

Inclusive Clothing for Individuals of All Abilities

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BACKGROUND

Dressing allows us to express ourselves and plays a key role in our sense of independence. Studies show that clothing related issues can create barriers to social participation and independence in individuals who have physical limitations and disabilities (Kabel, Dimka, & McBee-Black, 2017). There are increased difficulties with finding garments containing adaptations that allow for independence with dressing (Chang, Zhao, Guo, Wang, & Gu, 2009). Clothing allows for the opportunity of self-expression, an experience that all individuals should be entitled to regardless of their limitations. (Chang, Hodges, & Yurchisin, 2014).

Unsolved dressing difficulties can lead to inability to leave the house, maintain a job, and can lead to decreased social participation (Azher, Saeed & Kalsoom, 2012). Adaptive clothing can increase an individual’s overall quality of life (Azher, et al., 2012).

There is currently limited research on adaptive clothing in the fashion industry. Over the past four years fashion companies have started to become more aware of disabilities and the need for adaptive clothing. Companies such as Nike, Target, and Tommy Hilfiger have created clothing for individuals with disabilities (Kosinski, Orzada, & Kim, 2018). Many apparel designers have not been trained for designing for individuals with disabilities, which in turn limits the amount of adaptive clothing on the marketplace (Kosinski, et al., 2018).

PROGRAM DETAILS

The purpose of this Doctoral Capstone Project was to educate and assist with the program implementation of the Design for All Project at Iowa State University. The goal of this program was to educate students on the need for adaptive clothing in the fashion industry. Dr. Ellen McKinney has been doing the Design For All Project for the past 3 years. She was open to collaborating with an occupational therapy student to bring a new perspective to the project. The focus was to educate the students on various disabilities and how those disabilities impact dressing independence and self-confidence..

Five clients were recruited for the project from ChildServe, an outpatient pediatric clinic in Ames, Iowa, to participate in the project. Students from the Iowa State University class were given the opportunity to meet with the clients and their families to discuss dressing difficulties in regard to their specific diagnoses. Students were then required to create specific clothing items adapted to the individuals to increase dressing independence and self-esteem.

FOCUSED QUESTION

What is the impact of accessible versus non-accessible clothing on psychosocial needs, ability to participate in functional activities, and overall quality of life?

METHODS

- An extensive literature matrix was completed to compile evidence based research on adaptive clothing and dressing difficulties amongst individuals with disabilities.
- A survey was created and completed by parents at ChildServe addressing dressing difficulties and mental health associated with decreased dressing independence.
- The survey was also sent through the Iowa State Disability Services in order to retrieve results and different perspectives from the young adult population.
- Based on results from the surveys that were conducted, a needs assessment was created to determine the need to implement program development in Apparel Design Programs addressing adaptive clothing and increasing knowledge on various disabilities.
- A PowerPoint presentation was presented to Iowa State’s AMD 426 course addressing dressing difficulties that are associated with different disabilities. A pre-assessment and post-assessment were given to determine how knowledge on various disabilities and adaptive clothing increased after completion of the Design For All Project.
- Presentations on adaptive clothing designs were delivered by the students via zoom to the clients participating in the project.
- Parent Handouts were created for ChildServe on “Resources for Adaptive Clothing” and “Tips for Successful Dressing” based on research conducted through this experience.

RESULTS

Survey results from clients showed:

- Fasteners on clothing (zippers, snaps, and buttons) are very challenging and limit independence with dressing due to decreased fine motor control, decreased hand strength, and visual impairments. Adding Velcro and magnets to closures can increase ease of dressing and improve independence and function (Azher, et al., 2012).
- Participants with Ankle Foot Orthoses (AFO’s) and prosthetic limbs indicated that the width of pants impacted ease of dressing. With wear of skinny jeans and leggings, AFO’s have to be applied over pants making their disability visible to their peers, and ultimately impacting overall self-esteem.
- Prosthetic limbs are often made of carbon fiber which rubs through jeans and leggings creating holes in clothing.
- Individuals born with spinal deformities or dwarfism found it difficult to find clothing that fit different body proportions. Clothing does not hang correctly and tends to draw more attention to disabilities. As they get older it is harder to find clothing that is similar to what their peers are wearing.

- Wheelchair users have difficulty finding clothes that fit as they were intended for an individual who maintains a seated position all day. “Wheelchair pants require a high back rise, longer leg length and darts in the seat area. Elasticized waist is another feature of wheelchair trousers as they help the pants fit properly at the waist when the patient has to transfer (Pojilov-Nesmiyan, Ivanov, & Suprun, 2017).
- Parents who have children with tactile defensiveness have difficulty finding clothing that is soft, tag-less, and seamless. Nowadays, clothing is made with different textures, sequins, and frill making it difficult for parents of children with tactile sensitivity to find clothing that fits the needs of their child.
- Clients who were apart of the initial interview process at ChildServe were all under the age of 10 years old. Because of this, many of the families who participated in filling out the survey felt that their child’s mental health was not impacted due to their age. Client’s did however state that their children occasionally would become frustrated by their inability to dress themselves independently.
- Mental health and self-esteem are greatly impacted by those with dressing difficulties, specifically in the adult population that was surveyed at Iowa State University. Appearance and self-confidence coincide for many individuals who have dressing difficulties.

Survey results from the Iowa State Students in the AMD 426 course regarding their knowledge on adaptive clothing and disabilities:

- Five students in the AMD 426 course participated in the survey; out of the five students, 2/5 had previous knowledge about disabilities. Prior to the start of the project, students were unaware of the demand that clothing can have on an individual who has a disability. Students were also uninformed on adaptations that could be made to clothing.
- All students agreed that Iowa State University should be educating the Apparel Design Program on adaptive clothing.
- Dr. Ellen McKinney has taught her students diversity and inclusion through this project. Based on CDC statistics, 1 in 5 adults or over 53 million people have a disability in the United States (Center for Disease Control [CDC], 2019). There is a need to increase education on adaptive clothing to students in Apparel Design Programs and to companies in the fashion industry to increase awareness of dressing difficulties among individuals with disabilities throughout the United States.



Photo of Design For All Project created by: Truth Ross and Hailey Vierck

BOTTOM LINE FOR OT

- Research has shown that unmet clothing needs for individuals are impacting overall mobility, social participation, employment needs, and everyday life events (Kabel, et al., 2017). Clothing cannot be just functional. It should also include styles and attractiveness that will enhance the wearer’s self-confidence and self-identity (McBee-Black & Ha-Brookshire, 2018).
- Dressing is a primary ADL that occupational therapists address with clients across the lifespan. As occupational therapists we may have to find compensatory techniques to improve our clients independence and quality of life. It is important that we advocate for our clients and raise awareness to the community on the need for adaptive clothing within the stores. Adaptive clothing can increase independence, social participation, and self-efficacy.
- It is essential for us as a profession to collaborate with professionals outside of our scope of practice. The fashion community has the skills to make adaptive clothing, so it is our job to advocate and reach out to professionals to share our knowledge and collaborate to make a change.
- As occupational therapists it is essential that we research to provide evidence that promotes the need for adaptive clothing. There is currently limited research on adaptive clothing and dressing difficulties related to various disabilities. (Chang, et al., 2014). Studies show that there needs to be more research conducted on the behavior of consumers with disabilities and how clothing impacts one’s identity.

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