

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The comparison of “Cognitive Orientation to daily Occupational Performance (CO-OP)” with Current Treatment Approach (CTA) on motivation and participation of 8-12 years old children with cerebral palsy

#### Protocol summary

##### Study aim

The comparison of (CO-OP)” with current treatment approach (CTA) on motivation and participation

##### Design

Clinical, Randomized, Tripple-blind trial with two parallel group

##### Settings and conduct

consent form will obtain from parents. children who eligible are randomly assigned to CO-OP and CTA groups. participant choose their three treatment goals based on COPM. pediatric volitional questionnaire in children are administered by an unaware therapist through video recording pre/post-test and follow-up. On the Pediatric motivation" (PMOT) is completed by the child in sessions 1, 3, 7, 12 during intervention. "Dimensions of mastery questionnaire(DMQ), "Life habit questionnaire" (LIFE\_H) GAS and COPM will be filled in pre/post test and follow-up. " ,

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: age 8 and 12 years of age a; diagnosis of cerebral palsy that is determined by neurologist; level 1- 3 on the Gross Motor Function Classification Scale (GMFCS); level 1- 3 on The Manual Ability Classification System (MACS); normal intelligence that is determined by Raven test; normal or corrected to normal hearing and vision; sufficient language ability Exclusion criteria: dissuasion of parents and child ; child had previously received a cognitive treatment.

##### Intervention groups

CO-OP group: Children choose three goals based on COPM and with the approach of CO-OP", acquire skills, learn general problem-solving strategies (goal, planning, implementation, review and identification of strategies specific to the CO-OP). This study will be presented in 45 to 1 hour sessions twice a week for 12. CTA : 45- to 1-hour sessions will be offered twice a week for 12

sessions.

##### Main outcome variables

Primary outcomes: Participation, motivation during rehabilitation, Mastery motivation to master, Volition  
Secondary Outcomes: Satisfaction and Performance  
Score of COPM, Goal Attainment Scale(GAS)

#### General information

##### Reason for update

The results of the pilot study showed that the evaluation of the second stage (sixth session) is indeterminate due to interfere with intervention programs for performing second activity goals (we had three goals, each goal approximately required 4 sessions of intervention, the sixth session is one of the goals in the middle of which the results could not be analyzed) Therefore, the evaluation of the second stage was removed and replaced with a follow-up evaluation two months after the last session. In order to assess the achievement of children's goals in the study, with a top-down approach and a client-centered approach, the Assessment of Goal Attainment Scale (GAS) and the Canadian occupational Performance Measurement(COPM) were included to the study as secondary outcomes. The main reasons for not updating on time are: 1- Training of the therapist "Cognitive to daily work performance (CO\_OP)" which lasted about four months, 2- The need to run a pilot, the results of which lasted six months, 3- Consequences of the Covid 19 pandemic.4: Edit and summarize the abstract due to word count limitation

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20120910010806N5**

Registration date: **2018-02-14, 1396/11/25**

Registration timing: **prospective**

Last update: **2021-02-24, 1399/12/06**  
Update count: **1**  
**Registration date**  
2018-02-14, 1396/11/25

**Registrant information**  
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**Recruitment status**  
**Recruitment complete**  
**Funding source**

**Expected recruitment start date**  
2018-02-12, 1396/11/23  
**Expected recruitment end date**  
2018-06-21, 1397/03/31  
**Actual recruitment start date**  
2018-12-22, 1397/10/01  
**Actual recruitment end date**  
2020-01-20, 1398/10/30  
**Trial completion date**  
2020-01-30, 1398/11/10

**Scientific title**  
The comparison of "Cognitive Orientation to daily Occupational Performance (CO-OP)" with Current Treatment Approach (CTA) on motivation and participation of 8-12 years old children with cerebral palsy

**Public title**  
The effect of "Cognitive Orientation to daily Occupational Performance (CO-OP)" on motivation and participation of 8-12 years old children with cerebral palsy

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Age between 8 and 12 years at the time of sampling  
Diagnosis of cerebral palsy that is determined by a neurologist Level 1, 2, or 3 on the Gross Motor Function Classification Scale (GMFCS) Level 1,2 or 3 on The Manual Ability Classification System (MACS) Normal intelligence Normal or near to normal in hearing and vision Sufficient language ability to communicate with the therapist and be understood during treatment  
**Exclusion criteria:**  
Dissuasion of parents in making response to questions of measurements or bringing students to the intervention sessions  
Dissuasion of students in making response to questions of measurements or coming to the intervention sessions  
Child had previously received, or is presently receiving, a cognitive treatment

**Age**

From **8 years** old to **12 years** old  
**Gender**  
Both  
**Phase**  
N/A  
**Groups that have been masked**

- Participant
- Outcome assessor
- Data analyser

**Sample size**  
Target sample size: **9**  
Actual sample size reached: **9**  
**Randomization (investigator's opinion)**  
Randomized  
**Randomization description**  
Participants will select by convenience sampling. Randomizing participants in CO-OP & CTA groups will be done with randomization digits table by a blind person to the study.  
**Blinding (investigator's opinion)**  
Triple blinded  
**Blinding description**  
Participants will not be aware of the group that they are randomized. In this study the assessments will be performed by parent, the child and trained assessor who are blind to the study. The data will be entered in SPSS and statistically analyzed by a blind statistician.  
**Placebo**  
Not used  
**Assignment**  
Parallel  
**Other design features**  
Cognitive Orientation to Daily Occupational Performance (CO-OP): is a well-explicated top-down, problem solving approach that has been shown to support skill acquisition and a client-centered approach. The CO-OP approach differs from traditional bottom-up interventions in that it is situated in a learning paradigm and uses cognitive strategies to facilitate skill acquisition at the ICF activity rather than structure and function level, and draw on motor learning principles to help children discover how to perform everyday activities. The main objective of CO-OP is skill acquisition, the learning of global problem solving strategy (goal, plan, do, check) and the identification of domain-specific strategies to support generalization to the other environment and transfer to other motor-based tasks. CO-OP can be used to enable the achievement of occupation-based goals while simultaneously promoting self-efficacy. "9 children with inclusion criteria will enter the CO-OP group. Each sample will receive the intervention two days a week and 2 hours in every day. Each sample will receive 12 hours of treatment. Current Treatment Approach (CTA) for children with cerebral palsy: this treatment typically focuses on remediation or bottom-up approaches. Many of these therapeutic approaches to managing cerebral palsy are based on neuromaturation models of motor development which focus on improving motor movement (bottom-up approaches) and do not emphasize performance in everyday activities. Other approaches

implementing these bottom-up strategies, such as casting and positioning techniques, can be effective in achieving in anatomical goals such as increase range of motion and enhancing postural tone. Little evidence exists that achieving these anatomical goals translates into improved task performance or motor-based skill acquisition among children with cp.

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

کمیته اخلاق دانشگاه علوم پزشکی و خدمات درمانی ایران

##### Street address

iran univercity of medical science- shahid Hemmat highway- Tehran- Iran

##### City

tehran

##### Province

Tehran

##### Postal code

1449614535

#### Approval date

2018-01-18, 1396/10/28

#### Ethics committee reference number

IR.IUMS.REC1396.9511355001

## Health conditions studied

### 1

#### Description of health condition studied

Cerebral Palsy (CP)

#### ICD-10 code

G80

#### ICD-10 code description

Cerebral palsy

## Primary outcomes

### 1

#### Description

participation

#### Timepoint

pretest , post test and follow-up (two months after last session)

#### Method of measurement

Life habit questionnaire(LIFE\_H) for 5-13 years children with cerebral palsy

### 2

#### Description

Motivation during therapy

#### Timepoint

sessions 1, 3,7,11 and 12

#### Method of measurement

The Pediatric motivation scale for children rehabilitation

### 3

#### Description

Mastery motivation

#### Timepoint

pretest , post test and follow-up (two months after last session)

#### Method of measurement

Dimensions of mastery questionnaire (DMQ) The DMQ parent proxy-report

### 4

#### Description

Volition

#### Timepoint

pretest , post test and follow-up (two months after last session)

#### Method of measurement

Pediatric volitional questionnaire (PVQ)

## Secondary outcomes

### 1

#### Description

Goal achievement

#### Timepoint

Pretest, post test and follow-up

#### Method of measurement

Goal Attainment scale (GAS)

### 2

#### Description

Performance and satisfaction scores of child-chosen goal

#### Timepoint

Pretest, post test and follow-up

#### Method of measurement

Canadian Occupational Performance Measurement (COPM)

## Intervention groups

### 1

#### Description

Intervention group: Cognitive orientation to daily occupational performance (CO-OP): is a well-explicated top-down, problem solving approach that has been shown to support skill acquisition and a client-centered approach. The CO-OP approach differ from traditional bottom-up interventions in that it is situated in a learning paradigm and use cognitive strategies to facilitate skill acquisition at the ICF activity rather than structure and function level, and draw on motor learning principle to help children discover how to perform everyday activities. The main objective of CO-OP are skill

acquisition, the learning of global problem solving strategy (goal, plan, do, check) and the identification of domain-specific strategies to support generalization to the other environment and transfer to other motor-based tasks. CO-OP can be used to enable the achievement of occupation-based goal while simultaneously promoting self-efficacy. In this study participant will choose three treatment goals by use of Canadian Occupational Performance Model (COPM). Primary sessions of CO-OP include to review the child's "daily activity log", setting goals and teaching general strategies. Middle sessions include facilitating the learning and use of domain specific strategy and family education. In the final sessions, the supportive role of therapist is reduced and the child is prepared for the transfer of general and specific strategies to other tasks.

### Category

Rehabilitation

## 2

### Description

Control group: Current treatment approach (CTA) Current approach for children with cerebral palsy: this treatment typically focus on remediation or bottom-up approaches. Many of this therapeutic approaches to managing cerebral palsy are based on neuromaturational models of motor development which focus on improving motor movement (bottom-up approaches) and do not emphasize performance in every day activities. Other approaches implementing these bottom-up strategies, such as casting and positioning techniques, can be effective in achieving in anatomical goals such as increase range of motion and enhancing postural tone. Little evidence exists that achieving these anatomical goals translates into improved task performance or motor-based skill acquisition among children with cp. 9 children between age 8-12 will receive twelve 45-minute sessions of intervention on average twice per week.

### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

sourosh school (for physical disabilities)

##### Full name of responsible person

Mr saeid reisi

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9th Boostan ave / Pasdaran Blv

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tehran

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## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Iran University of Medical Sciences

##### Full name of responsible person

Dr. malahat akbarfahimi

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Occupational Therapy department- School of Rehabilitation Sciences- Madadkaran alley- Shah-Nazari street- Madar square- Mirdamad avenue

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#### Grant name

Research deputy of Iran university of medical sciences

#### Grant code / Reference number

#### Is the source of funding the same sponsor organization/entity?

Yes

#### Title of funding source

Iran University of Medical Sciences

#### Proportion provided by this source

100

#### Public or private sector

Public

#### Domestic or foreign origin

Domestic

#### Category of foreign source of funding

empty

#### Country of origin

#### Type of organization providing the funding

Academic

## Person responsible for general inquiries

#### Contact

##### Name of organization / entity

Iran University of Medical Sciences

##### Full name of responsible person

Zahra Poorzamani Dehkordi

##### Position

master candidate of Occupational Therapy

##### Latest degree

Bachelor

##### Other areas of specialty/work

Occupational Therapy

##### Street address

Occupational Therapy department- School of Rehabilitation Sciences- Madadkaran alley- Shah-Nazari street- Madar square- Mirdamad avenue

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## Person responsible for scientific inquiries

**Contact****Name of organization / entity**

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**Position**

PhD in neuroscience- Faculty of Iran University of Medical Sciences

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Neuroscience

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**Position**

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**Latest degree**

Bachelor

**Other areas of specialty/work**

Occupational Therapy

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## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is a plan to make this available

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**

Article published

**When the data will become available and for how long**

March 2019

**To whom data/document is available**

The researcher and occupational therapists

**Under which criteria data/document could be used**

Other research, critics, check and clinical usage

**From where data/document is obtainable**

First person in article

**What processes are involved for a request to access data/document**

Send request by email

**Comments**