The Landscape of Adaptive Apparel: An Investigation of Current Brands' Strategies for Meeting the Unmet Needs of People with Disabilities

Jin Su, Melanie Carrico, and Cadye Murphy, The University of North Carolina at Greensboro
Xiao Tong and Brian Taylor, The University of Alabama

Keywords: adaptive apparel, brand strategies, people with disabilities, market analysis

Introduction and Literature Review. The emergence of the adaptive apparel industry sector since 2009 demonstrates fashion focusing some attention on the clothing needs of people with disabilities (PWDs) (Esmail et al., 2022; Feng & Hui, 2023; Li et al., 2023). The global adaptive apparel market size has grown from $271.88 billion in 2019 to a projected $348.81 billion in 2024 (Statista, 2020). Considering that PWDs make up 26 percent of US citizens (CDC, 2023), the opportunity for the adaptive market is substantial. New niche brands and existing brands are entering the adaptive apparel space. Even with the growth, information regarding the adaptive apparel market is lacking. The ***purpose*** of this study is to gain a holistic understanding of the adaptive apparel sector by performing a market analysis. We investigate the market potential and identify potential gaps to enhance the industry's understanding of producing and marketing adaptive apparel products.

Method. A thorough investigation of the adaptive apparel industry sector was conducted, focusing on the current market landscape, adaptive apparel trends, and the market potential for the adaptive apparel industry. Existing adaptive apparel brands, retailers, and organizations were exhaustively surveyed via company websites, industry reports, trade publications, and recent news media. In sum, *44 brands, 8 multi-brand retailers, 9 organizations, and 3 designers* with adaptive apparel orientations were investigated in detail. This study implemented descriptive analysis, word cloud, and thematic analysis techniques to interpret and convey the findings.

Results. ***Macro trends*** potentially influencing the increased awareness of clothing for PWDs include the global increases in the aging population, increases in Autism diagnoses, smart textiles, and increased demand for diversity, equity, and inclusion (Bhattarai, 2021; Casey, 2020; Morales & Khattar, 2019; Nishimura, 2023). Most of the adaptive apparel brands surveyed are from US (n=27), followed by Canada (n=7), UK (n=5), and Australia (n=3). Our examination of brands shows that the adaptive ***apparel sector suffers from*** stale designs and features specific to advanced-age PWDs. The sector is fragmented, targeting audiences specific to a condition or a limitation versus finding innovative ways to optimize methods of personalized apparel production for varied PWD needs.

Until recently, ***brand and retailer first-movers*** dominated the adaptive apparel space, primarily focusing on the needs of the aging population. Some first-movers maintain market presence through brand recognition, affordability, and large-scale partnerships with nursing homes, such as Silverts and Buck and Buck, each promoting ease of self-dress and assisted-dress through design features (Buck and Buck, n.d.; Silverts, n.d.). They emphasize product attributes of affordability and comfort and communicate the benefits of dignity and self-confidence. Aside from the aging population, adaptive designs for young and middle-aged PWDs are gaining momentum, as evidenced by ***recent product line expansions of multinational brands and retailers***, such as Tommy Hilfiger and Target. Disability-specific clothing, such as paralysis or limb loss, is delineated on websites into categories. A discernible difference between the age groups is evident in marketing that appeals to utilitarian (i.e., aging consumers) versus hedonic (i.e., young adults) motivations.

Between 2009 and 2013, ***specialty brands catering to PWD needs*** outside the elderly demographic began to emerge, with brands such as IZ Adaptive, Adaptawear, Slick Chicks, and MagnaReady entering the competitive landscape. In the last five years, more specialty brands, such as Christina Stephens (Australia) and Liberare (US) entered the marketplace, with a common focus on achieving fashion and function in their products. Adaptive apparel brands maintained ***missions*** centered on accessible designs for diverse bodies/everybody; a balance between style and comfort and form and function; empowerment and self-expression through dress; and convenience and ease-of-dress to enhance PWD's daily lives.

A new emphasis on younger consumers living with disabilities has led to the ***creation of new apparel categories and products*** inspired and informed by the disability community. For example, Liberare, est. 2019, provides women with contemporary intimate wear and shapewear options with easy closures and trendy silhouettes (Liberare, n.d.). In the denimwear category, No Limbits offers easy-on, stylish silhouettes specially designed to accommodate prosthetics and seated wear needs (No Limbits, n.d.). In the activewear and athleisure space, Slick Chicks and IZ Adaptive exemplify fashion-centric, easy-on athleisure for younger women, while MagnaReady provides a variety of classic, tailored options for men and women of all ages (IZ Adaptive, n.d.; MagnaReady, n.d.; Slick Chicks, n.d.). In shoes, Nike, Friendly Shoes, and Kizik encompass innovation-driven, easy-on styles for men, women, and children (Nike, n.d.; Friendly Shoes, n.d.; Kizik, n.d.). While there are more options available to consumers of all ages and needs considerations, ***product assortment remains limited*** among specialty retailers. Price sensitivity is a pain point among PWDs, with increased production costs and retail prices hindering PWD's procurement of appropriate apparel that meets their needs. Contemporary specialty brands often utilize a premium pricing/promotional mix strategy to leverage their high-value products, compared with first mover brands that promote price accessibility and assortment. Promotional pricing, like Tommy Hilfiger's constant 40 to 60 percent off MSRP, places many premium brands within a similar price point to budget brands and retailers such as Silverts and Target (Bhattarai, 2021; Tommy Hilfiger, n.d.).

Children living with disabilities are faced with unmet clothing needs as they size out of baby clothing. Ease-of-dress alone does not meet the needs of PWD with sensory sensitivities to tags, textures, etc. While ***sizing*** appears to be inclusive (e.g., XXS to up to 7 XL), it is dictated by mass-market industry sizing and does not account for body diversity among PWD (i.e., short stature; individuals with Down Syndrome). Considering ***aesthetics***, approximately 70 percent of adaptive clothing is devoid of "graphics, stripes, spots, checks, floral, or other non-plain patterns" (Nishimura, 2023, para. 4).

While there is growth in adaptive apparel brands, ***synergistic organizational approaches*** to adaptive apparel remain scant. Runway of Dreams is a non-profit that has gained widespread notoriety for its inclusive runway shows, and it was integrated into New York Fashion Week in 2018 (Runway of Dreams, n.d.). Open Style Lab is another pioneer in design-oriented approaches to adaptive apparel, leading an ongoing collaborative design program with The New School, Parsons School of Design, and a tech-focused partnership with Massachusetts Institute of Technology IDC (Open Style Lab, n.d.). Tilting the Lens is a [for-profit] consulting firm that provides adaptive apparel centered approaches to luxury fashion brands like Gucci. Chamiah Dewey (Dewey Clothing), Becca McChalen-Tran (Chromat), and Keisha Greaves (Girls Chronically Rock) are adaptive apparel designers bringing forth innovative, fashion-forward designs and materials while closing the loop on the circular economy by promoting ethical and fair wage production (Dewey Clothing, n.d.; Chromat, n.d., Girls Chronically Rock, n.d.).

Conclusion. The findings indicate a salient market need for adaptive apparel advancement, evidenced by the low product availability relative to mainstream fashion options. The market potential for the adaptive apparel sector signifies an area of incredible opportunity for new entrants with innovation-based competitive advantages, as well as large, multi-brand retailers.

References

Bhattari, A. (2021, August 6). *No seams, buttons or tags: Retailers are rethinking back-to-school clothing for students with disabilities*. The Washington Post. https://tinyurl.com/3s7erknc

Buck and Buck. (n.d.). *Buck and Buck Advantage Adaptive Clothing for Seniors, Disabled & Elderly Care*. Retrieved from https://www.buckandbuck.com/advantage

Casey, C. (2020, March 19). Do your D&I efforts include people with disabilities? *Harvard Business Review*. https://hbr.org/2020/03/do-your-di-efforts-include-people-with-disabilities

Centers for Disease Control and Prevention (CDC). (2023). *Disability impacts all of us* [Infographic]. National Center on Birth Defects and Developmental Disabilities. https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html

Chromat. (n.d.) *About us*. Retrieved from https://chromat.co/pages/about-us

Dewey Clothing. (n.d.). *Our story*. Retrieved https://www.deweyclothing.com/pages/about-us

Feng, Q., & Hui, P. C. L. (2022). What are the factors that influence the adaptive market? An empirical study with wheelchair users in Hong Kong. *Journal of Fashion Marketing and Management*, *27*(3), 506-530.

Friendly Shoes. (n.d.). *About*. Retrieved from https://tinyurl.com/ym64dvnw

Girls Chronically Rock. *Keisha Greaves Bio*. Retrieved from https://girlschronicallyrock.com/pages/test

IZ Adaptive. (n.d.). *Adaptive clothing*. Retrieved from https://izadaptive.com

Kizik. (n.d.). *Our story*. Retrieved from https://kizik.com/pages/our-story

Li, M., Zhao, L., & Srinivas, S. (2023). It is about inclusion! Mining online reviews to understand the needs of adaptive clothing customers. *International Journal of Consumer Studies*, *47*(3), 1157-1172.

Liberare. (n.d.). *Our story*. Retrieved from https://liberare.co/pages/about-us

MagnaReady. (n.d.). *About us—Our story*. Retrieved from https://magnaready.com/pages/about-us

Morales, D., and Khattar, V. (2019, April). Drivers and innovations in the adaptive clothing market [Market report]. *PreScouter*. https://tinyurl.com/58prv27v

Nike. *Easy on*. Retrieved from https://www.nike.com/easyon
Nishimura, K. (2023, December 8). *Research shows adaptive apparel market underserved at Retail*. Yahoo! Life. https://tinyurl.com/y3zesv94
No Limbits. (n.d.). *About us*. Retrieved from https://no-limbits.com/pages/about-us
Open Style Lab. *OSL Academy*. Retrieved from https://www.openstylelab.org/services/osl-academy
Runway of Dreams (n.d.). *The foundation*. Retrieved from https://www.runwayofdreams.org/the-foundation
Silverts. (n.d.). *Silverts History – About us – Silverts*. Retrieved from https://www.silverts.com/history
Slick Chicks. (n.d.). *Our story*. Retrieved from https://slickchicksonline.com/pages/our-story
Statista. (2020, September 10). Global adaptive apparel market size from 2019 to 2024 (in billion U.S. dollars)* [Graph]. https://tinyurl.com/y2sp86jw
Tommy Hilfiger. (n.d.). *Shop Tommy Hilfiger Adaptive*. Retrieved from https://usa.tommy.com/en/tommy-adaptive

Note. This work is supported by the Higher Education Challenge Grants Program, [grant no. 2023-70003-38778], from the U.S. Department of Agriculture, National Institute of Food and Agriculture.