

APPENDIX C: PROJECT PARTNER INTERVIEW SUMMARY

The purpose of our initial interview with our project partner was to learn more about the needs of adults with intellectual or developmental disabilities at Misericordia and to understand the problems with existing sensory manipulation products on the market. The interview with Nicole Humphrey was conducted over Zoom on Monday, September 25, 2023.

Problems

Ms. Humphrey emphasized the following problems with existing products on the market:

- Not age-appropriate because the products are designed for babies, children or even pet dogs (baby rattles or keys).
- Fail to stimulate users' senses (not visually appealing, no smell or sound, or do not feel nice to touch and chew) or their cognitive interests.
- Unsafe by posing a choking hazard if chewed on. Adults with intellectual or developmental disabilities often put items in their mouths.
- Draw unwanted or negative attention due to the materials or design which compromises their sense of dignity.

Requirements

The project partner identified these requirements for the design:

- Some level of intellectual stimulation but not too challenging intellectually because it is difficult for residents to learn
- Meets some sensory needs:
 - visually appealing such as brightly colored
 - a scent
 - repeated sound or music
 - orally stimulating, feels nice to touch and chew since many objects go into the mouth
- Safety:
 - does not present a choking hazard
 - user can be left alone with the item without supervision
- Respects the age and dignity of adults with intellectual or developmental disabilities so the product should not look or feel like a baby or child's toy.

- Durable since objects are often thrown or slammed to the ground so product could be soft (silicone) or hard (plastic)
- Easily cleaned with soapy water and bleach for repeated use since objects are often dropped onto the floor either accidentally or intentionally.
- Brings joy to the user because “getting a smile out of someone who doesn't often [smile] is a great day”.
- Product should be generalized so that everyone can use it
- Avoid products that make too much noise or have too much scent, use excessively bright lights, spiky textures or use multiple textures that can lead to overstimulation.
- Avoid products that use technology

Users

The primary users are adults with intellectual or developmental disabilities, many of whom are autistic and show signs of pica, meaning they crave and chew substances that have no nutritional value. They have a strong desire to put items in their mouths and have issues with biting. Users are attracted to different types of things, for example, one user may become obsessed with alphabet blocks or another might love nursery rhymes or Disney VHS tapes. Users engage with the objects for different amounts of time, depending on interest. Autistic users might fixate on one item for one day. Users are attracted to musical or meditation sounds, bumpy or smooth textures (not sandpaper), and sensory balls. Favorite items include baby phones that make a lot of noise, colorful “little kid keyboards”, the alphabet, math/numbers and money concepts, “rainstick” toy, sorting activities such as plastic fruits, and a “purple cactus” toy.

Environment

Misericordia is a home for people with developmental disabilities in Chicago. The current process for sanitizing items is to: (1) wash them in soapy water, add in a chemical disinfectant such as bleach, (3) submerge items in Halt chemical solution overnight.