



**IM-TWIN: from Intrinsic Motivations
to Transitional Wearable INTelligent
companions for autism spectrum disorder**
a European funded project

Scientific workshop 2
Deliverable 6.7



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Authors:	V. Sperati, Lisa Jacquey, F. Giocondo, M. Schembri

Acronyms of partners

CNR-ISTC	Consiglio Nazionale delle Ricerche, Istituto di Scienze e Tecnologie della Cognizione (Italy)
UU	Universiteit Utrecht (The Netherlands)
CRI	Centre de Recherches Interdisciplinaires (France)
LA SAPIENZA	Università degli Studi di Roma La Sapienza (Italy)
PLUX	Plux - Wireless Biosignals S.A. (Portugal)

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1. Overview of the deliverable

This deliverable provides information about the workshop called “[Assistive technologies for kids with special needs](https://aaate2023.eu/assistive-technologies-for-kids-with-special-needs/)”¹. The event took place at the 17th edition of the International Conference of the “[Association for the Advancement of Assistive Technology in Europe, AAATE](https://aaate2023.eu/)”², held from August 30 - September 1st 2023, in Paris, France, at the Conference Centre located in the [Campus Condorcet](https://www.campus-condorcet.fr/)³ (fig. 1).

2. Workshop overview

The workshop was organised by ISTC-CNR and the [Learning Planet Institute](https://www.learningplanetinstitute.org/en/) LPI⁴, and was held within the [Innovation Area](https://aaate2023.eu/call/innovation-area/)⁵ track: this was a dedicated session where participants (companies, industries, designers, laboratories, researchers) could present innovative products, prototypes, services and project results.



Figure 1, from left to right: logo of the AAATE conference; the Campus Condorcet; the conference entrance.

The session was attended by 16 people and lasted about 1 hour; during the workshop the researchers presented to the audience, through live demos, the 3 main technological outputs of the IM-TWIN project (fig. 2, 3):

- the *Transitional Wearable Companions* toys, *Panda PlusMe* and *Octopus X-8*, along with the control App;

¹ <https://aaate2023.eu/assistive-technologies-for-kids-with-special-needs/>

² <https://aaate2023.eu/>

³ <https://www.campus-condorcet.fr/>

⁴ Formerly CRI, <https://www.learningplanetinstitute.org/en/>

⁵ <https://aaate2023.eu/call/innovation-area/>

- the camera glasses;
- the sensorised t-shirt.



Figure 2: the IM-TWIN tools – namely the sensorised t-shirts, the interactive toys with the control App, the sensorised glasses – were available on a desk in front of the audience.

The audience was firstly introduced to the IM-TWIN project, including the research goals, the scientific results and the functioning of technology tools; then the attendees had the opportunity to try the interactive toys, while the usage of camera glasses and the sensorised t-shirt have been shown through videos⁶ and dedicated slides.

Feedback from attendees, obtained during the *Questions & Answers* time at the end of the demo, was positive: the participants appreciated both the TWC interactive toys, and the tools for data collection. In general, the integration of the different components in a single tool to support and monitor therapeutic activities in early treatment of children with Neurodevelopmental Disorders, NDD, was appreciated and evaluated as innovative. Interestingly, one participant, working in the field of NDD intervention, asked for information for a possible collaboration to use the proposed technology at his institution.

⁶ <https://im-twin.eu/video/>



Figure 3: snapshots of the workshop activity.

3. Conclusions and future developments

The described activity is part of the dissemination task. Similar disclosure activities will continue in the next months, to disseminate the project results.

History of changes

No.	Description
1	Version updated from 1 to 2 (February 2024)
2	<p>At the end of page 5, a new paragraph, reporting the feedback from attendees, was added:</p> <p><i>“Feedback from attendees, obtained during the Questions & Answers time at the end of the demo, was positive: the participants appreciated both the TWC interactive toys, and the tools for data collection. In general, the integration of the different components in a single tool to support and monitor therapeutic activities in early treatment of children with Neurodevelopmental Disorders, NDD, was appreciated and evaluated as innovative. Interestingly, one participant, working in the field of NDD intervention, asked for information for a possible collaboration to use the proposed technology at his institution“.</i></p>