of not being mentally invested in the game. This is because poker is ultimately a game of information, and it is a natural consequence that information denial through deception is a standard part of a winning strategy. Therefore, it is highly unlikely a user of this live HUD system would want to advertise to the rest of the table that they are taking the game seriously, particularly since the application's purpose is to help them avoid making ill-advised plays.

A solution to this problem is to allow for a "kill switch" to be present on the screen in case a neighboring player happens to take interest in what the user is doing. For instance, pushing a button immediately makes the app look like an arcade game, display sports scores, show a family photo slideshow, etc. This could be customizable by the user.

4.   SUCCESS METRICS
As it is with most apps that rely on consistent use and honest user input (e.g. language-learning software like Duolingo works only when it is consistently visited and used, and MyFitnessPal requires truthful and thorough input), determining success might be more complex than simply tracking the number of downloads and active users.

Interestingly enough, an increase in self-reported problem gamblers or an increase in the amount of spending on treatment for gambling addiction might indicate that the app is helpful. That is, people who were otherwise unwilling or unable to see the extent of their problem might be motivated to get help based on their personal results from using the app.

In a more global sense, it will reduce the number of people with gambling addiction in the poker community (though it could be expanded to help gamblers who enjoy other games, like blackjack), which could lead to the government being more amenable to legalizing online gaming and revitalizing an industry, creating lots of jobs.

5.   CONCLUSION
Skilled poker players will profit regardless of whether a degenerate gambler is at the table, and taking strides to give tools like this to those at risk could improve the game's standing in the public eye. Therefore, an app like this would be useful to the poker community, particularly those who wish to learn to become better players, mitigate their losses from recreational play, or wean themselves off their addiction altogether. Everyone could benefit from recognizing situations that are costly and see the ramifications as a loss that extends beyond ceramic chips on felt.

6.   REFERENCES
[1]   http://www.pbs.org/wgbh/pages/frontline/shows/gamble/etc/facts.html

[2]   http://rehab-international.org/gambling-addiction/gambling-addiction-statistics

[3]   Angelo, T. *Elements of poker.* Self-published, Oakland, 2007.