

INCLUSIVE DESIGN: RESOURCES FOR A SOCIAL T-SHIRT MODEL FOR PEOPLE WITH VISUAL IMPAIRMENT

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1 INTRODUÇÃO

This article is the result of the conclusion of the Innovation and Textile Materials discipline studied in the PPGModa UDESC master's program, taught by Professor Dulce Maria Holanda Maciel. The study focuses on project planning in the development of a dress shirt for visually impaired individuals. To achieve this, the context and universe of visually impaired individuals were sought to be understood. Thus, it is observed that designers need to be concerned with the inclusive participation of people with functional differences in society, which aligns with Universal Design.

The inclusion concept used for this research is based on the principles of universal design and inclusive design, as it is necessary when designing a solution to consider it to serve the largest number of users possible, that is, to think about universality. In the specific case of clothing for visually impaired people, specialized solutions and the message present in the garment must be realized in the structural form of clothing design, in the colors, in the tactile textures of the fabric, to allow for sensory experiences, and mainly in the information contained in the labels, such as writing in braille (PEREIRA, 2016).

It was also observed that the fashion industry does not seem to be concerned with serving the visually impaired public, which is evident in the planning and development of their products, as they do not present inclusive characteristics or resources. However, according to SBVC - Brazilian Retail and Consumption Society (2019), consumers with disabilities generate around R\$ 5.5 billion annually, yet a large part of the industry simply ignores this public. Also, according to SBVC (2019), among the most consumed goods by people with disabilities, electronics and home appliances are in first place, and clothing, accessories, and footwear are in second place in the ranking, with 73%.

Therefore, the objective of this research is to identify and define assistive resources that can be applied to a dress shirt to make this clothing item more inclusive for visually impaired people. Regarding the methodological procedures, this research is classified as basic and applied in nature, qualitative in its singularity, and descriptive in relation to its objectives. This research was developed from the combination of design methodologies, resulting in a hybrid methodology.

The design methodologies used for the development of this research were based on the design methodologies proposed by authors Baxter (2011), Lobach (2001), and Bonsiepe (1984), as well as the fashion methodology of Montemezzo (2003). Thus, the design criteria for the development of the research were listed.

2 DEVELOPMENT

According to the last census conducted by the Brazilian Institute of Geography

and Statistics (IBGE) in 2010, Brazil (BR) has approximately 6.5 million people with some form of visual impairment. This is a considerable number, as it represents about one-fifth of the Brazilian population, that is, 18.7% (IBGE, 2010). Data from the World Health Organization (WHO) indicate that around 39 million people are totally blind in the world, with 285 million having severe limitations, and that 1 to 2 million new cases of blindness arise every year (UN, 2013).

According to Grepí (2020), in a report published on the USP Journal website, studies conducted by researchers from USP indicate that by 2050 the forecast is for there to be around 61 million blind people worldwide, 474 million will have moderate to severe visual impairment, 360 million will have mild visual impairment, and 866 million will have uncorrected presbyopia. The studies were published by The Lancet Global Health. According to Silva (2017), blindness or total loss of vision can be acquired or congenital, or it can also be derived from various other problems.

The concepts of universal design and inclusive design must first be elucidated, as they are easily confused. Universal design, when applied to a project, aims to maximize its use, making it useful to as many people as possible, regardless of their physical and intellectual abilities. Thus, universal design does not aim to design specifically for people with disabilities, but rather to design with universality in mind (CRUZ, 2010). Therefore, designers need to apply universality in their creations in order to add significant quality to their product. From the perspective of inclusive design, this consists of putting people first, that is, designing specifically for people with disabilities. The evolution of inclusive design became relevant in several countries from the 1950s onwards with the “barrier-free” movement (CRUZ, 2010). Inclusive products should have wide applicability in situations of physical or psychological limitations, considering that the boundary between a diagnosed normal health state and a health problem is minimal.

According to Santos (2011), the body of a person with a disability generally undergoes alterations due to different forms of locomotion, with the body being the support for clothing and needing to present differentiated aspects to meet the needs of these consumers. Sousa (2023) considers that visually impaired individuals can be considered a normally forgotten segment of consumers. Schneider (2017) discusses the importance of retail enterprise managers dedicating efforts to training employees to deal with the different needs of people with disabilities.

For Bononi (2016, p. 51), “People with disabilities also need to express their identity, have access to fashion, learn how to dress appropriately, and feel like active members of society.” Therefore, based on the design methodologies of the authors presented earlier, a hybrid methodology was established with the aim of assisting the designer in creating and selecting elements of inclusive design to be applied to the shirt. The develo-

ped hybrid methodology aims to assist so that the process can be developed by following the proposed stages and actions.

3 CONCLUSION

With the data obtained, the context and concept of inclusive aspects were then worked on, and it was possible to list the assistive resources to plan a clothing product designed and planned for visually impaired people, thus working on inclusion in fashion. The result obtained shows that with the development of the hybrid design method, it was possible to outline a path in which the needs, demands, and desires of visually impaired people were identified, and the possibility of working on the inclusion of visually impaired people in fashion was also observed, as the professional, in his development process, is attentive to the needs of visually impaired people.

Therefore, it was possible to consider braille resources, which consist of identifying information about the product, in addition to this information being obtainable through QR codes for audio description about the product, and also relief resources that can be felt and interpreted through touch. For the market to serve this public and expand the consumer target audience of brands in economic terms, as well as social issues, in addition to promoting inclusion, promotes interaction with society on a broader level.

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