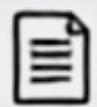


THE EFFECTIVENESS OF GROUP COGNITIVE BEHAVIORAL THERAPY (CBT) IN IMPROVING QUALITY OF LIFE AMONG INDIVIDUALS WITH METHAMPHETAMINE USE DISORDER



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METHAMPHETAMINE USE DISORDER AFFECTS MORE THAN SUBSTANCE USE

Its impact extends across multiple dimensions of a person's life.



**PHYSICAL
HEALTH**



**PSYCHOLOGICAL
WELL-BEING**



**SOCIAL
FUNCTIONING**



**QUALITY
OF LIFE**



PROBLEM STATEMENT

01



No approved pharmacological treatment is currently available for methamphetamine use disorder.

02



Psychosocial interventions, particularly Group CBT, are widely used to support recovery and improve quality of life.

03



Evidence on the effectiveness of Group CBT in improving quality of life remains limited.

WHAT DID THE STUDY EXAMINE?

Group CBT was evaluated across four key outcomes.



QUALITY OF LIFE

WHOQOL-BREF



**READINESS TO
CHANGE**

URICA



**DEPRESSIVE
SYMPTOMS**

PHQ-9



**GENERAL
PSYCHOPATHOLOGY**

SRQ-20

STUDY SETTING & PARTICIPANTS

Where the study was conducted and who was included.



WHERE & WHEN

Substance Use Rehabilitation Unit
Dr. Radjiman Wediodiningrat Hospital
Lawang, East Java



JAN – MAR 2025



WHO 18–59 YEARS

Adults with methamphetamine use disorder undergoing rehabilitation.



SAMPLE

Patients who met the predefined inclusion criteria.

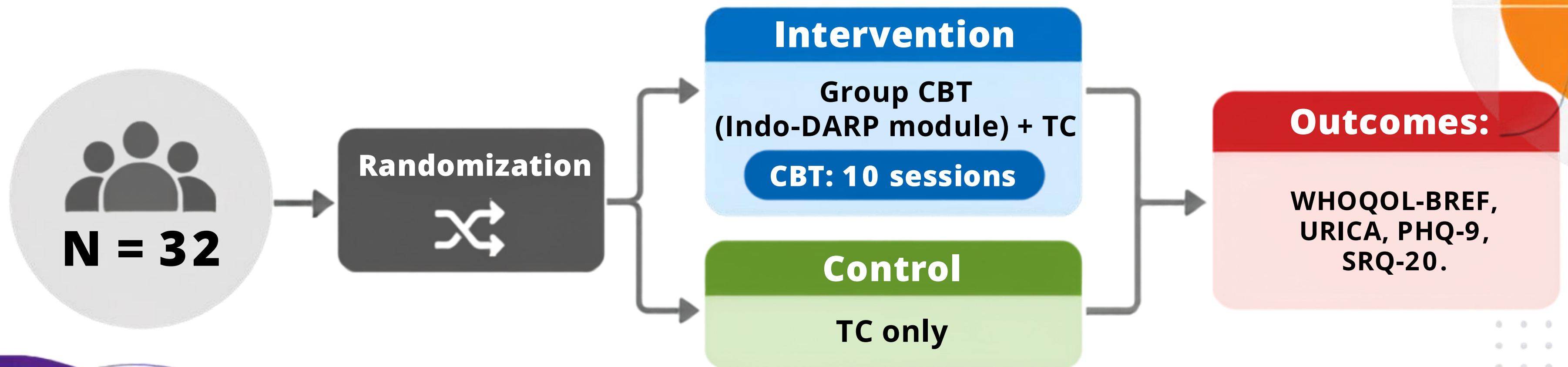


SAMPLING

Purposive sampling based on predefined inclusion criteria.

HOW WAS THE **STUDY** DESIGNED?

Single-blind randomized controlled trial



WHO WAS ELIGIBLE TO PARTICIPATE?

Eligibility Criteria



INCLUSION CRITERIA



18–59 years



Methamphetamine use disorder
as the primary substance



Duration $\geq$ 1 year



Preparation stage on URICA



Written informed consent



EXCLUSION CRITERIA



Currently intoxicated



Psychotic symptoms impairing
thought processes



Intellectual disability

No Significant Baseline Differences Were Observed

Across the characteristics presented

● Group I / CBT+TC ● Group II / TC



AGE

18–29 years*

Group I / CBT+TC

13 | 81.25%

Group II / TC

9 | 56.25%

p = 0.199



EDUCATION

Junior High School*

6 | 37.50%

7 | 43.80%

Senior High School*

7 | 43.80%

6 | 37.50%

p = 0.707



OCCUPATION

Employed*

Group I / CBT+TC

14 | 87.50%

Group II / TC

12 | 75.00%

p = 0.654



MARITAL STATUS

Unmarried / Single*

Group I / CBT+TC

11 | 68.75%

Group II / TC

11 | 68.75%

p = 1.00



INCOME

<2 Million*

Group I / CBT+TC

10 | 62.50%

Group II / TC

9 | 56.25%

p = 0.591



DURATION OF USE

1–<3 years*

Group I / CBT+TC

10 | 62.50%

Group II / TC

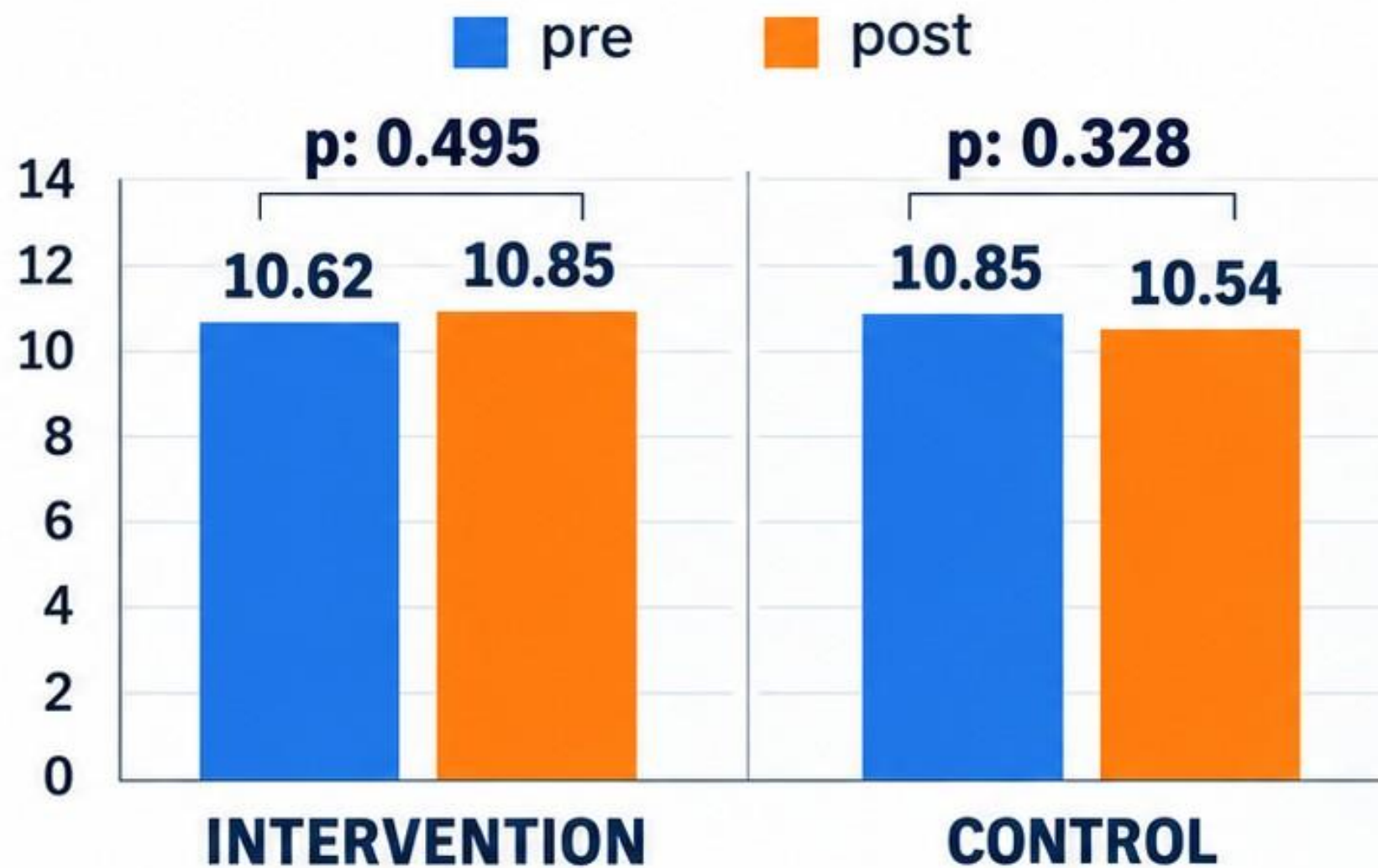
7 | 43.75%

p = 0.312

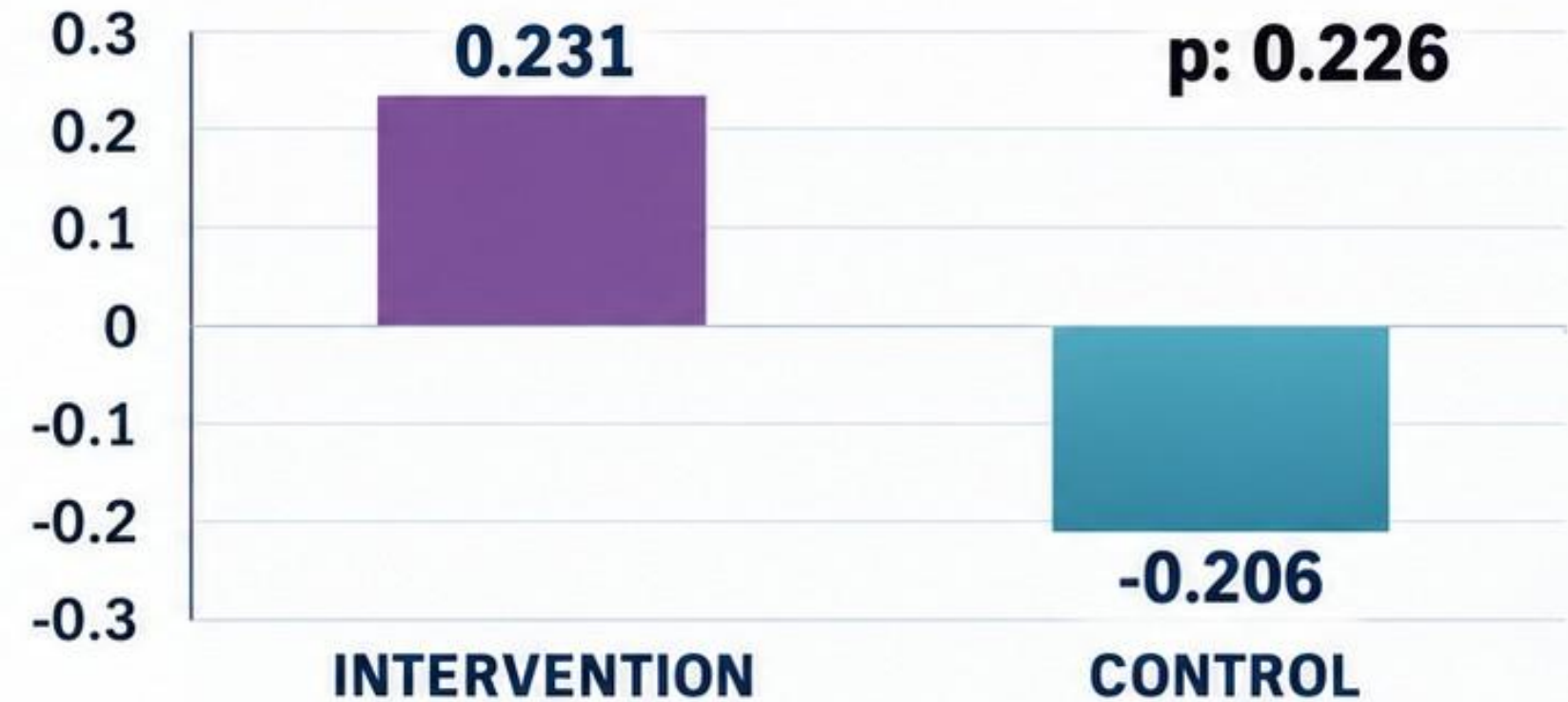
* Category with the highest number of research subjects.
Significance threshold: $p < 0.05$

URICA

AVERAGE URICA



AVERAGE Δ URICA

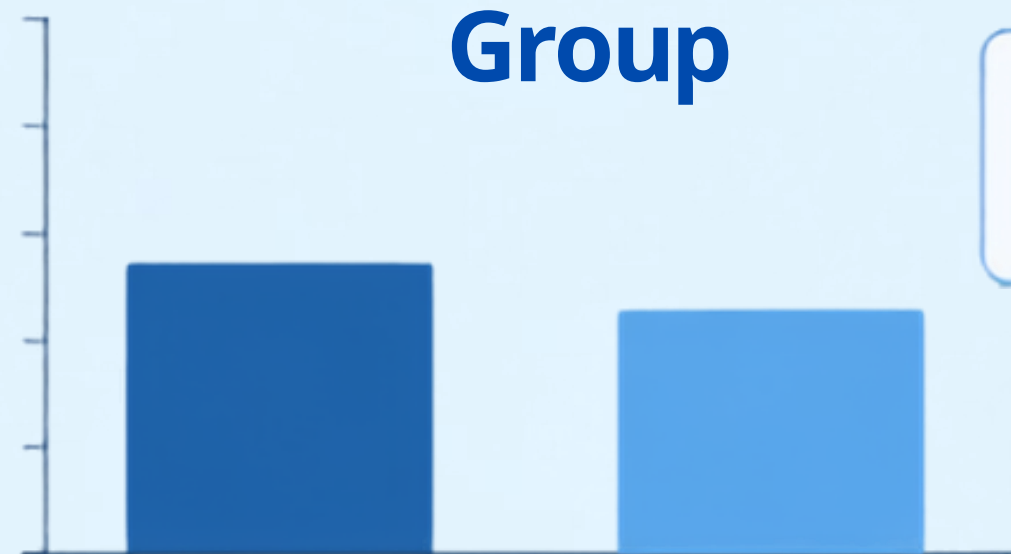


- No significant change in URICA scores was observed in either the intervention or control group.
- Most participants were already in the preparation stage, which may have limited the potential for further improvement in readiness to change.

DEPRESSIVE SYMPTOMS (PHQ-9)

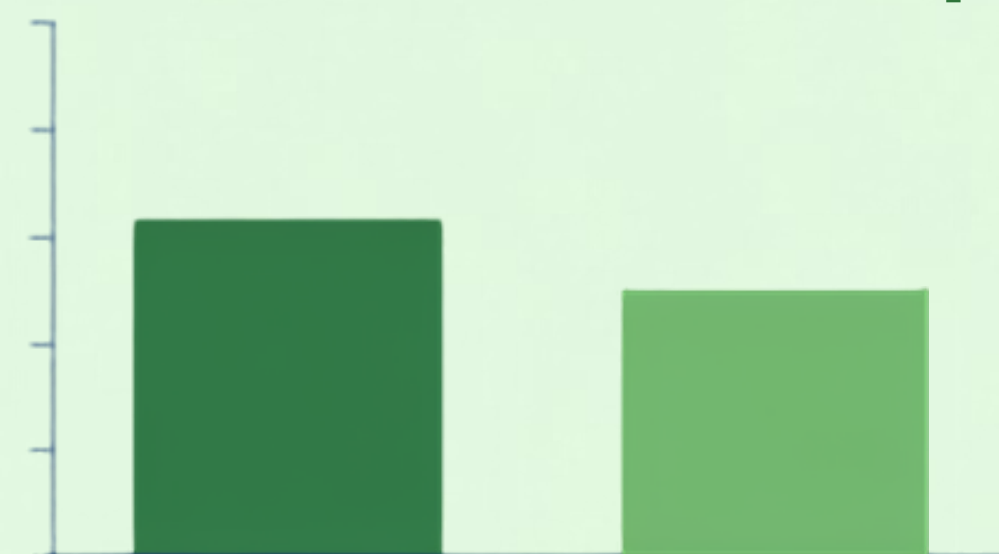
No significant changes were observed

Intervention Group



Within-group
p = 0.404

Control Group



Within-group
p = 0.110

Average PHQ-9

Intervention
0.81

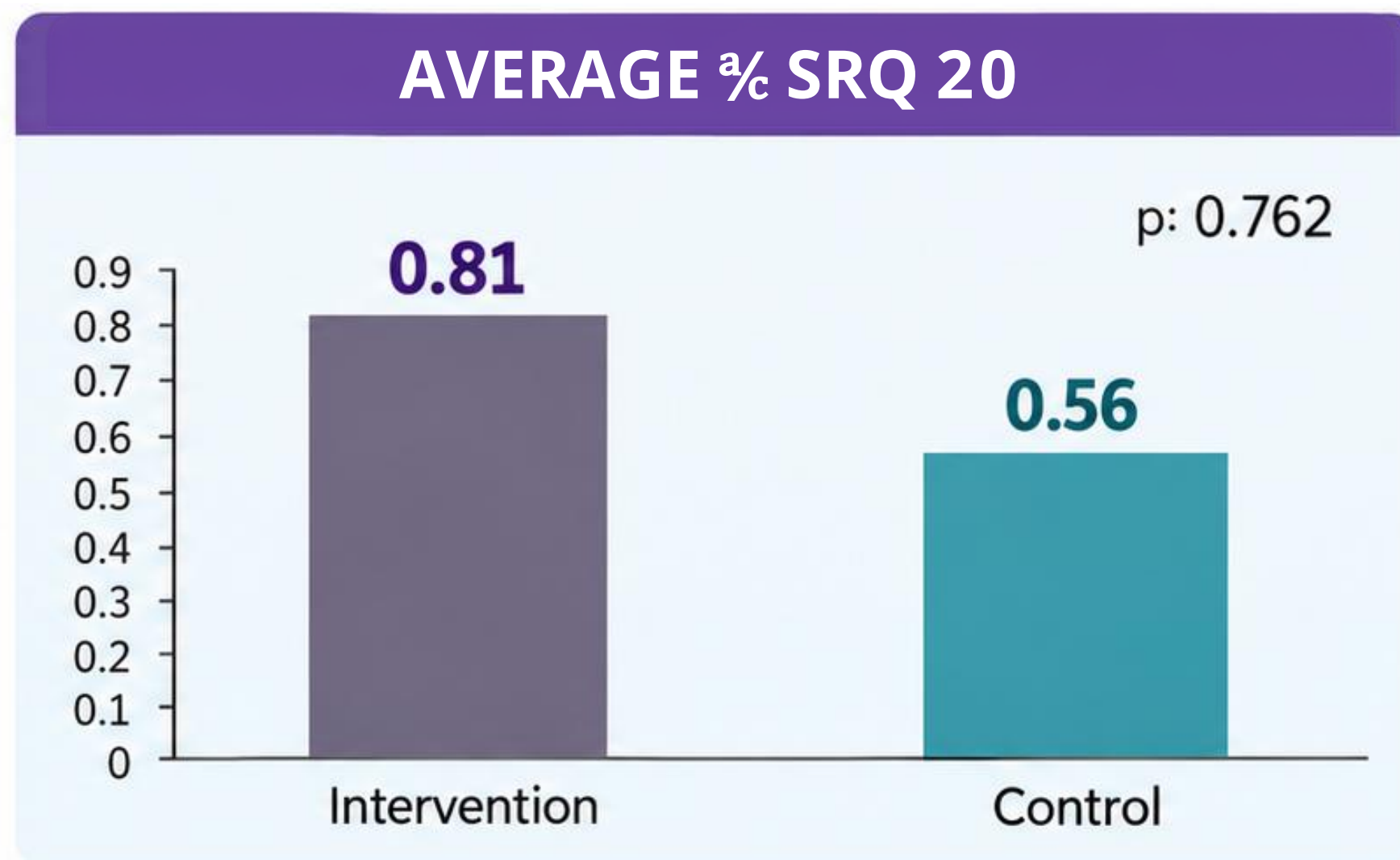
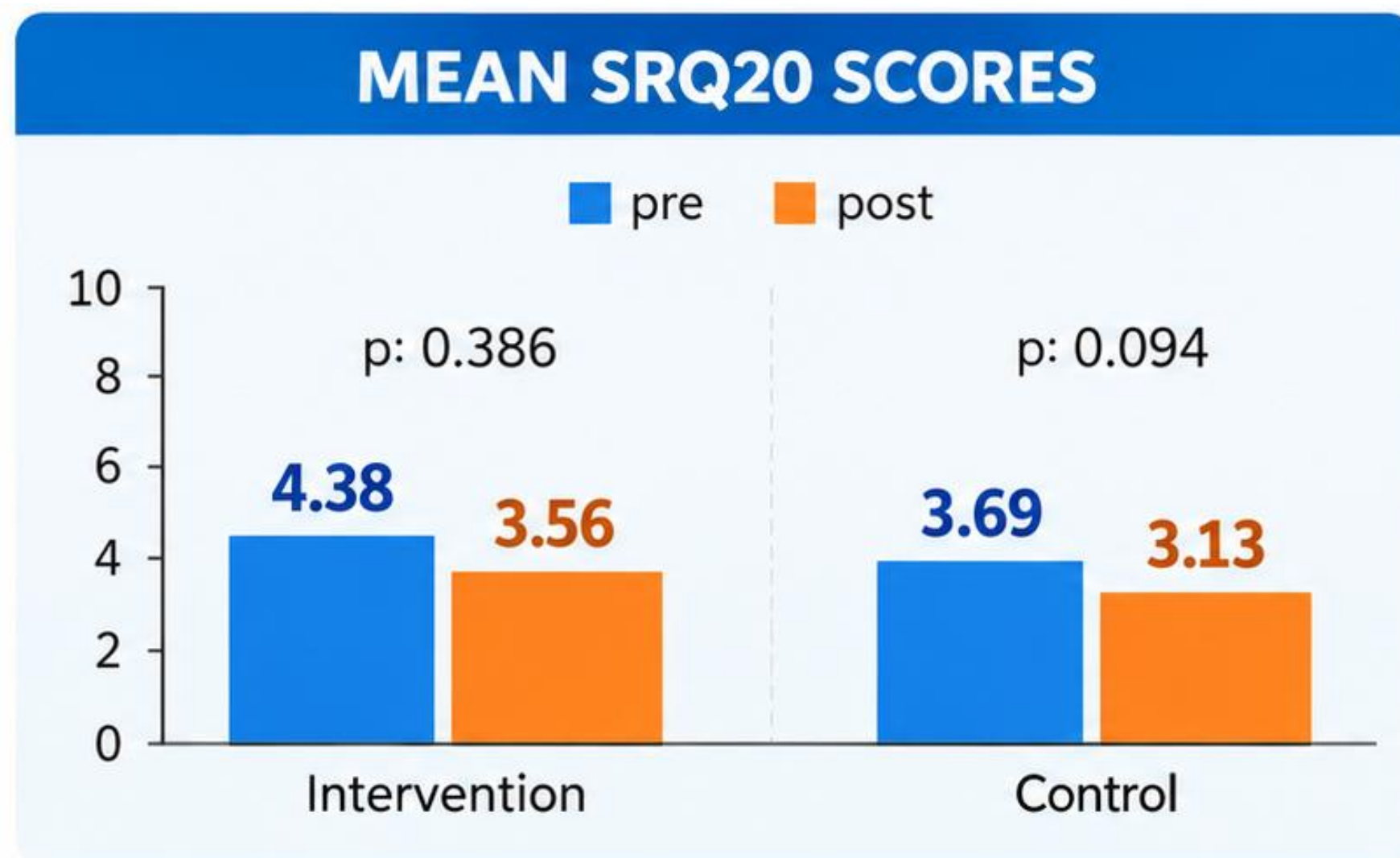
Control
1.31

Between-group
p = 0.724

- No significant changes in PHQ-9 scores were observed before and after the intervention or between groups.
- The intervention did not produce a significant reduction in depressive symptoms under the conditions of this study.

PSYCHOPATHOLOGY (SRQ-20)

No significant improvement was observed



1

No significant improvement in SRQ-20 scores was observed following the intervention.

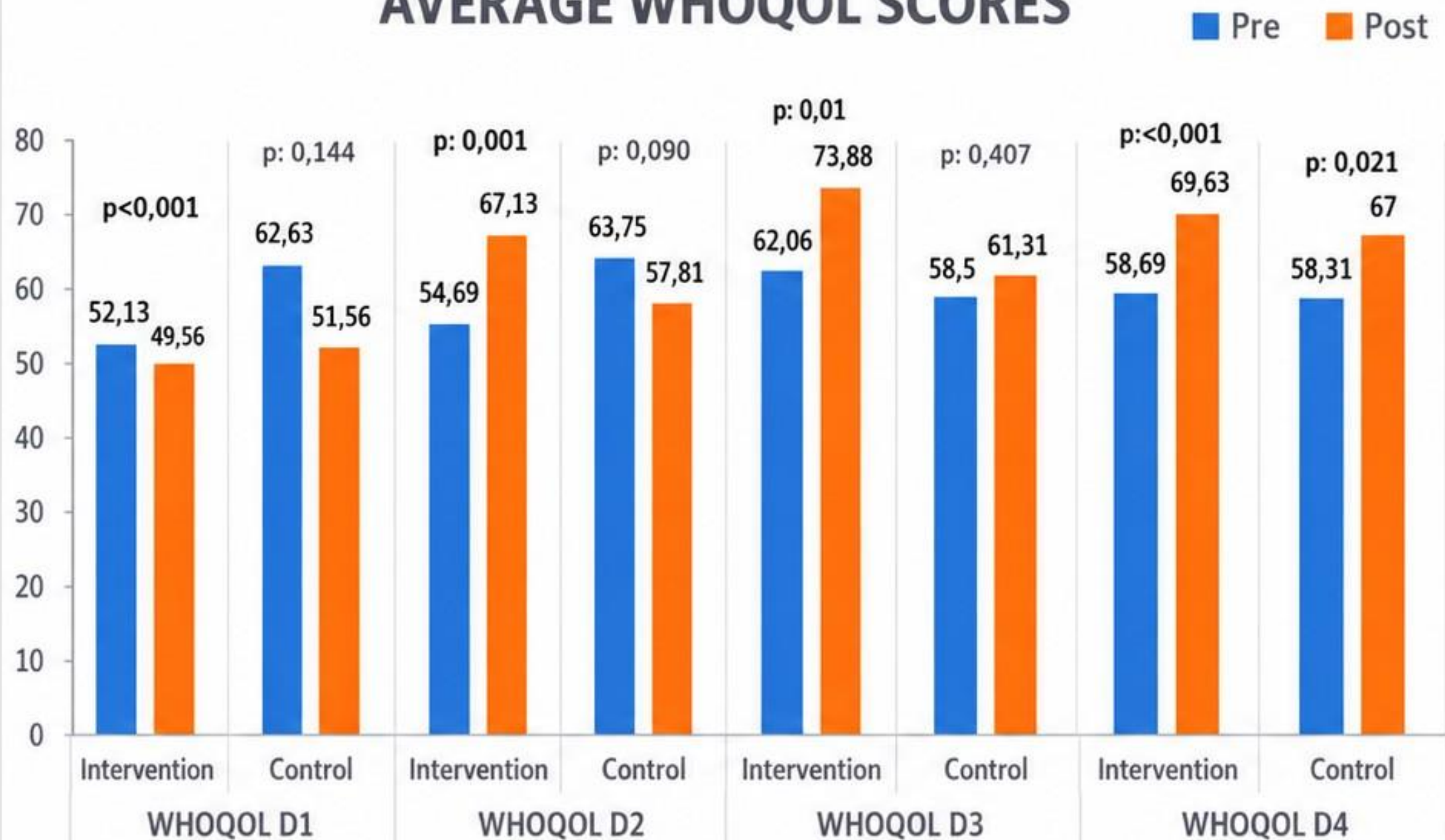
2

The complex nature of psychopathology in methamphetamine use disorder likely requires long-term multimodal treatment, combining psychological, pharmacological, and social interventions.

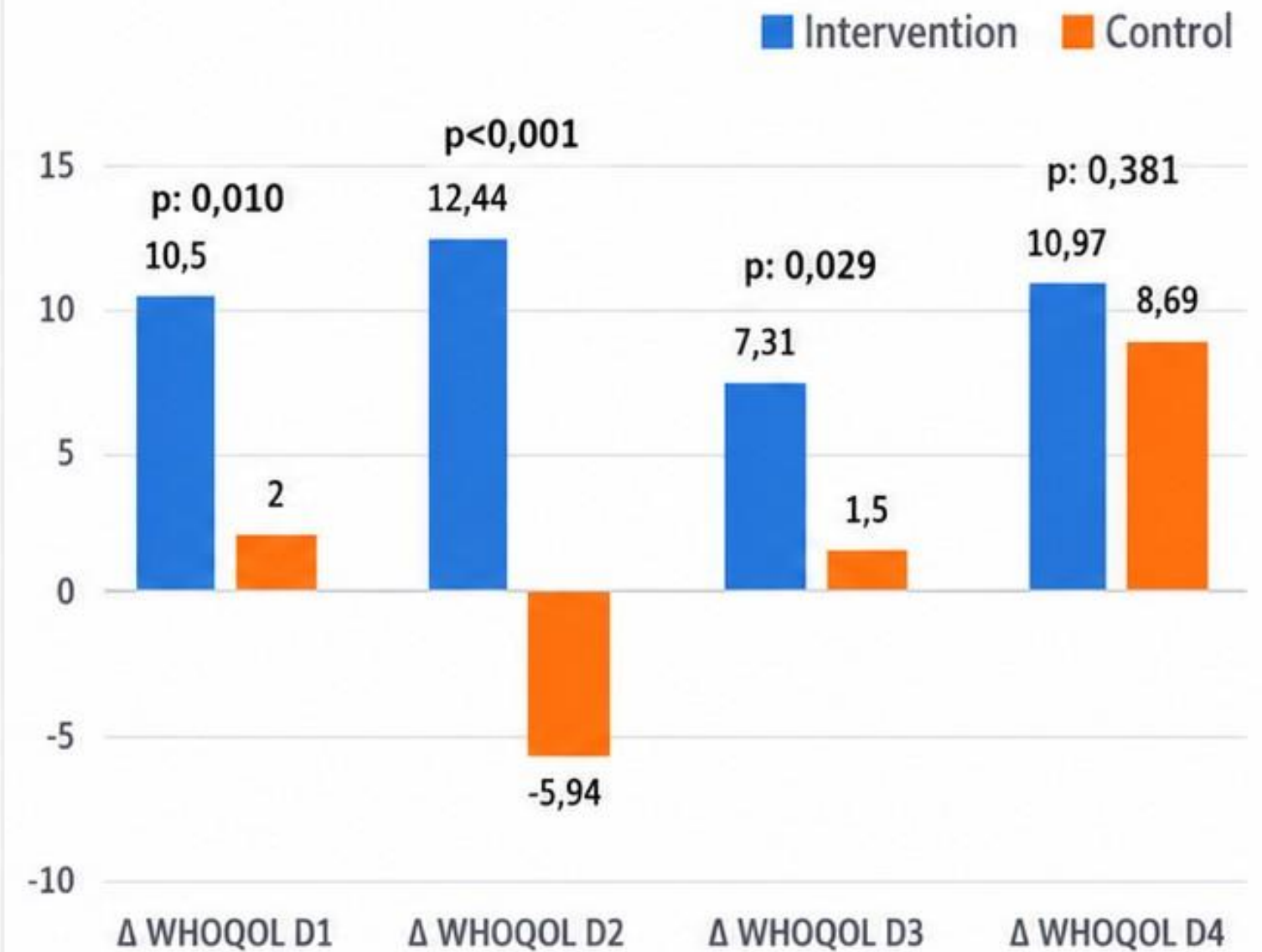
WHOQOL-BREF

Change in Quality of Life Scores

AVERAGE WHOQOL SCORES



AVERAGE Δ WHOQOL



WHOQOL-BREF

- Group CBT significantly improved the physical, psychological, and social domains of quality of life.
- No significant effects were observed on readiness to change, depressive symptoms, or general psychopathology.
- CBT improves quality of life through cognitive restructuring, behavioral modification, and enhanced coping skills.
- The environmental domain improved in both groups, with no significant between-group difference.
- The improvement in the environmental domain was likely attributable to the shared protected hospital environment, where both groups experienced similar environmental conditions during inpatient treatment.

STUDY LIMITATIONS

- Short CBT duration may have limited effects on psychological outcomes.
- Blinding was difficult in a psychological intervention.
- Self-report measures may have introduced reporting bias.
- Participants were relatively stable at baseline, with homogeneous methamphetamine use histories.
- Interventions were not tailored to addiction severity.
- The prevalence of F1 9.8 diagnosis may have influenced treatment response.
- The structured and protected hospital environment may have affected outcomes, particularly the environmental quality-of-life domain.

CONCLUSION



No Significant Improvement Was Observed In:

- Readiness to change (URICA)
- Depressive symptoms (PHQ-9)
- General psychopathology (SRQ-20)

Group CBT Significantly Improved:

- Physical quality of life
- Psychological quality of life
- Social quality of life
- Compared with the control group.

- Environmental quality of life improved in both groups, with no significant between-group difference.
 - The improvement in the environmental domain was likely related to the shared protected hospital rehabilitation environment.
 - Overall, group CBT is an effective intervention for improving quality of life in individuals with methamphetamine use disorder, although its effects on psychopathological outcomes remain limited.
- 



RECOMMENDATIONS

- Extend the duration of CBT to better address psychological outcomes, including :
 - Depression
 - Negative emotions
 - Readiness to change
- Conduct larger, multicenter studies to evaluate long-term effectiveness.
- Tailor interventions according to addiction severity and individualized treatment plans.
- Integrate group CBT and others Psychosocial intervention with pharmacotherapy as part of a comprehensive rehabilitation program.





THANK YOU

Questions & Discussion

