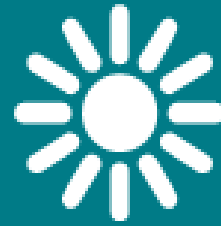


The good, the bad and the muggy HOW TO WIN LOVE ISLAND?



This summer, the UK was shocked as it emerged that more young people had applied to Love Island than to Oxford and Cambridge combined.¹ For non-Brit readers, Love Island is a reality television programme in which a dozen singletons spend the summer smearing tanning oil over their chiselled abs, gossiping and sharing a single bedroom in a luxury villa. (Guess what goes on there and why the series is wildly popular...) The ultimate aim is to find love and win £50,000. Now, with the grand finale approaching, we look at whether appearing on the show really is a more lucrative career move than going to a leading university and – if so – what you should do once you're on the island to maximise your earnings.

At the end of each series of Love Island, the winning couple share a £50,000 prize in addition to each other's undying love (which is priceless, of course, and we therefore make a simplifying assumption to ignore it for our purposes). However, the Love Island aficionados at Frontier note that former Islanders tend to make much more than that from endorsements, advertisements and public appearances upon their return. Some of previous years' contestants have managed to secure book deals and even spin-off TV series. Even an ordinary ex-Islander who goes through life endorsing protein powder on Instagram can reportedly make close to a £1m a year.

Can anyone on the show really expect to make a million? By looking at estimates of previous Islanders' earnings from various tabloid newspapers, and studying elements of their public lives since leaving the show, we have attempted to calculate how much each contestant could expect to earn. We can't possibly account for every television interview or calendar sold, but we do know:

- typical rates paid for sponsored posts based on the number of Instagram followers;
- the number of followers for each previous Islander;
- the average number of sponsored posts they publish per month;
- information on the fees Islanders charge for club appearances;
- and the average number of club appearances in the months after leaving the villa.

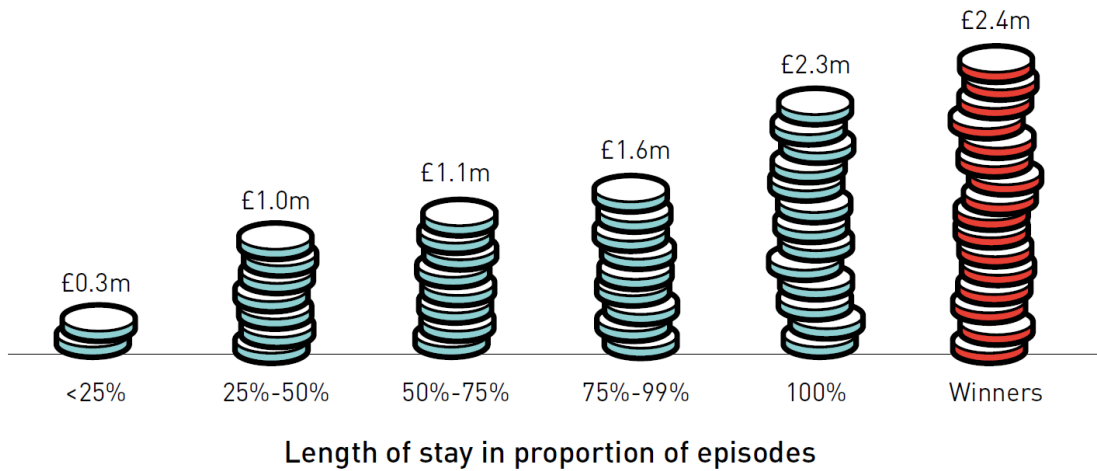
We used this information to estimate total potential earnings from Instagram and public appearances after the show. These two sources of income are almost guaranteed for anyone returning from the Love Island sunshine, but some contestants doubtlessly manage to trade on their fame to tap into additional income streams.

Following this method, we find that earnings are closely related to the length of stay on the show, with constant on-screen exposure helping contestants build their public brand. Islanders who have been in the villa for the full duration of the series can be expected to earn about £2.3m over the next five years²; interestingly, winning the show provides only a small extra boost to £2.4m.

¹ 85,000 people applied for Love Island, while 37,000 applied for Oxford and Cambridge combined. <https://www.bbc.co.uk/news/entertainment-arts-44369531>

² This assumes a 30% year-on-year "fade" in income, because maintaining fame after the show is hard no matter how defined your abs are.

Figure 1 Estimated earnings by length of stay in the villa



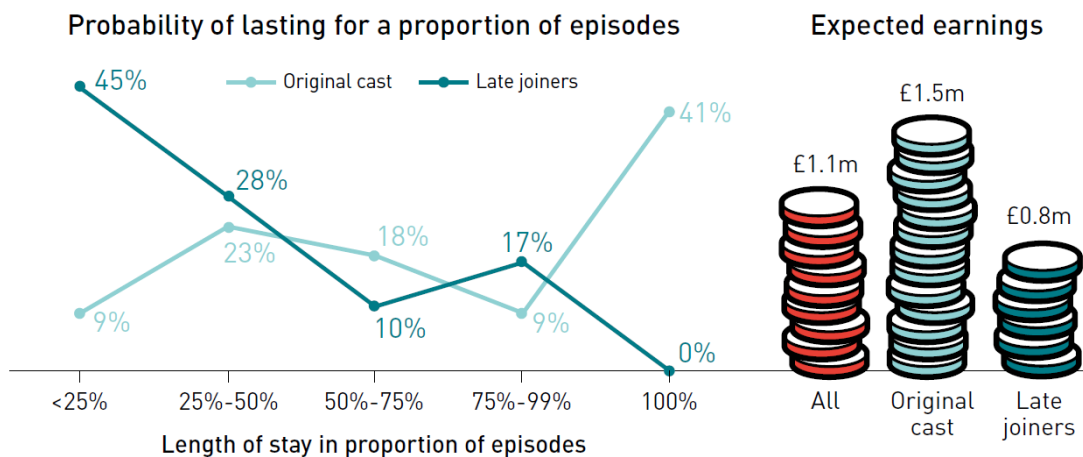
Source: Frontier Economics calculations

But, of course, you are not guaranteed to make these sums once you set foot in the villa. In fact, there is a small chance that you will be kicked off the island the very next day (like poor Oliver from Season 2 in 2016, who has ended up with a measly 6,000 Instagram followers today³). So what are your chances of striking it rich?

Data from past series can give us an idea of how long you are likely to stay once you've arrived at the villa. We found that on average you have a 33% chance of making it to the final, but this goes up to 41% if you're part of the original crew. The chances of an early exit are quite high if you're a late joiner; 45% of contestants appeared on less than a quarter of the episodes in their series (this is partly just a direct result of entering the villa at the point when there are not many episodes remaining).

Combining potential earnings with the probability of making it to various stages of the programme, we arrive at the expected returns from going on Love Island: £1.1m. The probability of staying in the villa for a long time is greater if you're there from the beginning, which means you can expect higher earnings too: £1.5m. Even as a late joiner you are looking at about £800,000 over the next five years.

Figure 2 Probability of remaining in the villa for a percentage of episodes and expected earnings



Source: Frontier Economics calculations

³ This is 100 times fewer than the average number of followers for all ex-Islanders, 620,000.

By contrast, a recent report estimates that an Oxbridge graduate is likely to earn about £815,000 more over their lifetime than someone who leaves school at age 18 with A-Levels.⁴ It appears to us that the young people of Britain are on to something and may be completely rational in their desire to appear on Love Island.

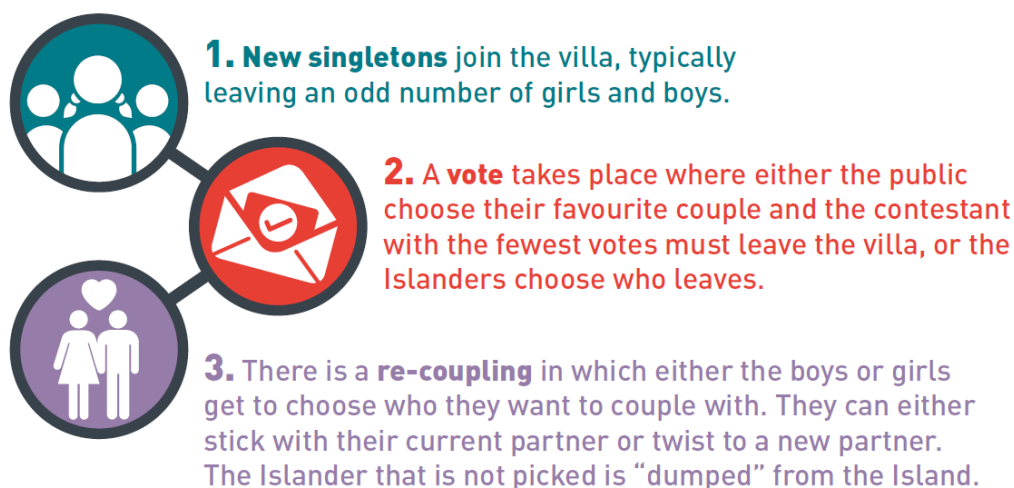
Of course, we haven't considered in our calculations the reputational cost of embarrassing oneself on national television. This is likely to vary according to personal preferences, and we would urge readers to factor in their own estimate before they decide to apply.

The game “on paper”

All successful reality shows give the appearance that something could happen at any moment to shake the game up. Love Island is no different. Viewers are shocked daily. In “reality”, though, Love Island follows a simple, relatively predictable format. This is perfect for excitable economists like us because we can model a simulation of the game to determine what the best strategy would be if we entered the villa.

For those who have managed to suppress their urge to watch this hugely addictive programme, the show starts with five single men and five single women coupling up with each other based only on initial attraction (or as an economist would put it, randomly). Once these happy pairs have peeled off, another Islander arrives and steals somebody's partner, leaving one person single.

The first hour of the programme sets the scene for the remaining eight weeks: relationships are formed because someone is 100% your type on paper; someone is single and grafting to break up a couple; and someone always ends up as a mug (meaning that they lose out). From there on, the average week will see each of these events occur:



The series ends with a vote from the public to crown the winning couple.

The key decisions that Islanders make are during the re-couplings, when they must choose whether to stay with their current partner or switch to another Islander. Using data from previous seasons, we find that there is some probability of a couple losing interest in one another and choosing a different partner at the next re-coupling, but it decreases the longer the couple has been together.

We also observe that the public seems to form an attachment to contestants the longer they have been on the show. They also punish certain behaviour, such as repeatedly stealing another person's partner (or “being muggy” to use the technical term). Contestants' personalities and various actions also affect how the public vote, but these are fairly random insofar as they do not tend to be correlated with any of the decisions described above. Therefore the public voting can be modelled as a function of the contestants' actions in previous rounds, with some element of randomness in it.⁵

Finally, we note that the Islanders' votes seem to follow a similar pattern to the votes of the public.

⁴ Levels of success: The potential of UK apprenticeships, Dr Philip Kirby October 2015, <https://www.suttontrust.com/wp-content/uploads/2015/10/Levels-of-Success3-1.pdf>

⁵ See the [technical annex](#) for more detail on this function.

Cracking on

Now that we know how the other contestants tend to play, what should your strategy be when entering the villa?

As we've seen, the key to doing well after Love Island is maximising your stay on the show; winning itself has little impact on your future earnings. To get a sense of how best to do this, we created four personas, each with their own decision-making strategy, and used Monte Carlo modelling to find out how long they would be likely to remain on the Island. Basically, we made our imaginary contestants play Love Island 100,000 times.

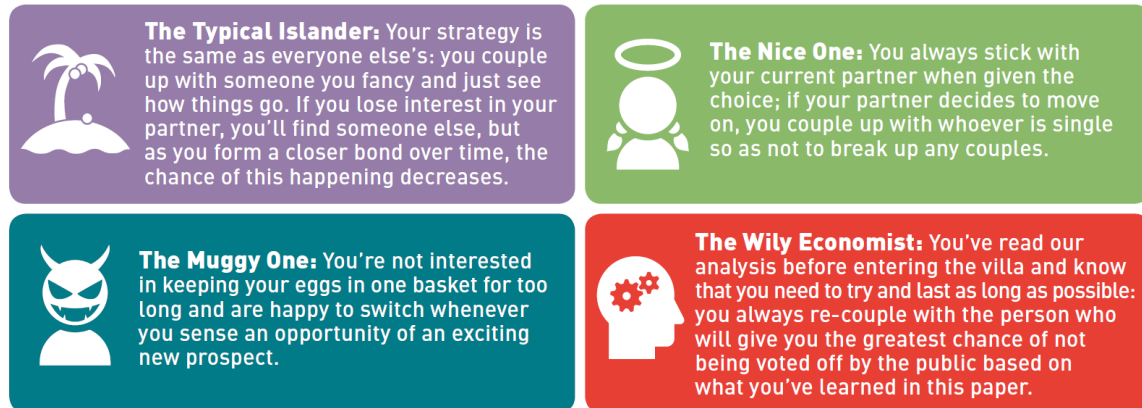


Figure 3 below shows the probability of staying in the villa under each of the four strategies. We see that for anyone who enters the villa at the start of the series, there is a moderate chance of having to leave in most weeks which goes down slightly as more new joiners (who are more likely to leave early) arrive. But whatever strategy you adopt, there is a 35% to 59% chance of making it all the way to the final.

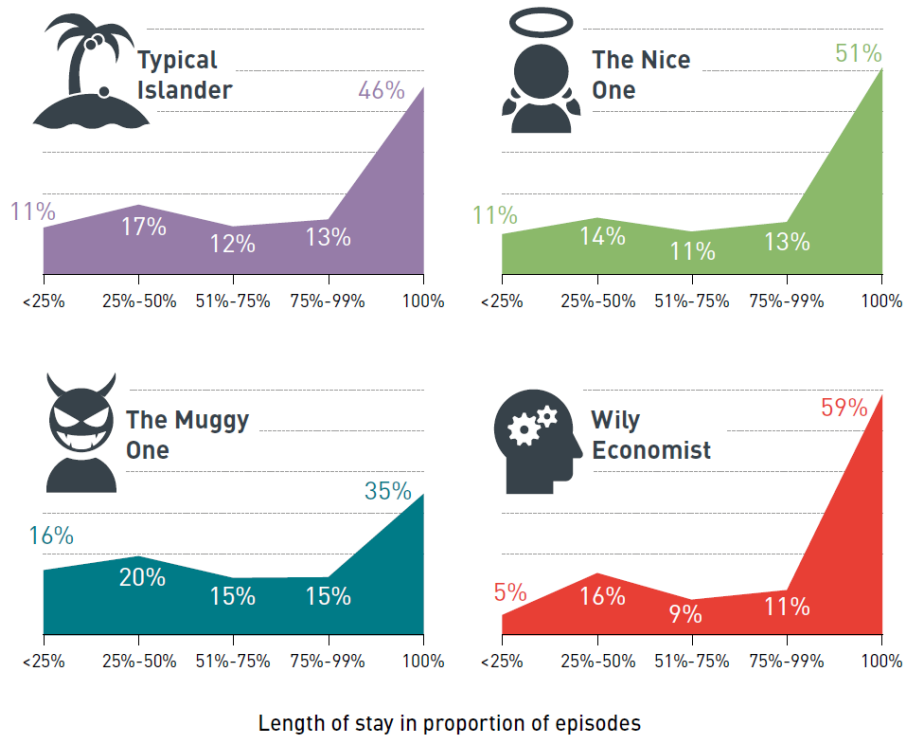
Our model predicts that being a “Wily Economist”, that is adopting a rational approach (some may call it cold and calculated), gives you the best odds of staying on the show until the bitter end and therefore raking in millions afterwards. We estimate there is a 70% chance of making it to at least three-quarters of the episodes, and a more than one-in-two chance of making it to the final. Being thoughtful, we've provided a formula in the technical annex that you can use to find the best person in the villa to couple up with each week.

We find that the strategy most Islanders seem to have adopted in the previous seasons (“Typical Islander”) delivers fairly good results. There is some luck involved in staying in the villa as weeks go by and you might find yourself coupled up with someone with whom there's not that much of a spark (or maybe they just use the word “loyal” too often). But, in general, if you've been in the villa from the very start, there is a decent chance that you will make it all the way to the end.

Being “muggy”, however, produces the worst results – this persona would have a decent chance of being voted off every week, and only a 35% chance of making it to the final despite being part of the original crew. Our Love Island experts have verified that this strategy has not borne much fruit for the least loyal of the Islanders in the past series.

The nice guy in our model has a lower chance of making it to the final than the economist – 51% versus 59%. However, his overall profile of probabilities is very similar to the economist's and better than that of the typical Islander. This makes intuitive sense: the public are harsh towards the Islanders who break up other couples and generally don't stick to their partners – the antithesis of a “nice” strategy.

Figure 3 Probability of staying in the villa for a percentage of episodes for four different personas



Source: Frontier Economics calculations

At the end of the day

So there you have it. To maximise your earnings you need to stay on the show as long as possible and we've now given you the tools to achieve that goal. Perhaps we may even see a few wily economists on the show next year. Unfortunately, where we can't help is with the feat of falling in love itself. For that, you're going to have to "crack on" and hope that you've "got the chat". You know what I mean?



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