

A Theory-Guided Dual-task Intervention for Community-Dwelling Older Adults with Mild Cognitive Impairment

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WHY THIS STUDY?

MCI can impair the ability to manage cognitive and motor demands at the same time, a function required for walking, conversation and many daily activities.

Dual-task programs vary widely
GAP and often overlook adherence and long-term behavior maintenance.

AIM

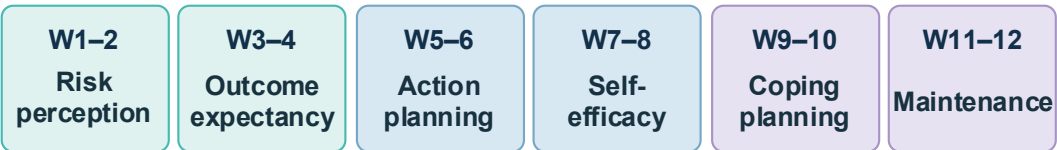
To evaluate the feasibility and preliminary effects of a health action process approach-based dual-task intervention (HAPA-DTI) for community-dwelling older adults with MCI.

SETTING & PARTICIPANTS

- Single-center pilot, non-randomized controlled trial in Tiantongyuan North Community, Beijing
- Sample: 72 participants (36 per group)
- Age 65–80 years; MoCA 19–25; ADL ≥60; community residence ≥6 months
- Recruitment embedded in community health examinations: AD-8 screen, then MoCA assessment

INTERVENTION MODEL

12 weeks · 2 sessions/week · 24 sessions



HAPA behavioral support converts intention into sustained action



STUDY TIMELINE



OUTCOMES

PRIMARY

Cognitive-motor dual-task performance

10-m walk + serial subtraction; dual-task cost

Secondary outcomes

- Global cognition (MoCA)
- Physical performance (SPPB) and grip strength
- Frailty status
- Self-efficacy and HAPA behavioral determinants

Feasibility & safety

- Recruitment and retention
- Session adherence
- Adverse events

ANALYSIS

Intention-to-treat analysis using generalized estimating equations to test group, time, and group-by-time effects, with covariate adjustment as needed.