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IDM Pre-thesis

Assignment 012-A

4/19/16

User Testing Design

*Step 1: Goals for this research*

I am hoping to establish the relevance of either the wearable movement experience or the movement game in the ASD community. I want to know if either of these ideas appeal to people with Autism Spectrum Disorders. It is important to me that their voices speak through the project; I want to avoid imposing my voice onto them.

I also want to get an idea of what kinds of “grown-up” aesthetics would appeal to someone with ASD. Do we have similar aesthetic sensibilities? What kinds of materials would feel interesting/good? What kinds of movement and points of contact would feel good/supportive? What kind of interface would be appealing for the game? What kinds of movements would you do if you could do anything?

*Step 2: Identify Participants*

I will work in collaboration with young adults with high-functioning ASD, as well as their communities of occupational therapists and families. For my initial user feedback, I will speak to occupational therapist Kristie Koenig and ASD self-advocate Jesse Saperstein. I have reached out to the Moses Center for Disabilities in hopes of finding a few individuals to do user testing and share their thoughts. Marshall Sunnes at the Moses Center suggested looking for participants outside of NYU to find a more responsive group, and he will email me on Wednesday 4/20 with a list of networks that he suggests.

*Step 3: Design your materials and feedback mechanism*

I think that interviews would be most helpful at this stage, but I will have to take what I can get. I am still waiting to hear back from the Moses Center, so I am unsure of how many students will be willing to participate or what available time they will have.

For a start, I have created a Word document with images of the prototypes, a link to the working game, and explanations of each idea. If I were conducting an interview, as I did with Kristie Koenig, I would explain the content of the text and present only the images and the game (or perhaps actual prototypes rather than photos).

*Step 4: Do a Pilot run*

I did a pilot test with Occupational Therapist Kristie Koenig in her office. I began by explaining the framework of fluid vs. rigid conceptions of ability as they inform the development of assistive technology. Her feedback on the idea was that she agreed strongly, but she felt that the idea had grown beyond the study of ASD. I told her that I agreed, but I felt that ASD presented a particularly complex situation for creating assistive technology because the disability itself is largely the masking of ability, which is an interesting territory to explore through this framework. She agreed, which was validating.

I then presented the working prototypes and explained the intention and potential development for each one. Here is a summary of her feedback:

Wearable Idea: Kristie seemed very interested in the idea of providing a different, more fluid proprioceptive experience to people on the Autistic Spectrum. She shared with me a project that was created for a similar purpose using a system of elastic bands to provide resistance to create a different sensory input, but Kristie criticized this precedent for being restrictive, inhibiting movement rather than translating it into different movement. She felt that the idea could be interesting to people with ASD as an assistive technology or a statement on assistive technology, and recommended continuing to develop it in collaboration with the ASD population. She affirmed that the aesthetic should feel more grown-up, and suggested that I move in the direction that feels grown up to me until I am able to interview people with ASD. She preferred minimal cage-y-ness and organic lines/colors, and she liked the idea of choosing supportive places for contact with the body.

Game Idea: Kristie felt that a game like this could be exciting to people with ASD. She liked the idea of a material with an interesting/malleable texture. She noted that the mouse movement game prototype should not flash different color backgrounds as it currently does. Flashing lights are known to cause seizures in some people with ASD, so I will remove this immediately. I assured her that the visual interface would be minimized with the development of the game, and she recommended emphasizing the visual aspect because many people with ASD are strong visual learners. This is helpful feedback, so I will keep that in mind as I move forward. She remarked that every social interaction is taxing for a person with ASD, and that the need for taking a break is not a result of navigating challenging situations, but a simple necessity.

Following my test run with Kristie, I have added a few additional questions like, “What does this remind you of?” and “Which of these ideas do you like better?” It was helpful that Kristie shared the elastic movement suit, as it will provide a precedent and design pitfalls to avoid, so I will prompt other participants to share similar projects. I also realized that I had forgotten to ask about Kristie’s preference between the two ideas, which will be good to know from the participants with ASD. I felt it was important to have some open-ended questions to allow the voices of the participants to speak for themselves, but I also wrote a lot of concrete questions, as they may be easier for people with ASD to answer.

I plan to run this with one more neuro-typical person (most likely Beth Rosenberg) and then pass it along to Jesse Saperstein, Beth’s son, and a few more people with ASD who may be easy to reach through Jesse, Beth, and Tech Kids Unlimited.