

LA S'CHINTEIA



Talossa's Magazine of Everything



Talossa Responds to COVID-19

Volume X

April 2020



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Talossa Responds to COVID-19

Ian Plätschisch

All it took to revive regular video chats in Talossa was a once-in-a-lifetime pandemic.

On March 24th, Lüc da Schir announced: “In the spirit of ‘if nobody does it, I’m gonna do it myself’ I’m ‘officially’ launching...La Curantoina (“The Quarantine”), the Covid-prompted successor to the Talossan Evening Chat Show.” Held March 26th and April 3rd (with more likely coming up), these well-attended get-togethers (featuring six and seven participants, respectively) have included discussions on the Non-Hereditary Monarchy Amendment, the Hat Redistribution Amendment, the unveiling of the new version of L’Översteir (“The Translator;” the tool of choice for translating English into Talossan) courtesy of Marcel Tafial, and a general knowledge quiz via Kahoot put together by Glüc da Dhi.

It has been a silver lining during what has otherwise been a very difficult time for Talossans across the globe. Numerous citizens, from such places as Scotland, New York City, Argentina, and New Zealand have posted to Wittenberg describing the measures their areas have taken in response to the virus. Francesco Manzella, who lives in Italy, posted a picture of himself making a stock of hand sanitizer.

Gödafriëu Válcadác'h had these encouraging words for the nation:

[This] will present enormous challenges, but also the unwanted and cursed free time will invite chances to make lemonade out of lemons in ways unexpected and different for each of us.

I strongly expect the next year to be the most difficult in the history of Talossa, if only in that it will be difficulty in all our lives not caused by anything Talossan. For us as Talossans, this is novel!

My prayer for all us is inner peace and physical safety not only for us all, but every family represented. The world has never really seen something like this before.

God, be with us all

Luckily, no Talossan has contracted the virus as far as we know.

As much as we, as Talossans, like to say that “Talossa is Not Wittenberg” (and do not get me wrong, it isn’t), the reality is that interaction between citizens occurs almost exclusively online. This has led to much concern for Talossa’s long-term prospects, as it is quite difficult to build and maintain a meaningful community when no one sees other members face-to-face. This concern is certainly well-placed, but we can also reflect on how well situated our nation is to confront this catastrophe. Sure, in the 1980s and 1990s, “doing Talossa” was an almost exclusively in-person activity, which no doubt contributed to its vibrant culture and community. But it is easy to see how “social distancing” could have decapitated the young Kingdom. While the rest of the world is struggles to move online, we find ourselves already equipped with the right infrastructure and already suited to this kind of interaction. It is the one part of our lives that can remain pretty much the same.

Examination of Slot Machine ~~Winnings~~ Losings

Ian Plätschisch

You can expect the third and final installment of my series of poker articles next month, but until then I thought I would turn my attention to another section of the casino.

Slot machines are essentially the grown-up version of Chutes and Ladders or Candyland in that they require no skill whatsoever. That said, there is something satisfying about pulling a lever and watching some lights flash, so I figured it could be fun for a little while, but I also wanted to put some slot machine wisdom to the test in the process.

First, it is pretty obvious that slot machine players are expected to lose money over the long run (otherwise the casino couldn't afford to stay open). However, just how long is the "long run?" Would only thirty spins be enough to provide convincing evidence that playing slots is a fanciful equivalent of flushing money down the toilet?

Second, I've heard it said that playing the slot machines at higher bets provides a better return (a player loses less over the long run by betting more per spin), and I was curious to see if I could find evidence for that claim as well.

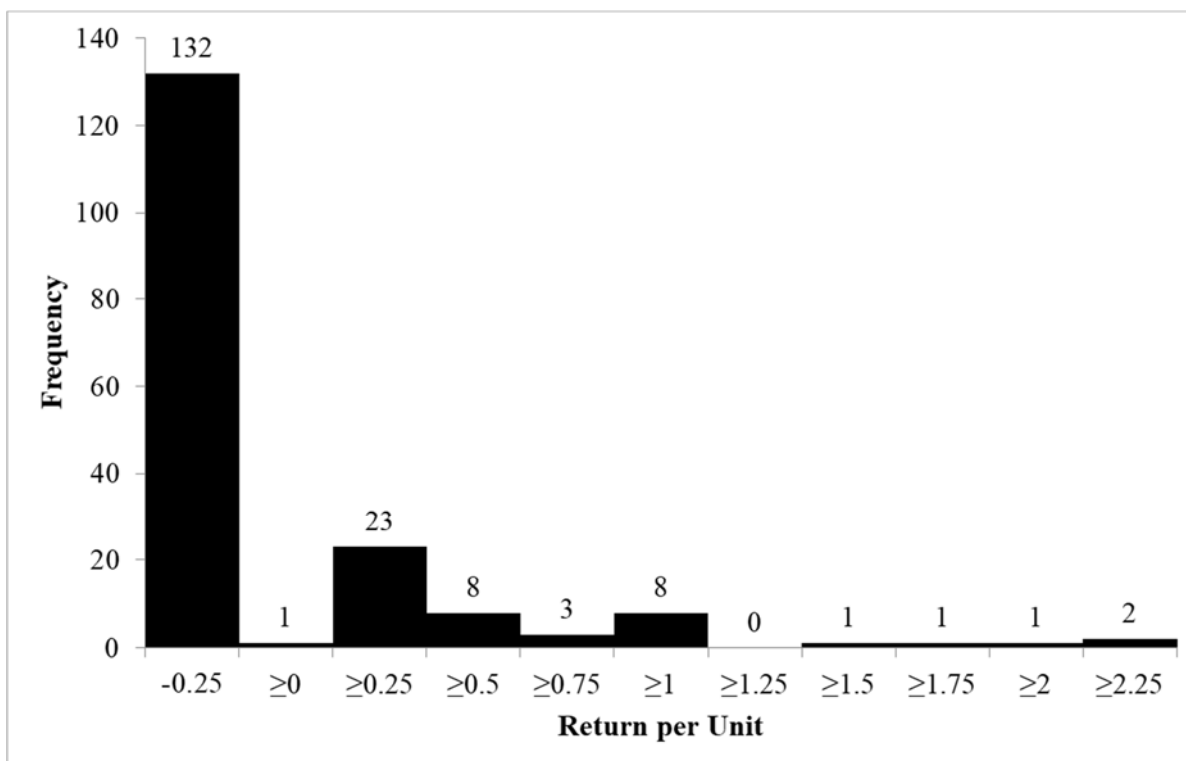
My data collection process consisted of playing two slot machines (the "Double Diamond" and the "Wild Red Sevens") thirty times each at three different bets: one, two, and three units (where each unit is 25¢ or ₱10). Because the cruise ship banned phones out in the casino and having a notebook out would look very conspicuous, I had to spin five or so times, leave the casino, record the winnings, and come back, so hopefully I did not make too many mistakes.

The key value for each spin is the return per unit:

$$\frac{\text{Winnings} - \text{Cost}}{\text{Number of Units}}$$

For example, suppose I pay two units (50¢) for a spin and win \$1: the return is only 50¢ because the other 50¢ simply recoups what I already paid (if I pay and win the same amount I end up with the same amount of money I had before you played and my return is zero). Dividing this by two yields a return of 25¢ per unit paid; this step allows comparison of returns across different amounts bet (a larger bet should have larger average raw returns because the player pays proportionally more for the opportunity). Since players often win nothing, the return is often negative.

To begin, here is a plot of the returns per unit over all 180 spins. The leftmost column are spins that did not win anything and thus lost the entire bet of 25¢ per unit:



Beginning with the Double Diamond machine:¹

	Sample Average Return per Unit	Standard Deviation	95% Lower	95% Upper
One Unit	-7.5¢	51.34¢	-26.67¢	11.67¢
Two Units	10.83¢	62.17¢	-12.38¢	34.05¢
Three Units	-15¢	22.99¢	-23.59¢	-6.41¢

The 95% lower and upper bounds for each bet provide bounds which we can be 95% confident contain the true average return per unit. For example, we can be 95% confident that the true average return per unit for the Double Diamond machine with a bet of one unit is between -26.67¢ and 11.67¢.² Because this interval includes positive values, we cannot conclude based on this sample that the average return on playing the machine with a bet of one unit is negative (even though we know *a priori* that this must be true). This is especially so for average return on

¹ Readers familiar with Tukey's Honest Significant Difference test may complain that I have constructed too many confidence intervals without appropriately adjusting the alpha levels. If this bothers you, too bad (actually, get in touch and I will explain why it didn't matter in this case).

² Since it is impossible to lose more than the amount of your bet, the minimum possible return per unit is -25¢, so the lower bound of -26.67¢ does not mean much in context.

betting two units, as I actually did make money over these thirty spins (since sample average return per unit is positive).

However, since the interval for playing the machine with a bet of three units only includes negative values, we can conclude that the true average return per unit is negative and that you will lose money playing it with that size bet over the long run. One reason the interval for a three unit bet is smaller than the other intervals is because the standard deviation of the return per unit is much smaller than the other standard deviations, so we can be more confident that the returns in the sample reflect the population of returns from playing the machine.

For the Wild Red Sevens machine:

	Sample Average Return per Unit	Standard Deviation	95% Lower	95% Upper
One Unit	-0.83¢	51.48¢	-20.06¢	18.39¢
Two Units	-3.75¢	30.99¢	-15.32¢	7.82¢
Three Units	-5¢	45.04¢	-21.82¢	11.82¢

All three intervals contain positive values, so we cannot conclude based on this sample that average return per unit is negative for any bet.

Without conducting any more tests, we know the sample data does not show that average return per unit increases as bet size increases. The simplest argument is that for both machines, the sample average return per unit is the lowest when the bet is three units. Also, all of the intervals for each machine overlap each other, so it would be possible for the true average return for the machines to be the same regardless of bet size (for example, based on the intervals, a return per unit of -5¢ would be reasonable for the Wild Red Sevens machine regardless of bet size, because that value is in each of the intervals).

Of course, even though thirty spins per machine per bet size was all I had the attention for, it is not a very large sample. In statistics it is often difficult to find evidence for a claim with a small sample size, and I am not surprised at all at the results. If people lost money so often playing slots that their unprofitability could be statistically demonstrated in an afternoon, no one would play them (in the limiting case, a slot machine that never gave out winnings would be very profitable if anyone ever played it, but no one would). A casino must balance the need for a house advantage with the need to make people want to play in the first place, which only happens when players feel like they have a chance.

How Alejo y Valentina Characters Would Seem in Talossan Style

Alejo Fernández

Alejo y Valentina is my favourite TV show, mostly because the main character (Alejo) has my same name. I decided to present these characters in a Talossan style.

Alejo



Carlitox



Valentina



El viejo del bastón/ The old man of the walking stick



End Matter

La S'chinteia is always hiring! If you want to write it, La S'chinteia wants to publish it. Get in touch with Ian Plätschisch if you would like to become a contributor (no set schedule, publish as many or as few times as you want) or staff writer. No experience required.

If you...

- Have feedback on one of our articles or an idea for an article
- Want to join our email list to get early access to new volumes
- Would like to get in touch with La S'chinteia for some other reason

Send Ian Plätschisch a message on Wittenberg or post in the Wittenberg thread corresponding to this volume.

Thanks for reading!