

Lessons from 31k Journal Entries – part 1

A few months ago, we took all journal entries in the game and put them in a big data pool so we can research what players write about and what needs for support they express in the journal entries. Reading journal entries? You might think this sounds like an invasion of privacy – but not to worry, as per our privacy policy and terms and conditions, the data pool only includes the words written, there is no personal information about who wrote them. We asked several players who were playtesting with us about how they feel that their journal entries are being read in this aggregated and anonymized way. They answered that if their entries cannot be recognized as coming from them and if we do this for research to help others, they are fine with it.

And so, we moved forward. Once we had the data pool, we took about 25% of the entries and started working with automated scripts based on machine learning and also manually assigning keywords to each group of journal entries. Our goal was to group them by theme (the topics the journal entries are about) and by sentiment (the feeling that is associated with the text) and to do some quantitative analysis on how much players write. This is what we learned.

How much our players write

We have a mix of players – those who write a lot, and about very deep things, others who write more playing with words or creating poetry and finally a group who just put gibberish into the journal or the same word over and over to continue playing without going deep into the writing part. We respect that you don't always feel like going deep and maybe just want to relax with drawing. Both are good for your mental health! Based on these different player groups, we also see that writing might not be so easy for everyone to get into.

The longest journal post is 330 words long (that's about the length of this blog post up to here), the shortest journal post is 1 word long. Most journal entries are around 15 words – this is consistent across phases, with slightly more words in the discovery phase. The most popular prompts in terms of number of words written for them are: What is your *rainbow* after the storm? When was someone *mean* to you? Where do you find *hope*? Put your challenge on the *big screen*! Step over your *shadow*! Who's *let you down*? When do you put up your *guard*? Have you ever asked "why me?" How are your relationships *changing*? What have you *overheard* that has left you worried? We noticed that half of the top ten prompts is about relationships and connection. These themes often also come up in player interviews as difficult and impacting the quality of life strongly – so maybe that is why they invite to more words than others.

What players write about

People write most about their mental and emotional state (50%), followed by writing about social relations (28%) or about their physical health (22%). When writing about mental and emotional states, the most frequent topics were dealing with Depression, Anger, Anxiety, Guilt, Shame, or questions about self-worth. There was also a lot of writing about successful strategies – and these were art, drawing, music as key means to support themselves. And there a quite a few players – not surprisingly as the game is played mainly by people below

30 – exploring their sexual identity or their relationship with gender identification and about finding their role in life. When writing about relations, it is often about the relation with parents, about loss of loved ones, isolation, and loneliness, and sometimes also about situations of abuse, where relations are not safe. When writing about their physical health, it is about a specific condition (without mentioning exactly which one) or about living with chronic pain.

When players write

Those players who write about deep things, seem to do this when something concrete is on their mind in the moment or to process something that has been with them for what sounds like for a long time, but still influencing their lives today.

What sentiment players express when writing

Both sentiments, negative and positive were expressed in a balanced manner. Interesting to see was that the positive sentiment – so expressing a sense of hope and ability to do something - had a stronger *intensity* than the feeling of hopelessness and despair. We have a feeling our players are people working hard to create a positive impact in their life and that this is reflected in this more intense positive sentiment. Interesting to see was also that the proportion of positive to negative entries increases as players advance in the game.

So, what we do with what we learned?

We are very moved by what this data analysis reveals: our players are dealing with many tough situations and are exploring ways to process these. To further support the journey of our players, these are the kind of topics we will discuss for the future of the game:

- Based on some of the more difficult themes we see in the journal entries, we want to add support links to official support lines around the globe.
- Based on the themes, potentially provide different paths through the game and provide players a way to choose a specific path.
- Support players further to build a writing practice – starting with easier, less personal prompts to get into writing more easily.
- Add an option to skip writing for now and get back to it later to avoid players who don't feel like writing write now having to put in gibberish to advance in the game.

What would you be interested to learn from what players write about? What would you change in the game based on these findings?