



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

***Workshop for therapists and
rehabilitation centers 2***
Deliverable 6.9



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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

Deliverable 6.9 describes the two workshops for therapists, rehabilitation centres, and early childhood educators, organised by the CRI in collaboration with two partner organisations, a daycare centre, and a rehabilitation centre. The first workshop took place on May 26, 2023, at *La Maison de Louise et Ted*, a daycare centre. This workshop was primarily intended for early childhood professionals who care for children with Neuro-Developmental Disorders (NDD). The second workshop was held on October 24, 2023, at the Early Medical-Social Aid Center in Roubaix. The expected audience for this workshop included healthcare and education professionals (therapists, educators, doctors, speech therapists) specialising in the care of children with NDD.

2. Workshops

2.1 Workshop #1 - Early Childhood Educators

Workshop #1 was organised in collaboration with *La Maison de Louise et Ted*, a daycare centre located in Wasquehal, Hauts-de-France, France. This daycare centre welcomes children with typical development (TD) as well as children with Neuro-Developmental Disorders (NDD). It has been a partner of the IM-Twin project since January 2022.



Figure 1: View of *La Maison de Louise et Ted*, the daycare centre where Workshop #1 was organised (Source: *La Voix du Nord*).

Workshop #1 took place on Friday, May 16, 2023, from 5:00 PM to 7:00 PM. It was open to professionals of the welcoming daycare centre as well as other professionals working with similar groups of children (i.e., TD and NDD children). The workshop brought together **16 participants** with diverse profiles, including facility directors, early childhood educators, and childcare assistants.

Workshop #1 program:

- **5:00 PM - 5:15 PM:** Introduction and Welcome
- **5:15 PM - 6:00 PM:** Presentation of PlusMe by Florie Clarisse + Discussion
- **6:00 PM - 6:45 PM:** Presentation of the T-shirts by Marine Peru and Chloé Payet + Discussion
- **6:45 PM - 7:00 PM:** General Discussion

2.2 Workshop #2 - Therapists and Rehabilitation Centres

Workshop #2 was organised in collaboration with the Early Medical-Social Aid Center of Roubaix (*Centre Aide Médico-Sociale Précoce de Roubaix*), a rehabilitation centre located in Roubaix, Hauts-de-France, France. This centre welcomes children with Neuro-Developmental Disorders (NDD) as well as children with various disabilities. It has been a partner of the IM-Twin project since September 2022.



Figure 2:View of the rehabilitation centre where Workshop #2 was organised (Source: *Centre Hospitalier de Roubaix*)

Workshop #2 took place on Tuesday, May 24, 2023, from 11:00 AM to 1:00 PM. It was open to professionals from the rehabilitation centre of Roubaix as well as other therapists and professionals working in rehabilitation centres. The workshop brought together **23 participants** with diverse backgrounds, including facility directors, paediatricians, speech therapists, specialised educators, psychologists, and more.

Workshop #2 program:

- **11:00 AM - 11:15 AM:** General Presentation of the Im-Twin Project by Lisa Jacquey
- **11:15 AM - 11:45 AM:** Presentation of PlusMe by Florie Clarisse + Discussion
- **11:45 AM - 12:15 PM:** Presentation of the T-shirts and Camera-Glasses by Lisa Jacquey + Discussion
- **12:15 PM - 1:00 PM:** General Discussion + Questionnaires on the Im-Twin Project

2.3 Main points of interest brought forward at the workshops

During the two workshops, different topics were discussed, reflecting the viewpoints of education and health professionals on the tools developed by the IM-TWIN project:

- **Cost:** one of the issues raised by several participants was that of cost. The participants indicated that the budgets of their facilities were very low (a few tens or hundreds of euros for the purchase of equipment). As a result, many seemed concerned about the potential cost (not mentioned initially in the presentations) of the devices. These comments indicate that particular vigilance is required on this point.
- **The specific interest of the IM-Twin devices:** a second point raised was that of the interest of using the devices developed within the IM-Twin project rather than other diagnostic or therapeutic devices already in existence. Discussion with the speakers provided an understanding of this specific interest, but this needs to be explained in greater detail when the tools are being marketed.
- **Transferability to other disorders:** a third point concerned the possibility of using certain devices (in this case, the T-shirts) in the context of other developmental disorders, and more specifically with severely disabled children who have very limited means of communication. This comment is an encouraging demonstration of the therapists' interest in the tools.
- **Usability:** A final issue raised was the ease of use of the devices by non-expert practitioners, as well as the robustness of the tools. This is a point to bear in mind if the tools are made available to the general public in the future.

3. Conclusions and Future Developments

The two workshops conducted as part of Deliverable 6.9 served to disseminate the results of the IM-Twin project to a specific audience of educators and healthcare professionals working with children with Neuro-Developmental Disorders. In addition to this deliverable, CRI will organise an open day for families on Tuesday, November 14, as part of an event focused on autism for families.