

Online training to improve communicative skills in autistic adolescents

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		<input type="checkbox"/> Protocol
Registration date 03/10/2025	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 07/05/2026	Condition category Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Autism spectrum disorder (ASD) is a condition that affects how people communicate and interact with others. Many autistic teenagers find it difficult to use language and other ways of expressing themselves, like gestures or facial expressions, in social situations. These skills are known as pragmatic communication. Although these skills are important, there are very few training programs that help autistic teenagers improve them. Even fewer are available online, which would make them easier to access. This study aims to test an online version of a training program called Cognitive Pragmatic Treatment, or @CPT, to see if it helps autistic teenagers improve their communication skills and whether it is practical to use.

Who can participate?

Teenagers aged 12 to 18 who have been diagnosed with autism by a qualified clinician, can speak Italian as their first language, and have basic language skills can take part in the study.

What does the study involve?

Participants are divided into two groups. One group receives the @CPT training online in small groups, with 15 weekly sessions lasting two hours each. The other group continues with their usual face-to-face therapy. Researchers assess participants before the training, after it ends, and again three months later to see if there are any changes in their communication skills.

What are the possible benefits and risks of participating?

Taking part in the study may help improve communication skills in social situations. There are no known major risks, but as with any training program, some participants might find certain tasks challenging or tiring.

Where is the study run from?

University of Turin (Italy)

When is the study starting and how long is it expected to run for?

January 2022 to May 2026.

Who is funding the study?
The study is funded by Fondazione CRT (Italy)

Who is the main contact?
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Additional identifiers**Study information****Scientific Title**

Effectiveness of Cognitive Pragmatic Treatment in telehealth (@CPT) compared to Treatment-as-Usual (TAU) in improving pragmatic communication skills in autistic adolescents

Acronym

@CPT

Study objectives

1. To present the adapted version of the Cognitive Pragmatic Treatment for adolescents (A-CPT) for telepractice use (@CPT)
2. To evaluate the effectiveness of @CPT and the stability of pragmatic improvements at three-month follow-up
3. To rule out spontaneous improvement by comparing the @CPT group with a control group receiving treatment as usual (TAU)
4. To assess the specificity of @CPT by evaluating cognitive and ToM skills, expecting no changes in these domains

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 24/01/2023, Bioethics Committee of the University of Turin (Via Bogino, 9, Turin, 10123, Italy; +39 670 4394; staff.cba@unito.it), ref: 0059806

Study design

Interventional randomized parallel trial

Primary study design

Interventional

Study type(s)

Efficacy, Treatment

Health condition(s) or problem(s) studied

Communicative-pragmatic difficulties in adolescents on the Autism Spectrum Disorder (ASD).

Interventions

Interventional study with two groups: an experimental group received the Cognitive Pragmatic Treatment adapted for telepractice (@CPT), delivered in 15 group sessions (2 hours each, once a week) via videoconferencing platforms over approximately three months, while a control group received Treatment-as-Usual (TAU) in face-to-face clinical rehabilitation centers. Assessments were conducted at pre-, post-, and three-month follow-up.

Intervention Type

Behavioural

Primary outcome(s)

Pragmatic-communication ability is measured using the equivalent forms of the Assessment Battery for Communication (ABaCo) at baseline (pre-training), immediately after the intervention (post-training), and at three-month follow-up.

Key secondary outcome(s)

A range of cognitive abilities (i.e., planning, cognitive flexibility, memory, attention, expressive vocabulary and language comprehension) is assessed at baseline and post-treatment using subtests from the BVN 12–18 battery (Gugliotta et al., 2009) together with Theory of Mind (ToM) tasks

Completion date

01/05/2026

Eligibility

Key inclusion criteria

1. Diagnosis of verbally fluent ASD certified by qualified clinicians using the DSM-5 guidelines
2. Age between 12-18 years
3. Native Italian speakers
4. Basic language abilities assessed by the language comprehension subtask of the BVN 12-18, namely the Token Test

Participant type(s)

Patient, Population

Healthy volunteers allowed

No

Age group

Mixed

Lower age limit

12 years

Upper age limit

18 years

Sex

All

Total final enrolment

0

Key exclusion criteria

1. Previous history of brain injury or neurological disorder
2. Concurrent participation in Applied Behavior Analysis (ABA) or other communicative rehabilitation programs

Date of first enrolment

01/02/2023

Date of final enrolment

01/02/2025

Locations

Countries of recruitment

Italy

Study participating centre

Centro di Riabilitazione Ferrero

Via Edmondo de Amicis, 16, Alba CN

Alba

Italy

12051

Study participating centre

Centro Autismo e Sindrome di Asperger ASL CN1

Via San Rocchetto 99.

Mondovì

Italy

12084

Sponsor information

Organisation

University of Turin

ROR

<https://ror.org/048tbm396>

Funder(s)

Funder type

Charity

Funder Name

Fondazione CRT

Alternative Name(s)

CRT Foundation

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Italy

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to privacy or ethical restrictions; however, data will be available from the corresponding author (ilaria.gabbatore@unito.it) on reasonable request.

IPD sharing plan summary

Available on request