

HCIN 5100F USER STUDY

Impact of distraction and interruption on working
memory through auditory channels

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Participants:

This study consisted of 8 participants. The participants were from India as the premium Spotify account was set up in India

Method:

To conduct the study, I used the DISCORD as it offered a list along feature with Spotify which meant that the researches was also able to hear what the users were hearing,

The participants were not required to turn on their videos however they had to stay connected till the end of their session.

Task 1: quantitative

From the premium version and the regular version of Spotify the participants were asked to listen to podcasts (educational) and at the end of each listening session they were given two tasks:

- To note down as many complete sentences as they could. (10 max)
- To summarise the general content of the podcast they listened to

Task 2: qualitative

The users were given 5 simple equations to solve while listening music to each of the versions of Spotify. 10 equations in total per person.

At the end of this session a qualitative study of two questions were asked where the users were asked to rate the experiences out of 5, in terms of intensity of interruption and the duration of the distraction. To understand and compare the difference in quality of life between the two models.

Instructions to the participants:

- Stay connected throughout their session.
- Move forward only if your answer is right (task 2)
- Listen to the advertisements completely.
- Do not discuss your answers with the other participants

Interview scripts and content:

Independent variables:

Duration of advertisements (30 seconds)

Duration of podcasts (2 minutes)

Number of equations (5)

Dependent variables:

Number of sentences recollected

Accuracy of the summary

Time taken to complete the equations

Interview questions:

Task 1:

1. To the best of your abilities recall as many sentences as you are able to (10)
2. To the best of your abilities summarise the general content of podcast (order matters)

Task 2:

1. On a scale of 5 rate the intensity of the interruption
2. On a scale 5 how long did the distraction persist for. (5 being the longest)
3. To the best of your ability summarise the different experiences.

