

## **BACHELOR THESIS ABSTRACT**

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### **Title:**

Development of an Online Catalog of Assistive Products Created by Occupational Therapists;  
Focus on Assistive Products to Improve Manipulation Hand Function in Individuals with  
Sensorimotor Hand Dysfunction

### **Abstract:**

Background:

Assistive products (AP) enable people with disability to perform daily activities independently. Occupational therapists in the Czech Republic can design and make AP, it is guided by decree no. 55/2011 Sb. The use of Do-It-Yourself (DIY) AP offers personalized, cost-effective solutions, tailored to the user's specific needs, with the potential to enhance accessibility and acceptance. There are many successful online communities sharing guides to make DIY AP like Makers Making Change, Printables, Thingiverse and more.

Goal formulation:

Creation and evaluation of an open-source online catalog featuring free guides for making AP that can be made by occupational therapists or their patients. Available guides for AP in catalog enhance the manipulation hand function in individuals with sensorimotor hand dysfunction. The evaluation of the catalog is conducted through 2 semi-structured interviews, involving an occupational therapist and IT professional.

Methodology:

Theoretical and practical aspects of the thesis involved a literature review, catalog development, and catalog evaluation by semi-structured interviews. Key databases and online resources were searched using specific keywords.

Results:

An online catalog, named ERGO Makers, has been developed featuring 59 guides for making AP. It can be found here: <https://kurzy.lf1.cuni.cz/ergo-makers/>. ISO 9999:2016 classification (with edits) has been used to categorize AP in the catalog. The evaluation done by semi

structured interviews provided important information on the quality of the catalog and gave valuable insights for future development.

**Conclusion:** The catalog provides a centralized resource in Czech language for DIY assistive technology guides for improving manipulation hand function and contributes to the accessibility of assistive solutions tailored to individual needs.

**Keywords:** Assistive Product, DIY (Do-It-Yourself), Online Communities, Occupational Therapy, Hand Function.