Digital Support for Autonomy – the DATA System

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DATA-SYSTEM

IT system

- the system has been up and running since February 2020
- publicly available since Autumn 2021
- in Hungarian only, needs registration

Research and development

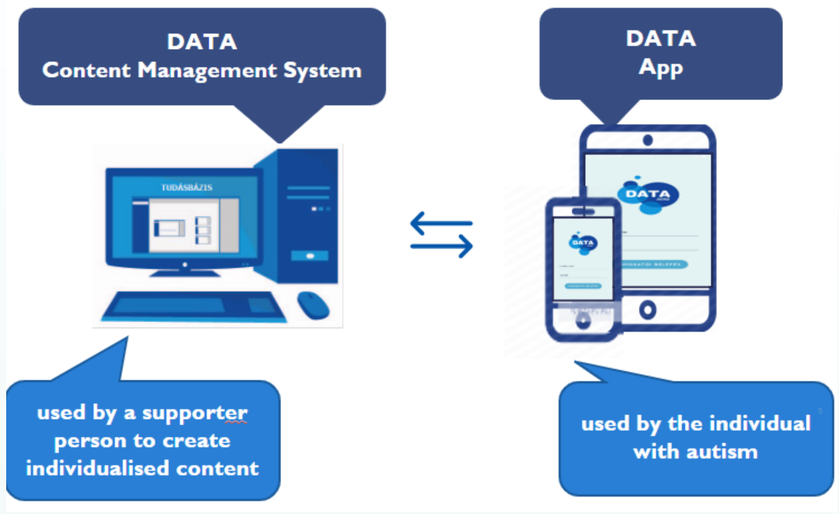
- primarily for supporting individuals on the autism spectrum
- monitoring effects of using the app, background services, methodologies

Training and support methodology

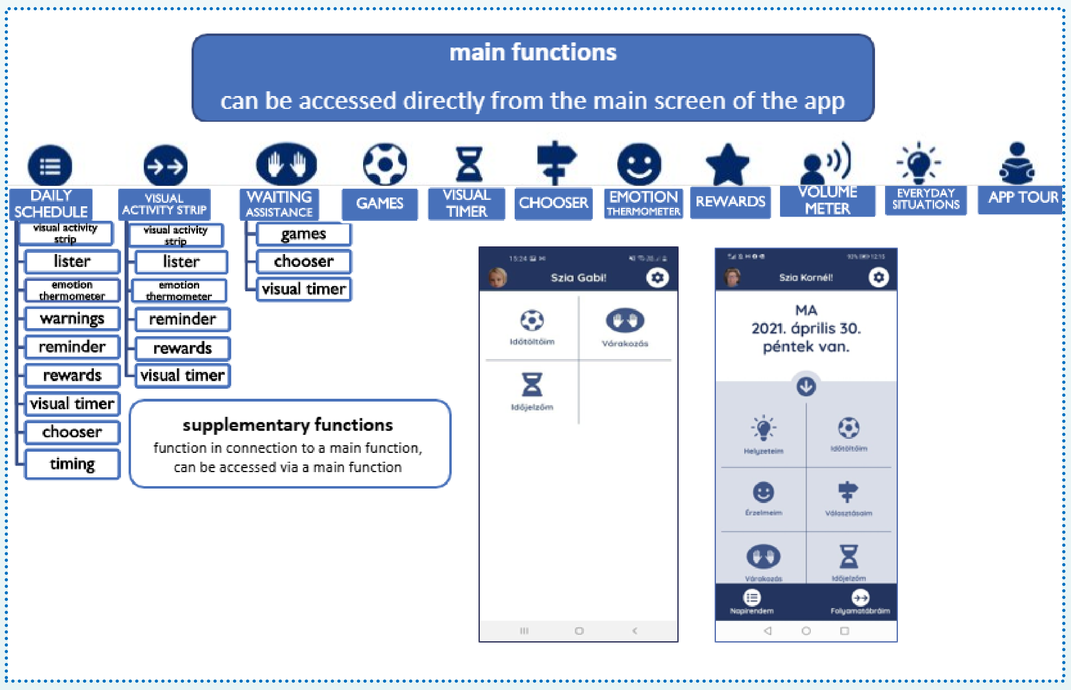
- implementation and application methodologies helping users, parents, other support partners and professionals using the system
- e-learning, training, helpdesk

The Digital Autonomy Support in the Autism Spectrum (DATA) system and services are designed to **support the daily living skills and autonomy of autistic people**. The system was developed in 2018-21 by a research and development consortium of the National Autism Society and our research team, funded by an EFOP grant from the European Union.

The DATA system was designed to **implement evidence-based comprehensive autism-specific educational methodologies**, with a focus on visual supports. We have also developed a number of services related to DATA to help users and their families; such as ready-to-use visual contents and the various manuals, videotutorials, training courses and a helpdesk service. The system provides ample scope for individualization through its many functions and tools, making it widely applicable across the autism spectrum, in a **broad range of age and ability profiles**.

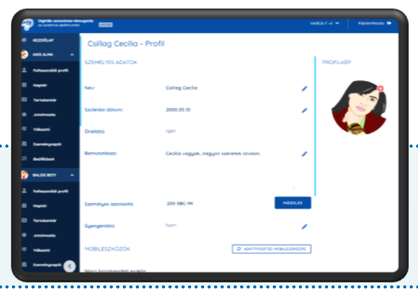


FUNCTIONS

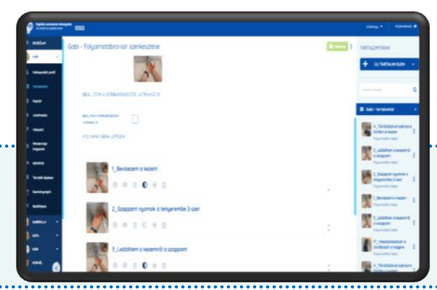


CONTENT MANAGEMENT SYSTEM

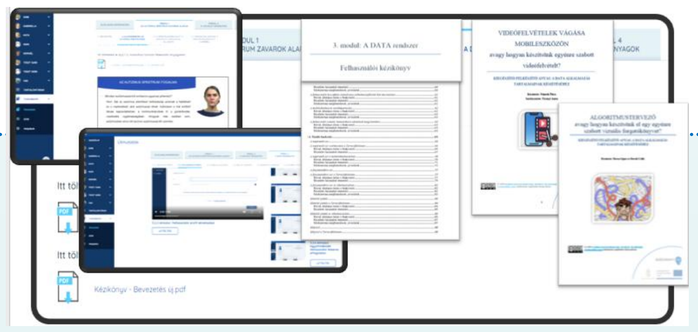
Creating profiles



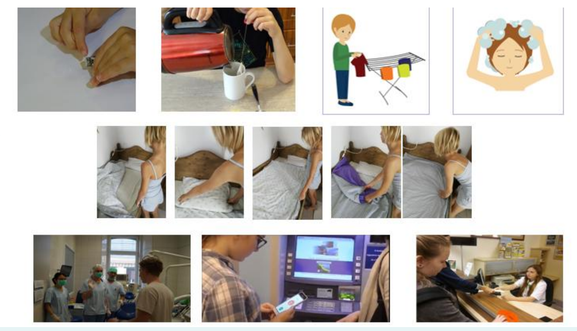
App settings, and editing different functions



Knowledge Base

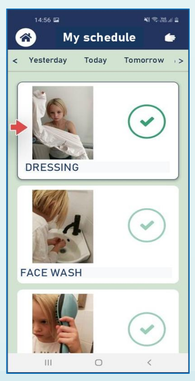


Content Stores

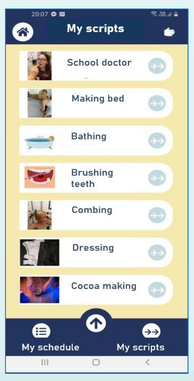


MOBILE APPLICATION -EXAMPLES

Schedule

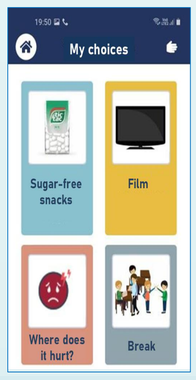


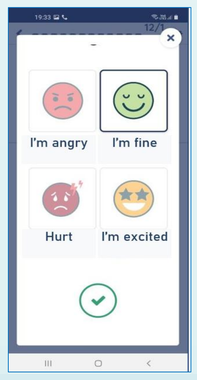
Waiting assistance



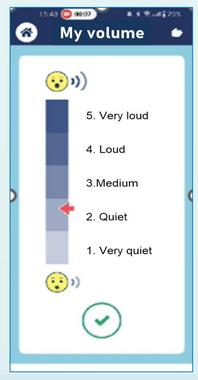
Visual timer

Emotion thermometer

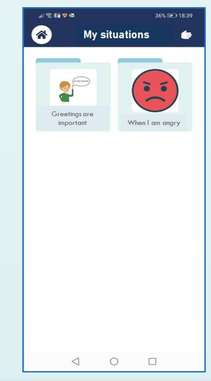


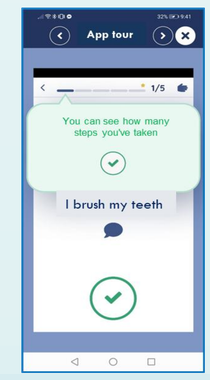


Speech volume meter



Everyday situations





Visual Activity Strip

Games

Chooser

Rewards

Everyday situations

UNIQUENESS

- wide set of available functions
- highly individualizable
- applicable on the entire autism spectrum
- encourages self-support
- content sharing functions
- collaborative content editing
- large sample content store
- a wide set of methodological and technical user guides
- a variety of services supporting learning and use (helpdesk, customer service points, etc.)
- relies on evidence-based methods, only

PERSPECTIVES & REFERENCES

- publishing results
- maintaining the system
- developing the system further
- international edition(s)

Gyori, M., & Billédi, K. (2019). *Atipikus diákok, segítő appok, tudományos evidenciák*. Budapest: ELTE BGGYK.

Gyori M., Csákvári J., Molnár M., Havasi Á., Varga F., Stefanik K. & Virányi A. (2018). Assessing Support Needs for Developing an App-Based Assistive System for Enhancing Independence in the Autism Spectrum: Results from a Mixed-Mode Study. In Miesenberger K. & Kouroupetroglou G. (szerk.), Computers Helping People with Special Needs: 16th International Conference, ICCHP 2018 Linz, Austria, July 11–13, 2018 Proceedings, Part I. (Lecture Notes in Computer Science; 10896.) (pp. 474-477). Springer

Havasi, Á., Bertók, C., Stefanik, K., & Győri, M. (2023). Hú, hát akkor ez működik?! A DATA-rendszer háttere, fejlesztése és funkciói. Gyógypedagógiai Szemle, 51(3), 258-275.

Havasi, Á., Őszi, Tné., Bertók, Cs., Janoch, M., Völgyesi-Molnár, M., Győri, M., Szekeres, Á., Németh, V., Stefanik, K. (2023). Mobillal a suliban? - Módszertani útmutató pedagógusok számára a DATA-rendszer alkalmazásáról integráló oktatási környezetben. Budapest: Eötvös Loránd Tudományegyetem Bárczi Gusztáv Gyógypedagógiai Kar.

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Research Group website: https://maszk.elte.hu/en

Eötvös Loránd University Barczi Gusztáv Faculty of Special Needs Education website: https://www.barczi.elte.hu/en/

DATA information website (English summary): https://data.aosz.hu/english-summary/

Short intro video with English subtitles: https://youtu.be/MHiB6ZCWOfg

DATA Content management system: https://app.data.aosz.hu

DATA app in the Android Play store: https://play.google.com/store/apps/details?id=hu.aosz.data.app

DATA app in the Apple App Store: https://apps.apple.com/hu/app/aosz-data/id1494308903?l=hu