

Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit...

There is no one who loves pain itself, who seeks after it and wants to have it, simply because it is pain...

1

Results

Chatbot Usability Questionnaire (CUQ)

1.0.1 CUQ Calculation tool

The CUQ was developed by researchers at Ulster University (see {CUQ}) and as the calculation can be complex a dedicated calculation tool has been created.

Please download the CEPEH CUQ calculation tool which has all of the data entered, so you can see the CEPEH CUQ scoring.

[click here to download CUQ calc tool](#)

The results are as followed:

```
knitr::include_graphics("cuq.png")
```

Chatbot Usability C

Results	
Chatbot	CEPEH chatbots
Participants	160
CUQ Score	65.2±11.4
Lowest Score	28.1
Highest Score	96.9
Median Score	65.6

This is the results page. Mean CUQ score, median scores are above. Mean scores pe

This scoring system was designed to be comparable to SUS and may be freely used alongside it, or in combination with other usability metrics. There has been evidence of correlation of 76% between the CUQ and SUS therefore we expect the SUS scored to be between 48.75 and 81%. We believe the CUQ has more validity towards measuring the concepts of interest on this study.

```
## [1] "checking for install of rmarkdown"
## [1] "checking for install of bookdown"
## [1] "checking for install of knitr"
## [1] "checking for install of kableExtra"
## [1] "checking for install of tidyverse"
## [1] "checking for install of here"
## [1] "checking for install of readxl"
## [1] "checking for install of ggplot2"
## [1] "checking for install of lubridate"
## [1] "checking for install of plotly"
## [1] "checking for install of dplyr"
## [1] "checking for install of wesanderson"
## [1] "checking for install of viridis"
## [1] "checking for install of leaflet"
```

1.1 System Usability Scale (SUS) Scores

Note= The amount of ‘agreement’ is defined as the addition of ‘Agree’ and ‘Strongly agree’ responses.

The SUS score for all data was XXX. This is within, and above the median of, 68 – which is in the range of ‘average’ usability. This is good as the resources were early demonstrations and had reduced beta alpha testing due to time constraints- future updates can improve this metric.

After reversing the scores of the negatively worded questions (odd numbered questions), participants strongly agreed the system was not complex (XX% agree-

ments), and they did not need assistance before use (XX% agreements). All remaining questions has the most frequently observed response as 'agree' - the lowest amount of agreement (agree and strongly agree) was XX% for question X, which was explored further in the individual Partners' analyses.

if you don't like boring tables, here is the same data in a graph!

1.2 Technology Acceptance Model

The TAM had 3 sections (Ease of Use, Perceived Usefulness, and Intention of Use). Ease of Use results showed significant increases in Users' usage with each Chatbot. Perceived Usefulness: There were not significant findings for the Perceived usefulness. The justification for this may be due to being early versions of applications with limited functionality and functions which can be difficult for user to experience the intended further range of features and learning exercises.

Intention of Use: For users' intentions to use within their course, the result of the Mann-Whitney U test was not significant, $U =$, $z =$, $p =$. in their intentions before use ($m=xx$, $mode=xx$) compared to after ($m=xx$, $mode=x$), however there was improvement therefore the chatbots may have more benefit than expected by students.

1.2.1 Other Findings

Other questions

I intend to continue using chatbots in the future (BI1)

The chatbot provided the information I needed with minimal commands

My knowledge of the topic improved after i had used the Chatbot

My confidence in understanding the topic improved after I had used the Chatbot

The chatbot provided me with the type of response i expected from asking a tutor/lecturer

The information provided was reliable

The chatbot has a high level of trustworthiness

The duration of conversations to find my answer was too long
The videos/images provided were useful to my questions
The chatbot exceeded my expectation of how it could help me
The chatbot exceeded my expectation of how it could engage with me
I think this learning method could help me to acquire knowledge
I would use this tool again as it has some value to me
I think i will actively use this learning method
I believe i had some choice about learning during chatbot use
I would trust the chatbot to provide me with information for my course
One piece of knowledge i learned from the chatbot was..
UP TO HERE1