

UX Notes on Harmony Tool

Test background and context:

I am an UX and Design professional and had been introduced to the Harmony Tool and the concepts behind it prior to this test so I already had some familiarity with it. I am testing the web version of the site/tool in Safari on MacOS. I arrived at the tool via the homepage of the website.

Initial observations:

Coming to the tool via the main website wasn't that difficult but I was faced with lots of words and reading and I had to search for links to use the actual tool.

The links to dev feedback/github etc and raising issues seemed more prominent.

It should be noted that as I was already mildly familiar with the tool I knew what to look for so not a true test case.

On using the actual tool:

Page layout is slightly unexpected, lots of info and a video in Left Hand Nav Bar. Feels very different to the main website.

Positive: Easy to see where I upload my files. However, I didn't understand the use for Harmony's database of questionnaires. Are these just benchmarks? If so, I couldn't see GAD-7 English.

I decided to source another online GAD-7 study in Portuguese and compare with Harmony Database version of GAD-7 Portuguese.

I downloaded data from this study on FigShare:

https://figshare.com/articles/dataset/Evidence_of_validity_of_the_GAD-7_Scale_in_brazilian_adolescents/21213026?file=37616198

On first upload attempt I was unable to import my questionnaire data because it was in XLS format and Harmony only accepts XLSX format so I re-saved the data as a PDF.

My second attempt to upload data in PDF format worked, however, the matches against the GAD-7 Portuguese in Harmony weren't very accurate. This is, I think, probably due to the misrepresentation of non-english letters in the original data. For example, the letters "ç" and "õ" in the Portuguese "preocupações" weren't present in the original data. This is common in data which has been written originally in Portuguese and then processed using English-based extraction tools.

The other differences in Portuguese data are the differing masculine/feminine abbreviation standards. Eg. The Harmony base data presents question 1 as "Sentir-se nervoso/a, ansioso/a ou muito tenso/a" and the downloaded study version uses the format " 1. Sentir-se nervoso(a), ansioso(a) ou muito tenso(a)."

I had to reduce the "sensitivity" to around 50% for the second question to match, however then I ended up with many other positive negative matches.

The exporting of the harmonisation data was fairly straightforward, however, on analysis of the output it seems that the questions in the uploaded data have been truncated? I'm not sure if that is a bug or not but possibly the reason for the difficulty in matching questions.

The uploaded data was probably not the best quality data however it was a random study picked on a search of GAD-7 on FigShare.

Second attempt using the same data in XLSX format instead of PDF:

Unsuccessful recognition of questions. Possibly to do with base file, as the question numbers are in the same cell as the actual questions themselves?

Third attempt using the same data in CSV format instead of PDF:

Slightly better results, the questions were recognised but the questions were again truncated so the matches weren't precise.

All base files and output files here: https://drive.google.com/drive/folders/14rxsrSgr2ypUrH-X6b79CV4GPcrcGDjl?usp=share_link

Other observations:

At the end of each process there is no option to repeat or start over. I had to click the Harmony logo or my browser back buttons to go back to the start of the process. Also, once I was back at the start of the process I had to delete my previous selections to upload new data/comparison data.

Summary:

Not sure how fair this test was given I was using fairly junky data, also I chose to compare Portuguese data with Portuguese data, would this happen in real-life? However, there are lots of areas for improvement on the UX/UI and design of the tool itself to make it more intuitive and easier to use. Without necessarily changing the features or functionality of the tool, I think some reorganising of the page and perhaps some step-based instructions would make an immediate difference.

Beyond this, there is definitely further scope to improve UX with additional

features based on user feedback which we could balance against project goals and dev input. I would suggest first building out a simple test plan and then conducting some user interviews and feedback sessions. Based on feedback we can start mapping out some wireframes and features for future development.