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Data Processing

Desktop Research

Definition: Desktop research is secondary research - going out and finding research that has already been analyzed and put into articles, websites, books, etc. on a given topic that you want to use to backup your own research or choices that you have made on a given design.

I researched how elderly people with dementia are interacting with virtual reality and how it might help them with their dementia. Going in to it I thought that the VR "helping them with their dementia" would be about maybe helping the disease slow, or something like that, but it was actually about the patients being able to visit places with the VR and start to recall memories that they wouldn't have been able to otherwise. This put them in a better mood and helped them to connect more with their caregivers.

Observation Research

Definition: Observation research is primary research - actually going out into the world and observing while looking for patterns, details, interactions etc. Once you have done the observing, going back and looking at everything you wrote down and writing down your initial thoughts.

I observed people at a bus stop. I placed myself at the edge of the bus stop and watched the stop for about 20 minutes. I then got on the bus and rode it for 2 stops and observed people while I was on it. Other than people who were there together, people kept to themselves. They either looked out the window, were on their phone, or sat with their eyes closed. Most people averted eye contact. I was not really surprised by any of this.

Interview Research

Definition: Interview research is primary research - preparing an interview guide in which you create questions for your interview. Then you invite an interviewee to speak with you. While you are doing the interview you can ask for clarification and elaboration from the interviewee to get the answers you need.

I did an interview with a 29 year-old woman about using social media. While I was doing my interview it was definitely nice to be able to be able to ask clarifying questions because her interest in social media is totally different from mine so I was very interested in what her thoughts on social media use were. Social media provides me a stage where I can share things I might not reveal in person- I can choose to expand my audience or not. I have the tools to engage with others and meet with like minded or diverse beings in an environment that is limitless and ever changing.

Survey Research

Definition: Survey research is primary research - while similar to interview research, it is a little more structured and much more quantifiable. Creating the survey with the question you want to answer in mind, you create questions that will give you information when the answers are analyzed and often quantified.

We created our survey about finding a job in Copenhagen while being and international student. We thought about some of the things that could make finding a job difficult, ie. access to transportation (bike, train, bus), having experience in the field that they are interested in, being able to speak Danish, etc. We then looked at our answers and analyzed them using the Google Forms Response page. We found that a lot of the struggles we thought international students were facing while trying to find a job were present besides access to transportation. 6 out of the 7 participants thought that their proficiency in Danish will affect their ability to get a job, but everyone had access to transportation which we were surprised by because that would allow the participants to search for jobs in a wider radius, but 6 of them were still searching for a job.



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Present research and analysis insights

Virtual Reality and Dementia

- I did my Desktop Research on the use of virtual reality in relation to elderly people with dementia. I went to Google Scholar and typed in "virtual reality + dementia"
- I found several different articles published on Medical News Today, Healthline, and Forbes.com and one video from Tribemix
- After opening the articles I read them and realized that three of them were about the same study!
- The study:
 - was done on seniors who were living with dementia
 - Each patient was given a headset and the options of 5 different locations for them to visit a sandy beach, a cathedral, a rocky beach, a countryside and a forest
 - One of the most important findings was that the patients were able to recall memories because they were exposed to stimuli
 that would otherwise be inaccessible to them do to mobility issues and poor health
- The video: the video was of several different adults using a VR headset to see a beach scene and what their reactions were, which was that they were very happy to have been able to see the scene and that it invigorated them
- The final article was about how VR headsets could be used to test navigation problems in patients that can be an indicator of mild cognitive impairment

The Bus Journey

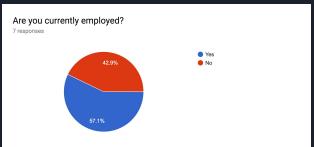
- I did my Observation Research on the bus stop and the bus journey in general
- I sat myself at the end of the bus stop and focused on watching people arriving at the bus stop
- The thing that I noticed the most was that people avoided eye contact with one another
- Most people spent their time on their phone or looking around
- Those who arrived early strolled up to the stop and sat and waited, those who were arriving closer to the departure time walked hurriedly towards the stop
- I then got on the bus and rode it for two stops observing those who were also on the bus
- Again, eye contact was avoided for the most part
- People looked at their phones, out of the window or sat with their eyes closed

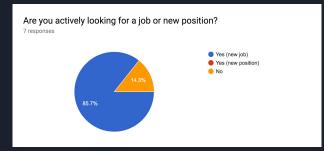
Social Media

- For my Interview Research I chose the topic of Social Media
- I created my outline of broad questions that I would ask at the interview
- My interviewee was a 29 year-old woman and I interviewed her on my couch at my apartment
- I asked my overarching questions that I had prepared while also keeping in mind that I could ask her to expand or clarify if needed
- I found that she is interested in social media because it provides her a stage where she can share things that she wouldn't normally in person
- She uses Instagram the most and she uses it as an electronic journal
- She likes Instagram the most because it is easy to follow and unfollow accounts to create the content that she sees on a daily basis
- "I have the tools to engage with others and meet with like minded or diverse beings in an environment that is limitless and ever changing"
- She believes that she uses social media for what it was intended for to connect

Finding A Job

We chose to do our survey about international students getting a job in Copenhagen and the struggles they might face. Below are some of the graphs that were created from the information gathered from the survey. There were 7 participants who took the survey.



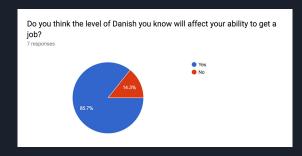




Of the 7 participants 4 said that they were currently employed, but 6 participants said that they were looking for a job (or a new job for the 4 who were already employed).

Of the 7 participants 5 said that they didn't know any Danish and 6 of them said that they thought that proficiency in Danish would affect their ability to get a job.

One of the most surprising insights that came out was that all of the participants had access to transportation, but 6 were still looking for jobs. We thought there would be a correlation between not having access to transportation because they would not be able to search for a job in as wide of a radius. However, all participants have access to transportation but are still struggling to find a job.



Resources

Below are my resources for my Desk Research:

Healthline - How Virtual Reality Can Help Seniors with Dementia https://www.healthline.com/health-news/heres-how-vr-can-help-people-with-dementia

Medical News Today https://www.medicalnewstoday.com/articles/325166.php

Forbes.com

https://www.forbes.com/sites/robertglatter/2019/05/09/how-virtual-reality-can-improve-the-quality-of-life-for-people-with-dementia/#2773811c7f1c

Medical News Today

https://www.medicalnewstoday.com/articles/325343.php

Tribemix VR for dementia care

<u>Tribemix Virtual Reality for Dementia Care</u>

This is the link to our Survey: https://forms.gle/F20YAi8VkjXxb9cA7