

Design Research
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Design Research Summary (part 1):

Collection method 1:

Type of research conducted: Interviews with my uncle (a smoker) and one of my roommates (who uses a Juul).

Who conducted the research: Sam

Who I conducted the research with: My uncle is a retired executive from Caterpillar. He currently lives east of Seattle in a town called Plain, Washington. For this interview, because he lives out of state, I conducted the interview over the phone. My roommate is a senior here at CU as well, studying computer and electrical engineering. He grew up in Longmont, Colorado. Fortunately, because I live with him, it was easy to conduct this person in person, in the living room of our apartment.

Some data/interesting findings:

To start, some background on both my uncle and roommates smoking habits (learned from the interviews). My uncle smokes cigarettes, and usually smokes about 3-4 times a day. My roommate uses a Juul, but the frequency for him was a little harder to judge. He said he will occasionally use his Juul on the way/in between classes, as well as intermittently throughout the evening at home. Each time is usually only one or two hits, so it's a little harder to quantify exactly how many times he smoked, where as for my uncle, smoking one time is finishing an entire cigarette.

One thing I found interesting was that both of my interview candidates started smoking at similar ages. My uncle began smoking as a junior in high school, and my roommate began smoking (using a Juul) the summer after his senior year. So both people were about 17 or 18 years old at the time, although they were very different time periods. I asked both people about their thoughts/views on the health effects. My uncle is very aware of the negative health effects that go along with smoking cigarettes at his stage in life now. He discussed how when he started smoking in high school, it was a time when smoking was socially accepted, so he was not too concerned at the time. However, like I mentioned, he is well aware of the affects now, and that is a lot of his motivation in trying to quit. My roommate has a slightly different approach. He has the viewpoint that using a Juul is better than smoking cigarettes. He recognizes that it still is not as healthy

as not smoking at all, but he isn't too concerned about the health concerns with smoking from a Juul. Finally, one last interesting talking point from the interviews were whether they had attempted to quit or not. My uncle has tried to quit a few times, and was actually successful for about 9 months according to him. My roommate hasn't really thought about or tried quitting, as he doesn't feel that there is a real risk with using Juuls.

Findings:

- One takeaway from these interviews, although a small sample, is that there is potentially a different viewpoint on smoking between younger and older generations. My uncle, who is now 58, like I mentioned knows the negative effects of smoking and has tried to quit several times. My roommate, who is 22 though, didn't see any problem with it.
- Building off of the above point, it seems that we may need to focus on the different kinds of smoking, as the viewpoints on health effects and smoking in general varied between Juul users and cigarette smokers. So it will probably be worth it to differentiate between different types of smoking.
- I also discovered that family has a big impact on the thoughts of smokers. My uncle mentioned how he always tries to hide his smoking from all of his family, as he is embarrassed by it. My roommate also discussed how his family did not allow him to use his Juul at home.
- One last take away from these interviews was that incentives to deter people from smoking may differ based on age. My roommate said that he would be more likely to be influenced by money (maybe taking money out of his bank account) rather than alerting his family, and my uncle said the opposite. This probably has something to do with income, and family values, which can very easily be influenced by age.

Collection Method 2:

Type of research conducted: Survey

Who conducted the research: Keiran

Who I conducted the research with: The survey was presented to people anonymously through Facebook. I was able to have 17 people with addictions complete the survey.

Some data/interesting findings:

In the survey, I found that 12/17 people started their addiction in high school. The survey also shows that most people are aware of the health effects associated with the addiction. 10/17 people have tried to quit their addiction but have been unsuccessful. 11/17 people are willing to try a wearable device to help hold them accountable. I am pleased with the information provided from the survey. I hope that the ability to be anonymous helped the people provide honest answers.

Findings:

- 12/17 people started their addiction in high school.
- 14/17 people are aware of the health effects.
- 10/17 people have tried to quit before.
- 10/17 people are addicted to cigarettes and 7/17 people are addicted to alcohol.
- 9/17 people are concerned with their addiction.
- 11/17 people are willing to try a wearable device.
- 8/17 people have a good support system.
- 7/17 people have family history of suffering with an addiction.
- 12/17 people said their addiction affects their ability to work.
- 15/17 people said money incentives would help them quit.

Part 2: Group Reflection:

Date and time of meeting: 10/28/18 at 4 pm

Location: Norlin Library study room

Group members present: Sam and Keiran

Do your findings agree:

For the most part, we found that our findings from the two research methods agree. One area where we did find some differing findings, as mentioned earlier, was in the incentives questions. The survey was presented to mainly college students on Facebook and they tended to be more willing to quit for money. We saw in the interview with my uncle that the thoughts of his family had much more of an impact on him. This difference in age was also seen when discussing the health effects and people's thoughts on smoking in general. Lots of people that use Juuls tended to have the viewpoint that they were not taking any significant risks by smoking, whereas my uncle was well aware of the risks associated with smoking cigarettes.

What decisions can you make based on this data:

We can understand that most addicts are willing to quit if they can find a means of doing so that is different than what they've tried before. A wearable technology could be implemented into their lifestyle to help them quit.

Were some data collection methods more or less useful than the others? Why?

Both data methods were useful in gathering data about addictions. The interviews provided personal and more in depth insight, while the surveys took a more anonymous direction, allowing the people answering to open up more and be more honest. I believe they both were equally useful in providing data for us.

If you think more data collection would help, what else would you want to know?

I think after our survey and interview we have a pretty solid knowledge base on our potential users. However, one thing we could use more knowledge about is the difference between people who use Juuls and people who smoke cigarettes for example. It would be great if our app could help people with a wide range of addictions, but in order to do this, we will have to dive in a bit deeper and get more knowledge about several different types of addictions and how those addictions are met.

Part 3: Appendices

Interview Script:

- When did you start smoking?
- What made you start smoking?
- How often do you smoke?
- Do you enjoy smoking/are you glad that you smoke?
- Are you aware of the negative health effects that go along with smoking?
- If you had someone/something to hold you accountable, do you think it would deter you from smoking?
 - How would you want to be held accountable?
- Is there something that you wish you had to help you with your addiction/smoking?
- Have you ever tried quitting? What brought you back?

Survey:

- Are you aware of the negative health effects associated with your addiction?
- Have you ever tried to quit?
- What type of addiction do you have?

- Are you concerned with your addiction?
- Would you use a device to hold you accountable?
- Do you have a good support system?
- Does addiction run in the family?
- Does your addiction affect your ability to work?
- At what age did your addiction start?
- Would money incentives help you quit?