

Supplementary Material

Comorbid anxiety, loneliness, and chronic pain as predictors of intervention outcomes for subclinical depressive symptoms in older adults: evidence from a large community-based study in Hong Kong

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S1. Overview of the adapted cognitive-behavioural therapy sessions of older adults in the JoyAge project

Low-intensity (6 sessions, 2 hours each)	High-intensity (8 sessions, 2 hours each)
1. Introduction to CBT and the group, mood check Ice-break, build relationships, and establish group rules; Introduce CBT goals, facilitate goal identification, practise mood-checks <i>Homework: Mood check (encourage ≥ 3 times during the week)</i>	1. Introduction to CBT and the group, mood check Ice-break, build relationships, and establish group rules; Introduce CBT goals, facilitate goal identification, practise mood-checks <i>Homework: Mood check (encourage ≥ 3 times during the week)</i>
2. How much do you know about emotions? Learn about common emotional reactions and their functions; Enhance awareness of bodily reactions amid stress and negative mood; Practise progressive muscle relaxation and breathing <i>Homework: Mood check, stress reduction activities at least once and progressive muscle relaxation and breathing at least once (behavioural activation)</i>	2. How much do you know about emotions? Learn about common emotional reactions and their functions; Enhance awareness of bodily reactions amid stress and negative mood; Practise progressive muscle relaxation and breathing <i>Homework: Mood check, stress reduction activities at least once and progressive muscle relaxation and breathing at least once (behavioural activation)</i>
3. Stress management Identify common causes and sources of stress, responses; Introduce stress management methods; Main components of CBT (cognition, emotion, behaviour, bodily reactions); Learn about symptoms of depression and their risk factors <i>Homework: Mood check, stress reduction activities at least once (behavioural activation)</i>	3. Stress management Identify common causes and sources of stress, responses; Introduce stress management methods; Main components of CBT (cognition, emotion, behaviour, bodily reactions) <i>Homework: Mood check, stress reduction activities at least once (behavioural activation)</i>
4. From "thoughts" to "emotions" Relationships between events and activities, thoughts, and emotions; Common thinking "traps", their impact on emotions, and facilitate awareness; Practise gratitude and positive thinking style <i>Homework: Mood check, identify ≥ 1 negative/positive event and its relationship with behaviours, physiological reactions, thoughts, and mood, daily gratitude diary</i>	4. From "thoughts" to "emotions" (1) Relationships between events and activities, thoughts, and emotions; Common thinking "traps", their impact on emotions, and facilitate awareness <i>Homework: Mood check, identify ≥ 1 negative/positive event and its relationship with behaviours, physiological reactions, thoughts, and mood</i>
5. New mindset, new lifestyle Identify own thinking traps, explore the role of negative cognitions, and personal coping methods; Practise questioning negative thoughts, build helpful thoughts (cognitive restructuring), and behaviours to improve mood (behavioural activation) <i>Homework: Mood check, identify own coping strategies</i>	5. From "thoughts" to "emotions" (2) Learn to be aware of one's own thinking "traps"; Learn about symptoms of depression and their risk factors; Set own activities for relieving negative emotions; Learning to engage in behaviours to modify mood <i>Homework: Mood check, tracking of mood-enhancing behaviours and recording their mood</i>
6. Start afresh Review CBT content, sharing of individual changes; Build personal tools to prevent depressive symptoms and design individual goals	6. Gratitude Be aware of the importance and relevance of gratitude; Develop the capability to develop and express gratitude; Aware of the relevance of gratitude in positive thoughts and mood <i>Homework: Mood check, identify ≥ 1 negative/positive event and its relationship with behaviours, physiological reactions, thoughts, and mood, daily gratitude diary</i>
–	7. New mindset, new lifestyle Identify own thinking traps, explore the role of negative cognitions, and personal coping methods; Practise questioning negative thoughts, build helpful thoughts (cognitive restructuring), and behaviours to improve mood (behavioural activation) <i>Homework: Mood check, identify own coping strategies</i>
–	8. Start afresh Review CBT content, and sharing of individual changes; Build personal tools to prevent depressive symptoms and design individual goals