Mindfulness (2025) 16:2303–2314
https://doi.org/10.1007/s12671-025-02626-4

ORIGINAL PAPER

Enhancing Whole-Person Care Through Mindfulness: Qualitative Insights from Patients with Parkinson's Disease

Jojo Yan Yan Kwok[1,2] · Charis Ann Lai[1] · Wilfred Wing Fung Sin[1] · Lily Man Lee Chan[1] · Yuki Yuk Shum[1] · Edmond Pui Hang Choi[1] · Jung Jae Lee[1] · Kris Yuet Wan Lok[1] · Shirley Yin Yu Pang[3] · Man Auyeung[4] · Samuel Yeung-shan Wong[5] · Rainbow Tin Hung Ho[2,6]

Accepted: 17 June 2025 / Published online: 5 July 2025

Abstract

Objectives Mindfulness has emerged as a promising mental health and wellness practice, but perceptions and experiences regarding its use for chronic illness care have not been well elucidated. This study explored the perceptions and experiences of people living with Parkinson's disease on using mindfulness techniques for rehabilitation.

Method This is a qualitative descriptive study with thematic analysis. Sixty-one Chinese people with Parkinson's disease, participating in a community-based mindfulness rehabilitation program, completed individual semi-structured interviews.

Results Three themes emerged: (1) reshaping illness experience through embodiment, (2) cultivating a sense of community through mindful engagement, and (3) fostering lasting mindfulness impact. Participants viewed mindfulness as transformative, offering psychosocial and spiritual benefits beyond physical relief. Group dynamics, mindful interactions, and culturally relevant affirmations were crucial factors in motivating participants in mindful engagement. Challenges in experiential learning highlighted the need for tailored support and resources for sustained mindfulness practice.

Conclusions The findings emphasize the transformative potential of mindfulness in empowering self-care practices through a whole-person approach. Integrating mindfulness into gerontological care is crucial to optimize holistic wellness, particularly for people with Parkinson's disease. Efforts should focus on personalizing disease-specific mindfulness techniques, expanding mind–body experiences beyond goal-driven practice, and fostering a supportive environment for routine integration.

Keywords Mindfulness · Meditation · Yoga · Parkinson's disease · Qualitative research · Rehabilitation · Mind–body · Chronic illness

Parkinson's disease (PD), the second most common neurodegenerative disorder, affects approximately 10 million people worldwide (Savica et al., 2018). Characterized by motor symptoms—resting tremor, rigidity, bradykinesia, and postural instability—and non-motor symptoms, including anxiety, depression, apathy, and cognitive decline, PD presents significant psychosocial challenges due to its unpredictable trajectory and fluctuating "on–off" symptoms tied to medication efficacy. Approximately 40–50% of PD patients experience clinically significant mental health issues, which exacerbate functional disability, accelerate physical and cognitive decline, and reduce quality of life (QOL) and high care dependency (Auyeung et al., 2012). These challenges are linked to a restricted attentional focus on threat-related cues, while acceptance-based coping is associated with improved stress management and health outcomes (Susan & Lizabeth, 2005).

In recent decades, mindfulness-based programs have emerged as a popular complementary healthcare practice for stress management and whole-person care (i.e., holistic care addressing physical, psychological, and spiritual dimensions). Mindfulness, defined as "the awareness that emerges through paying attention, on purpose, in the present moment and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 145), is cultivated through interventions like Mindfulness-Based Stress Reduction (MBSR), developed by Jon Kabat-Zinn in the 1970s (Mathews & Anderson, 2021). Originally designed to alleviate chronic pain and stress, MBSR employs practices such as mindfulness meditation, body scanning, and mindful movement (e.g., yoga) and has been widely applied to conditions including psychiatric disorders (Hofmann et al., 2010;

Extended author information available on the last page of the article

Lo et al., 2015; Wong et al., 2018), cancer (Rush & Sharma, 2017), cardiovascular diseases (Niazi & Niazi, 2011), and PD (Kwok et al., 2022a, 2022b) due to its focus on enhancing self-regulation and emotional resilience (Hofmann et al., 2010; Lo et al., 2015; Wong et al., 2018). In this study, we implemented a tailored mindfulness-based rehabilitation program, adapted from MBSR and co-created by Kenneth Y.K. Wong and Jojo Y.Y. Kwok. Designed specifically for Chinese individuals with PD in Hong Kong, it incorporated PD-specific modifications like simplified yoga sequences (e.g., modified sun salutations and Soaring Crane "仙鶴翱翔") and Cantonese affirmations (e.g., Three Rong and Four De "三容四得"; see Supplementary File 1) to address motor and non-motor symptoms while promoting psychosocial and spiritual well-being.

Mindfulness is particularly suited for PD, as it interrupts maladaptive cognitive-emotional cycles (e.g., rumination, threat-focused attention) by fostering acceptance-based coping, enhancing emotional regulation, and mitigating the psychological distress caused by symptom fluctuations. In China, standard PD care emphasizes pharmacological treatments (e.g., levodopa) and physical rehabilitation, with limited psychological support due to mental health stigma and resource constraints in public healthcare (Chan et al., 2025; Kwok et al., 2021). Our mindfulness program, delivered through low-cost, community-based sessions, complements this care by addressing psychosocial and spiritual needs, reducing stigma via group-based delivery, and aligning with cultural values of harmony and self-cultivation rooted in Buddhist and Taoist traditions (Kwok et al., 2020). China's collectivist orientation enhances the intervention's feasibility, as group settings foster social connection, while institutional factors, like overburdened healthcare systems, underscore the need for accessible, scalable interventions. However, most mindfulness research in PD has focused on quantitative symptom relief, with limited exploration of its psychosocial and spiritual effects, implementation perspectives, and factors influencing sustained engagement. Qualitative studies in Australia and the UK have reported positive experiences with mindfulness among PD patients, highlighting improved resilience and confidence to live meaningfully despite disability (Birtwell et al., 2017; Fitzpatrick et al., 2010; Vandenberg et al., 2019). Yet, these studies often adopt a psycho-cognitive lens, leaving gaps in understanding mindfulness's spiritual impact and cultural applicability (Karacan et al., 2023).

This study aimed to explore the experiences of Chinese PD patients using mindfulness techniques as a lifestyle approach for rehabilitation and self-care. Specifically, it sought to examine their perceptions of these techniques, elucidate underlying mechanisms, and identify factors influencing motivation, acceptability, and practical implementation in a Chinese cultural context.

Method

Participants

We recruited participants from a community-based mindfulness rehabilitation program for PD. Purposive sampling was used to include participants with high and low adherence, and diverse socio-demographic characteristics. The 8-week community-based Mindful Yoga for PD program, a tailored adaptation of MBSR co-developed by Kenneth Y.K. Wong and Jojo Y.Y. Kwok, was designed to address PD's motor and non-motor symptoms. Weekly 90-min in-person sessions were led by a certified MBSR and yoga instructor with 10 years of mindful yoga training and 5 years specializing in neurological conditions, including PD. Each session included (i) mindfulness meditation — starting with focused attention on breath or an object to develop attentional stability and non-judgmental awareness of the current mental state (Keng et al., 2011); (ii) mindful movement (modified as sun salutations, and Qigong-inspired Soaring Crane [仙鶴翱翔] to accommodate motor limitations like rigidity and bradykinesia) — the mental training starts with focused attention on various physical or emotional experiences arising through dynamic and mindful body movements; and (iii) breathwork — the rhythmic conscious breathing, including the AUM mantra and bee breath (also known as Bhramari Pranayama, a yogic breathing technique involving a humming sound like a bee during exhalation), adapted from pranayama techniques to promote emotional release and reduce tremors. Each session ends with group discussion followed by exploring weekly themes (drawn from MBSR, included beginner's mind, letting go, non-judging, acceptance, non-striving, trust, patience, and gratitude) tailored to address PD-related challenges (e.g., coping with symptom fluctuations). Culturally relevant Cantonese affirmations, such as "Three Rong and Four De" (e.g., "Kuan Rong" [寬容] for lenience, "It's okay to just try" [吞撲得]), were integrated to foster emotional safety and self-acceptance (see Supplementary File 1). The program emphasized a holistic approach, addressing the physical, psychological, and spiritual dimensions of PD in a culturally resonant manner. Detailed sequences are shown in Table 1 and the study protocol has been published (Kwok et al., 2023).

Procedure

Individual semi-structured interviews were conducted between May 2021 and September 2022, 1 month after participants completed the mindfulness rehabilitation program. Interviews were held using a mixed approach—either

Table 1 Theme and outline of the mindfulness rehabilitation program for PD

Week	Theme	Program outline
1	Beginner's Mind: Introducing Mindfulness	**Warm-up**: Mindful breathing, mountain pose with balance shifting (centered, left, right, forward, heels), alternating mountain and chair poses with synchronized breathing and arm movement, soaring crane sequence **Yoga sequence**: Crocodile pose, Sphinx pose, Cobra pose, Child pose **Meditation, breathwork & mindful practices**: Body scan, mindful breathing, introduction to mindful eating
2	Patience: Allowing time for purifying mind, body, and spirit	**Warm-up**: As Week 1 **Yoga sequence**: Mountain pose, side bend, revolved forward bend, lotus mudra, cow face pose with forward bend, lion's breath **Meditation, breathwork & mindful practices**: Thoracic breathing, diaphragmatic breathing, mindful breathing, mindful eating
3	Non-judging: Cultivating awareness towards inner and outer experiences	**Warm-up**: As Week 1 **Yoga sequence**: Supine sequence (mountain pose, upward salute, neck turning, single leg raises with ankle rotation, double leg raises, bridge pose, knees to chest pose, corpse pose) **Meditation, breathwork & mindful practices**: Body scan, mindful breathing, Santosha guided meditation in corpse pose, Soham mantra meditation (seated)
4	Acceptance: Embracing, exploring, and expanding own limitations	**Warm-up**: As Week 1 **Yoga sequence**: Triangle pose, Warrior II pose, side angle pose, wide-legged forward bend, modified sun salutations (mountain pose, upward salute, standing forward bend, low lunge, child pose, tabletop pose, knee-chest-chin pose, cobra pose, downward-facing dog, standing forward bend, upward salute, mountain pose) **Meditation, breathwork & mindful practices**: Body scan, sit-down mild stretching, 3-min mindful breathing exercise, 3-min breathing space, yoga nidra
5	Non-Striving: Connecting to inner self without pushing	**Warm-up**: As Week 1 **Yoga sequence**: Seated sequence (thunderbolt pose, staff pose, seated side bend, cow face pose with forward bend, camel pose, rabbit pose), modified sun salutations (as Week 4) **Meditation, breathwork & mindful practices**: Mindful walking, Lion's breath, bee breath, cooling breath, om mantra meditation, yoga nidra, body scan
6	Generosity: Giving time, energy, and attention to others while practicing self-compassion	**Warm-up**: As Week 1 **Yoga sequence**: Dyadic yoga sequence (seated namaste face-to-face, seated mountain pose with neck stretching back-to-back, seated side bend back-to-back, seated waist twisting back-to-back, supported chair pose, triangle pose back-to-back, Warrior II back-to-back, tree pose side-to-side, easy pose shoulder retraction with partner) **Meditation, breathwork & mindful practices**: Mindful walking, body scan, mild stretching, yoga nidra in partner corpse pose
7	Trust: Instilling confidence and loving-kindness	**Warm-up**: As Week 1 **Yoga sequence**: Modified sun salutations (as Week 4) **Meditation, breathwork & mindful practices**: Mindful walking, bee breath, alternating nostril breathing, Om mantra meditation, mindful breathing, loving-kindness meditation in corpse pose, body scan
8	Letting go: Surrendering and being fully present	**Warm-up**: As Week 1 **Yoga sequence**: Modified sun salutations (as Week 4) **Meditation, breathwork & mindful practices**: Mindful walking, om mantra meditation, mindful breathing, yoga nidra, body scan

in person, via telephone, or video-conferencing software (Zoom), based on participant preference. Informed consent was sought prior to the start of interviews. To ensure consistency of data collection, all interviews were coordinated by one female researcher (CL, the second author), who has a background in psychology and 3 years of experience in psychosocial health research. Each interview took place in a private room at the university to ensure a one-on-one setting without family members, caregivers, or healthcare providers present to avoid external influence. Each interview session lasted from 1 to 1.5 hr and was audio recorded with participants' consent. Participants were encouraged to express their thoughts at their own pace, allowing for a comprehensive understanding of their experiences and feelings regarding the interventions. Data collection concluded after the 61st interview, as no new meaningful findings emerged, indicating information redundancy.

Measures

An interview guide (Supplementary File 2) was developed through a comprehensive literature review and consultation with experienced qualitative researchers who were experts in providing psychosocial and neurology health services in Hong Kong and a nurse practitioner who specialized in neurology care.

The interview focused on two main areas: (1) participants' experiences of living with their illness and (2) their experiences and perceptions of participating in the mindfulness program. Open-ended questions explored participants' feelings, understanding, and perceived effects of mindfulness, as well as factors influencing their motivation, acceptability, and real-life practice of mindfulness. Participants were encouraged to share personal anecdotes and examples of applying mindfulness in daily life. They were also asked whether they would recommend mindfulness and continue practicing it as self-care. All interviews were transcribed verbatim for analysis.

Data Analyses

Interview transcripts were analyzed using Braun and Clarke's (2006) thematic analysis approach, which involves six iterative steps: (1) familiarizing with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing the themes, (5) defining and naming themes, and (6) producing the report. Data analysis was conducted in the original language, with final themes and supporting quotes translated into English by four Cantonese–English bilingual speakers using a forward–backward translation approach (Choi et al., 2022).

First, the first and second authors (with expertise in behavioral and qualitative research) independently read all transcripts multiple times to immerse themselves in the data, noting initial patterns and impressions. Second, initial codes were generated inductively by systematically identifying meaningful units of data (e.g., phrases or sentences reflecting participants' experiences or perceptions) using open coding. For example, a participant's statement about breathwork reducing tremors was coded as "symptom relief through breathwork." Approximately 120 initial codes were generated across all transcripts. Third, codes were clustered into categories based on shared meanings (e.g., codes related to emotion regulation and cognitive clarity were grouped under "psychosocial benefits"). Fourth, categories were reviewed and refined through iterative discussions between the first and second authors to ensure internal homogeneity (coherence within categories) and external heterogeneity (distinctiveness between categories), following Patton (1990). Discrepancies in coding or categorization were resolved through consensus discussions, with a focus on aligning interpretations with participants' narratives. Fifth, categories were synthesized into three overarching themes (e.g., "reshaping illness experience through embodiment") and seven subthemes, which were named to reflect their core essence. NVivo12 (QSR International) was used to manage and organize codes, categories, and themes, facilitating systematic analysis.

Rigor

To ensure rigor, multiple strategies were implemented: (1) transcription accuracy was verified by cross-checking transcripts against audio recordings by an independent researcher; (2) linguistic accuracy was ensured through forward–backward translation conducted by four bilingual speakers, guaranteeing precise representation of participant responses across languages; (3) external validation was achieved through peer debriefing with an experienced qualitative researcher (fourth author, JL), which enhanced the credibility of the findings; (4) researcher reflexivity was addressed through regular discussions between the first and second authors to acknowledge and mitigate potential biases, such as preconceptions about the benefits of mindfulness; and (5) the final themes were validated through member checking, where 10 participants reviewed preliminary findings to confirm their accuracy and resonance with their experiences (Korstjens & Moser, 2018). The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist guided reporting (Tong et al., 2007) (Supplementary File 3).

Table 2 Summary of the participants' characteristics ($n = 61$)

Characteristics	Participants, no. (%)
Age, mean (*SD*)	63.1 (7.8)
Sex	
Male	33 (54.1)
Female	28 (45.9)
Marital status	
Single/separated/divorced/widowed	19 (31.1)
Married	42 (68.9)
Education level	
Illiterate or primary	10 (16.4)
Secondary	37 (60.7)
Tertiary	14 (23)
Living status	
Alone	8 (13.1)
With spouse, family, or friends	53 (86.9)
Social security allowance	39 (63.9)
Years since Parkinson's diagnosis	8.3 (7.0)
Hoehn and Yahr stage[a]	
2	28 (45.9)
3	33 (54.1)
MDS-UPDRS-III[b], mean (*SD*)	39.2 (10.9)
HADS[c], mean (*SD*)	9.84 (6.6)

SD, standard deviation

[a]Disease staging measured by Hoehn and Yahr scale (stage I: unilateral involvement; stage II: early bilateral involvement, independent activities of daily living and no postural instability; stage III: postural instability; stage IV: assistance for activities of daily living/ ambulation activities; stage V: dependent for activities of daily living)

[b]MDS-UPDRS-III: Movement Disorder Society—Unified Parkinson's Disease Rating Scale, motor subscale, measures the severity of motor symptoms including tremor, rigidity, bradykinesia, gait, and postural instability (range 0–132, high score indicates severe motor symptoms)

[c] HADS, Hospital Anxiety and Depression Scale. A higher score indicates a higher level of psychological distress

Results

A total of 61 participants with a mean age of 63.1 years ($SD = 7.8$) were recruited for this study, of whom 54% were female ($n = 33$). About two-thirds of the participants were married (68.9%) and received secondary education (60.7%). The mean duration since Parkinson's diagnosis was 8.3 years ($SD = 7.0$). About half of the participants had mild PD with early bilateral involvement (Hoehn and Yahr stage 2: 45.9%), while the other half had moderate PD with bilateral disease and postural instability (Hoehn and Yahr stage 3: 54.1%). Table 2 provides a summary of the key socio-demographic and clinical characteristics of the participants. Overall, three overarching themes together with seven meaningful subthemes emerged (Table 3).

Theme 1. Reshaping Illness Experience Through Embodiment

Participants reported significant psychological distress tied to physical symptoms but experienced therapeutic benefits through mindfulness and embodied practices.

Subtheme 1. Improved Emotion Regulation and Cognitive Clarity

Mindfulness practices helped participants regulate emotions and enhance cognitive clarity. By directing their focus inward, they developed self-awareness and reconnected with their bodies, thoughts, and actions, enabling better management of emotions and distractions. Participant 27, a 63-year-old female, described her emotional transformation through mindful breathing:

> I used to become easily irritable, but mindfulness has helped me. Now, before losing my temper, I focus on my breath and notice how it becomes shallower and faster. By observing my breath, it slows down again, and as I breathe in and out, I feel more comfortable and no longer struggle.

Participants often encountered wandering thoughts and distractions during mindfulness practice. They found techniques such as "anchoring" and "labelling" particularly helpful in enhancing their present-moment awareness, concentration, and cognitive clarity amidst distractions and occasional delusional beliefs.

Table 3 Summary of themes and subthemes

Themes	Subthemes
1. Reshaping illness experience through embodiment	1. Improved emotion regulation and cognitive clarity
	2. Regaining body mastery through the relief of motor and non-motor symptoms
2. A sense of community through mindful engagement	1. Nurturing group dynamics and shared experiences
	2. Culturally-responsive instruction and supportive relationships
3. Fostering lasting mindfulness impact	1. Personalizing mindfulness practice
	2. Expanding mind–body experiences beyond goals and expectations
	3. Creating a supportive environment for sustainable mindfulness practice

> During meditation, I learned to let distracting thoughts come and go freely, labelling them and then focusing on my breath. Through this process, I was able to bring myself back to the present moment. I felt more grounded and less distracted. (Participant 39, 64-year-old male)

Mindfulness transformed participants' perception of their illness. Instead of ruminating and struggling with the health conditions, mindfulness allowed them to fully observe and reconnect with their present mind–body experiences. This phenomenon reshaped their illness experiences in a positive way, leading to a sense of relief, openness, positivity, and empowerment:

> I have become more open-minded and optimistic, and I am less likely to be upset about my illness. The lesson has taught us not to be so fixated, and it is helpful to observe things from a third-party perspective. (Participant 61, 64-year-old male)

Subtheme 2. Regaining Body Mastery Through the Relief of Motor and Non-Motor Symptoms

Participants reported improved PD-related motor and non-motor symptoms through mindfulness practices. Mindful breathing and body scan were particularly helpful to alleviate resting tremors.

> When I focus on my breath, my tremor ceases. Engaging in body scanning also reduced my tremor. These practices bring me to a transcendental realm of mindfulness, calming my heartbeat and firmly anchoring me in the present moment. (The participant then demonstrated how he was able to pause his tremor within a minute of mindful breathing). (Participant 11, 59-year-old male)

Participants also found mindful walking exercise beneficial in improving their gait and increasing confidence in balance:

> Before the intervention, I experienced dragging my foot and taking small, shuffling steps, or having a big sway, making me prone to falling. However, learning the four steps of mindful walking – lift, forward, down, center – is greatly helpful. Lifting and centering myself in this way feels much better and reduces the risks of falling. (Participant 27, 63-year-old female)

In addition to motor and functional improvement, participants also found body scan and breathwork helpful in addressing non-motor symptoms, such as insomnia and wear-off episodes. One participant (participant 16, 67-year-old female) described, "I used to occasionally suffer from insomnia, struggling to fall asleep until 4 am. After learning body scanning, I practice it for about 10 min before bed, and I can now fall asleep quickly. So far, I haven't experienced any difficulties falling asleep." Another participant (participant 56, 70-year-old female) shared, "During 'off-state', I sometimes feel like I can't breathe properly, but my breathing becomes smoother after practicing the AUM mantra and bee breath."

Theme 2. A Sense of Community Through Mindful Engagement

Participants highlighted the importance of group dynamics, shared experiences, and a supportive environment fostered by the instructor's interpersonal behaviors and culturally relevant affirmations. These factors significantly influenced their motivation and willingness to explore mindfulness.

Subtheme 1. Nurturing Group Dynamics and Shared Experiences

Participants emphasized the value of group practice in building a sense of community. The shared experience of living with PD and mutual understanding gradually fostered bonding and rapport and created a safe space for open expression:

> It's beneficial to be able to share with other PD patients because outsiders often don't understand our situations, and even our loved ones may not fully understand. I feel much relieved when I chat with other participants. (Participant 14, 61-year-old male)

Participants also appreciated the emphasis on non-judgmental and mindful agreement in group activities, which enhanced their motivation, engagement, and compliance.

> The group dynamics are joyful, and I can be fully attentive. Exercising together without competition creates a carefree environment. You only focus on doing your best without comparing yourself to others or expecting to be the best. (Participant 8, 63-year-old)

Social engagement extended beyond the structured lessons. These rewarding experiences encouraged the participants to build social relationships and maintain social connections in their daily lives:

> I used to decline invitations from others when they asked me to hang out. But now, I feel more motivated to go out and meet friends. It's like building a habit

again, and I have become more accustomed to maintaining social contacts." (Participant 18, 49-year-old female)

Subtheme 2. Culturally-responsive Instruction and Supportive Relationships

Participants appreciated the instructor's frequent use of culturally relevant affirmations and invitational verbal cues in Cantonese idioms (Supplementary File 1), which fostered emotional safety and self-acceptance, relieving the pressure of feeling obligated to practice or make comparisons.

> In the mindful yoga practice, the first thing is to listen to yourself. Firstly, you need to have a relaxed mindset. Then, follow the rhythm and go at your own pace according to your abilities. The sense of accomplishment comes from knowing that even if you can't do everything, there are things that you can do and resources that can help. The instructor provided great encouragement, saying, 'Be lenient to yourself, just do as much as you can'. (Participant 25, 55-year-old female)

The positive instructor-participant relationships were crucial in shifting participants' focus from achievement-oriented thinking and becoming mindful of their present experience, embracing their limitations as part of the practice. By creating a non-judgmental learning environment and providing patient and detailed explanations, the instructor supported participants in acquiring mindfulness skills and exploring psychotherapeutic boundaries within and outside the lessons.

> The instructor is very supportive, and tailors his guidance to our unique circumstances. He emphasizes the presence of limitations, regardless of our abilities or performance, and encourage us to give our best effort. The instructor highlights the power of visualization and encourages us to imagine achieving our goals even when we face challenges in executing specific tasks. He reminds us not to compare ourselves to others or push beyond our personal limits. This mindset is essential because we have Parkinson's disease and unique needs, and he creates a safe and empowering environment where we can explore, make mistakes, take breaks, and ultimately learn and grow. (Participant 33, 66-year-old male)

Theme 3. Fostering Lasting Mindfulness Impact

Participants sometimes faced physical limitations, cognitive difficulties, and practical barriers when it came to engaging in mindfulness practice due to their neurodegenerative conditions. They emphasized the need for tailored approaches and supportive environments to cultivate sustainable mindfulness practices and enhance their experiences.

Subtheme 1. Personalizing Mindfulness Practice

Participants sometimes struggled with the mentally focused meditation techniques because of their motor symptoms and cognitive impairments. They found it difficult to sit for long periods and experienced worsened symptoms such as muscle stiffness and bradykinesia during prolonged static meditation.

> I struggle with meditation. Concentration is difficult, understanding and achieving the desired effects is challenging for me. I have difficulty remembering all the steps, especially with the body scan, possibly due to my lower level of education. Sitting still is tough, I can only do sitting meditation for shorter sessions. (Participant 44, 67-year-old male)

Some participants found meditation less tangible compared to physical activities like dance or gymnastics:

> The effectiveness of the meditation program seems to rely on one's ability to comprehend it. It must be useful, but I don't understand its purpose because it's different from dance or gymnastics. In those activities, you learn a complete set of movements step by step and become skilled at them, which allows you to feel your body. But with meditation, it feels mysterious, and there are no clear steps to follow. (Participant 61, 64-year-old)

To address these challenges, participants highlighted the importance of sequencing mindfulness practices, starting with movement to build a connection between body and mind:

> I've found that yoga is truly beneficial for Parkinson's disease. It offers a unique blend of movement and stillness that brings about positive effects. Even when we engage in gentle and subtle movements, as the instructor pointed out, it can be quite challenging to stay fully aware of our present sensations. But, you know, that's what makes it so important. It's a delicate aspect, but it plays a significant role in establishing a strong connection between our actions and thoughts. Personally, I've discovered that starting with mindful movement helps me maintain focus and truly feel connected with my body and mind. (Participant 33, 66-year-old male)

Subtheme 2. Expanding Mind–Body Experiences Beyond Goals and Expectations

Participants responded to mindfulness in diverse ways, and initial expectations often influenced engagement. Unrealistic expectations of immediate benefits sometimes led to disappointment:

> The lessons are abstract, which is not what I expected. I had hoped to see improvements in my mobility through the program, but it has turned out to be different from my expectations, and it doesn't seem to be effective for me. A positive person will naturally think positively, while a pessimistic person will naturally think pessimistically, being mindful will not help much. (Participant 55, 49-year-old male)

Over time, participants shifted from a goal-oriented mindset to integrating mindfulness into daily life. They became more aware of their sensations and thoughts, and they developed the ability to respond to stressful situations, such as adversities in life or worsening symptoms, more skillfully with a compassionate attitude instead of reacting with panic or complaints. Participant 43, a 59-year-old female, described how she applied the "labelling" technique during a challenging situation with her father's critical condition:

> I received a phone call from the hospital informing me that my father was in critical condition. I panicked, and my Parkinsonism symptoms worsened, causing uncontrollable shaking in my hands and legs. Overwhelmed by anxiety, I instinctively turned to the "labelling" technique I had learned in my mindfulness course. Consciously repeating words like "father, father, father" to myself had a remarkably calming effect. This experience let me know how mindfulness has seamlessly integrated into my daily life. The more I practice, the calmer I become. I've used this method multiple times, and it consistently helps me in tough moments. It is surprising how mindfulness can be so effective for me.

Subtheme 3. Creating a Supportive Environment for Sustainable Mindfulness Practice

Participants encountered practical challenges that impacted their engagement in mindfulness practice. Factors such as physical exhaustion due to long travel distances, wearing face masks during lessons, and limited personal space at home posed obstacles to concentration and focus. To address these challenges, the participants expressed the need for regular group practice to stay motivated and engaged.

> I have a strong interest and motivation to practice mindfulness with the guidance of the instructor. However, I find it challenging to concentrate at home for more than 5–10 min because my children are around. I hope there's regular and sustain group practice to keep us motivate and engaged. (Participant 32, 63-year-old male)

To support long-term mindfulness practice, participants suggested strategies such as continuous guided practice, extended lesson durations for more feedback and peer sharing, and access to supplementary resources like books and recordings:

> Sharing and debriefing sessions are invaluable; at times, understanding the steps of mindfulness practice can be challenging, but through mutual sharing and learning, we gain insights from one another. Peer sharing creates a platform where we can discuss both positive, neutral, and negative experiences, fostering a deeper understanding of mindfulness practices. (Participant 51, 52-year-old male)

Participant 56, a 64-year-old male, highlighted the importance of program continuity and holistic approaches for managing long-term conditions:

> I hope for program continuity, particularly because neurodegenerative diseases like Parkinson's disease cannot be cured with medication alone. Mindfulness practices are helpful, and I wish that rehabilitation centers could offer similar programs for us.

Discussion

This study explored the perceptions and experiences of a community-based, mindfulness rehabilitation program among Chinese PD patients in Hong Kong. The findings provide empirical evidence for the transformative potential of mindfulness techniques and the benefits they offer to individuals with neurodegenerative conditions. Participants' narratives highlight how mindfulness improves PD's motor and psychological symptoms. We found three main themes in how participants experience mindfulness: (1) reshaping illness experience through embodiment, (2) cultivating a sense of community through mindful engagement, and (3) fostering lasting mindfulness impact.

The first overarching theme, "reshaping illness experience through embodiment", highlights how mindfulness approaches, including meditation and movement-guided yoga, provide significant therapeutic benefits for PD patients. These benefits encompass emotional regulation, cognitive

clarity, and relief from motor and non-motor symptoms, reshaping participants' illness experiences. Consistent with prior research, this study confirms that mindfulness practices can enhance psychological coping and regulate physiological stress responses in PD patients. A key adaptive challenge for PD patients is coping with an "uncooperative" body and altered identity owing to motor symptoms, making patients particularly vulnerable to negative connotations associated with their fluctuating condition (Habermann, 1996; Stanley-Hermanns & Engebretson, 2010). Traits such as avoidance, symptom fixation, and rumination, commonly associated with depression in PD patients, affected their ability to adapt (Julien et al., 2016). These dysfunctional psycho-cognitive processes further exacerbate motor symptoms, resulting in a vicious cycle of negative emotions and adverse health outcomes. Recognizing the interdependences of cognitive, affective, motor, and non-motor symptoms underscores the need for a whole-person care approach in PD (Dossey et al., 2016). Mindfulness-based care may help interrupt this negative cycle by enhancing awareness and non-judgmental processing of thoughts, feelings, and experiences. This approach positively impacts behavior and extends therapeutic effects beyond emotional stability to physical symptoms, such as alleviated tremors and improved sleep quality.

The findings also revealed that mindfulness techniques were particularly helpful for managing motor symptoms. Participants reported the calming effect of breathwork on tremors and the use of mindful walking to address gait problems. Corroborating with tremor management literature, relaxation techniques such as mindful breathing, meditation, and progressive muscle relaxation could reduce emotional and physiological arousal, alleviating the severity of tremor, particularly when triggered or exacerbated by stress and anxiety (van der Heide et al., 2021). Neuroscience studies have suggested that impaired basal ganglia function in PD affects the activation of supplementary motor areas, leading to deficits in activity preparation and abnormal movements like freezing of gait (Mahoney et al., 2016). Mindful walking may act as an internal cueing strategy for mental activation, simultaneously addressing the motor elements, anxiety, and cognition underlying gait problems (Kwok et al., 2022a, 2022b). Participants' feedback indicates that combining mindfulness with motor skill training offers multiple pathways to enhance mind–body coordination, aiding in the management of freezing of gait and reducing fall risks, which are particularly relevant for aging populations.

The second overarching theme, "a sense of community through mindful engagement", highlighted two important aspects underpinning participants' engagement and motivation in mindfulness practices. Firstly, group practice and mindful interactions with peers and the instructor played a vital role in fostering group resonance, which facilitated a safe, shared, and nurturing community where participants felt a sense of closeness, trust, and belongingness to comfortably express their vulnerabilities. Corroborating findings in other vulnerable health conditions, such as depression (Canby et al., 2021), group dynamics and resonance have been posited as important parts of the mindfulness experience. Shared experiences with peers facilitated a reframing of participants' roles and identities, reducing isolation and stigma while fostering greater acceptance of their illness (Shapiro et al., 2006). Some participants reported its effects extended to their social lives, making them more comfortable reaching out to community resources or social interactions. Secondly, the use of culturally and linguistically relevant affirmations and verbal cues to create a non-judgmental and accepting environment is important because it empowered participants to develop a sense of agency and understand the processes involved in engaging in the practice.

Our third overarching theme of "fostering lasting mindfulness impact" focused on identifying the specific needs of individuals with neurodegenerative diseases, expanding mind–body experiences beyond goals and challenges, and strategies for integrating mindfulness into daily life for long-term practice. Participants perceived mindfulness as a stress and symptom management tool, but their responses varied. While most developed a more accepting and compassionate relationship with their symptoms, some experienced distress and resistance to meditation. It should be noted that prolonged static meditation may trigger physical symptoms or cognitive exhaustion in individuals with movement disorders. Those with pre-existing health conditions often face challenges in embracing difficulty and practicing acceptance (Sirois et al., 2015). Mindfulness-based interventions emphasize exposure and awareness to positive, neutral, and negative experiences as mechanisms of change. However, this process may also elicit psychological distress, fear, or confusion, especially for beginners (Malpass et al., 2012). This highlights the need to consider illness-specific and sociocultural contexts to ensure the safety and well-being of participants, especially in vulnerable groups. Future interventions for neurodegenerative diseases or older adults could incorporate shorter meditation and emphasize mindful movement practices such as yoga, Tai Chi, or Qigong. These mind–body modalities may offer a more concrete point of focus, fostering engagement and allowing participants to explore body anchors and cultivate awareness of relatively "neutral" bodily sensations before gradually expanding their focus to include present mental events. This approach can improve cognitive clarity and reduce the risk of mental confusion, making mindfulness more accessible and effective for these populations.

Additionally, the effect of initial expectations on the effectiveness of mindfulness as a self-care approach should be considered. A mismatch between initial expectations and the actual experience can lead to ambivalence about its usefulness.

Research shows that client expectations can significantly influence therapy outcomes, with therapist behaviors such as warmth and competence linked to more positive expectations (Seewald & Rief, 2023). Future mindfulness programs should address facilitator interpersonal skills to promote positive expectations and optimize the benefits of mindfulness. Lastly, integrating mindfulness into daily routines requires more than individual effort—it demands a community-based approach involving healthcare providers, community partners, commercial entities, politicians, and media. Considering the growing multimorbidity and mental health challenges in aging populations, exploring how mindfulness can be effectively incorporated into healthcare systems, particularly primary care, is essential.

Limitations and Future Research

This study has several limitations. First, the experiences and perceptions of mindfulness were culturally specific to Chinese PD patients in Hong Kong, which may affect the transferability of findings to non-Chinese, non-PD contexts. Second, the combination of in-person, telephone, and online interviews may have influenced the data richness. Telephone and online formats restricted the observation of non-verbal cues and physical expressions, which were more noticeable during face-to-face interactions. For example, in an in-person interview, the researcher observed subtle physical changes, such as participants' breathing patterns slowing or their resting tremors diminishing while discussing how mindfulness enabled them to regain a sense of control over their bodies. These details were harder to detect in online interviews due to factors like camera angles and video quality. Furthermore, interviews conducted 1 month post-intervention did not allow for an exploration of long-term effects. Future research should consider longitudinal studies that assess the sustained impact of mindfulness interventions, providing deeper insights into their role in PD management. Nevertheless, this study is among the few to explore the experiences and perceptions of mindfulness techniques for managing PD. The findings provide new insights and perspectives on how Chinese people living with PD experience and adapt mindfulness in illness management and self-care, shedding light on their care planning and adjustment strategies.

In conclusion, this qualitative study offers valuable insights into the integration of mindfulness in gerontological care, particularly for people with PD. Although PD is often viewed primarily as a movement disorder, the findings emphasize its complex interplay with mental health, where psychological distress exacerbates motor symptoms. This underscores the need for an integrative mind–body approach that addresses both physical and psychospiritual aspects of the disease. The study identifies key factors for participant engagement, including group dynamics, cultural adaptation of mindfulness practices, and the rapport between participants and instructors. While some participants initially struggled to integrate mindfulness into daily lives, the findings provide guidance for designing future programs to enhance participant autonomy, engagement, and adaptation. Efforts should focus on personalizing mindfulness techniques for PD, expanding mind–body experiences beyond goal-driven practice, and creating supportive environments to facilitate routine integration. Since most PD patients reside in the community and rely on caregivers, a community-based mind–body care model is essential. Such a model should include early screening for physical and psychospiritual symptom burdens, evidence-based interventions, and capacity building for allied health professionals and caregivers. This approach has the potential to destigmatize PD and enhance the overall wellness and quality of life for individuals living with similar chronic illnesses and their families.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s12671-025-02626-4.

Acknowledgements The authors express their sincere gratitude to all participants for their time and valuable contributions to this study. We also thank Kenneth Y.K. Wong, the pioneer of Mindful Yoga, the research team, and collaborators for their support throughout the project.

Author Contribution JK conceptualized the study and acquired the funding. CL collected data, assisted by YS. JK and CL analyzed data and interpreted it together. JK drafted the manuscript. CL, WS, LC, YS, EC, JL, KL, SP, MA, SW, and RH revised the manuscript critically for important intellectual content. All authors gave final approval of the version to be published.

Funding This work was supported by the General Research Fund 2020 from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No. 17611720).

Data Availability The data supporting the findings of this study are available upon reasonable request from the corresponding author, subject to ethical and privacy restrictions. Due to the sensitive nature of the qualitative data and to protect participant confidentiality, the full dataset is not publicly available.

Declarations

Ethics Approval Ethics approval for this study was obtained from the Institutional Review Board of the University of Hong Kong/Hospital Authority Hong Kong West Cluster (HKU/HA HKW IRB, reference No. UW 19–446).

Informed Consent Written informed consent was obtained from all participants prior to their involvement in the study.

Conflict of Interest The authors declare no competing interests.

Use of Artificial Intelligence No artificial intelligence tools or technologies were used in the design, data collection, analysis, or writing of this study. All content and findings are the result of human effort and expertise.

References

Auyeung, M., Tsoi, T. H., Mok, V., Cheung, C. M., Lee, C. N., Li, R., & Yeung, E. (2012). Ten year survival and outcomes in a prospective cohort of new onset Chinese Parkinson's disease patients. *Journal of Neurology, Neurosurgery & Psychiatry, 83*(6), 607–611. https://doi.org/10.1136/jnnp-2011-301590

Birtwell, K., Dubrow-Marshall, L., Dubrow-Marshall, R., Duerden, T., & Dunn, A. (2017). A mixed methods evaluation of a mindfulness-based stress reduction course for people with Parkinson's disease. *Complementary Therapies in Clinical Practice, 29*, 220–228. https://doi.org/10.1016/j.ctcp.2017.10.009

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Canby, N. K., Eichel, K., Peters, S. I., Rahrig, H., & Britton, W. B. (2021). Predictors of out-of-class mindfulness practice adherence during and after a mindfulness-based intervention. *Psychosomatic Medicine, 83*(6), 655–664. https://doi.org/10.1097/psy.0000000000000873

Chan, L. M. L., Choi, E. P. H., Lam, W. W. T., Chan, K. H., Pang, S. Y. Y., & Kwok, J. Y. Y. (2025). Palliative care need and quality of life mediated by psychological distress in neurologic diseases. *Journal of Pain and Symptom Management, 69*(6), 641-653.e643. https://doi.org/10.1016/j.jpainsymman.2025.03.004

Choi, E. P. H., Kwok, J. Y. Y., Choi, K. W. Y., Lee, J. J., Lok, K. Y. W., Wong, J. Y. H., Fong, D. Y. T., Wan, E. Y. F., Wong, W. C. W., & Chow, E. P. F. (2022). Perceptions and experiences of sexual violence among Chinese men who have sex with men in Hong Kong. *Journal of Advanced Nursing*. https://doi.org/10.1111/jan.15391

Dossey, B. M., Keegan, L., & Barrere, C. (Eds.). (2016). *Holistic nursing: A handbook for practice* (7th ed.). Jones & Bartlett Learning.

Fitzpatrick, L., Simpson, J., & Smith, A. (2010). A qualitative analysis of mindfulness-based cognitive therapy (MBCT) in Parkinson's disease. *Psychology and Psychotherapy: Theory, Research and Practice, 83*(2), 179–192. https://doi.org/10.1348/147608309x471514

Habermann, B. (1996). Day-to-day demands of Parkinson's disease. *Western Journal of Nursing Research, 18*(4), 397–413. https://doi.org/10.1177/019394599601800404

van der Heide, A., Speckens, A. E. M., Meinders, M. J., Rosenthal, L. S., Bloem, B. R., & Helmich, R. C. (2021). Stress and mindfulness in Parkinson's disease – a survey in 5000 patients. *npj Parkinson's Disease*, *7*(1), 7. https://doi.org/10.1038/s41531-020-00152-9

Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 78*(2), 169–183. https://doi.org/10.1037/a0018555

Julien, C. L., Rimes, K. A., & Brown, R. G. (2016). Rumination and behavioural factors in Parkinson's disease depression. *Journal of Psychosomatic Research, 82*, 48–53. https://doi.org/10.1016/j.jpsychores.2016.01.008

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144–156. https://doi.org/10.1093/clipsy/bpg016

Karacan, A. V., Kibrit, S. N., Yekedüz, M. K., Dogulu, N., Kayis, G., Unutmaz, E. Y., Abali, T., Eminoglu, F. T., Akbostanci, M. C., & Yilmaz, R. (2023). Cross-cultural differences in stigma associated with Parkinson's disease: A systematic review. *Journal of Parkinson's Disease, 13*(5), 699–715. https://doi.org/10.3233/Jpd-230050

Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review, 31*(6), 1041–1056. https://doi.org/10.1016/j.cpr.2011.04.006

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice, 24*(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Kwok, J. Y. Y., Lee, J. J., Auyeung, M., Chan, M. L., & Chan, H. Y. L. (2020). Letting nature take its course: A qualitative exploration of the illness and adjustment experiences of Hong Kong Chinese people with Parkinson's disease. *Health & Social Care in the Community, 28*(6), 2343–2351. https://doi.org/10.1111/hsc.13055

Kwok, J. Y. Y., Huang, T. W., Tretriluxana, J., Auyeung, M., Chau, P. H., Lin, C. C., & Chan, H. Y. L. (2021). Symptom burden and unmet support needs of patients with Parkinson's disease: A cross-sectional study in Asia-Pacific regions. *Journal of the American Medical Directors Association, 22*(6), 1255–1264. https://doi.org/10.1016/j.jamda.2020.09.012

Kwok, J. Y. Y., Choi, E. P. H., Lee, J. J., Lok, K. Y. W., Kwan, J. C. Y., Mok, V. C. T., & Auyeung, M. (2022a). Effects of mindfulness yoga versus conventional physical exercises on symptom experiences and health-related quality of life in people with Parkinson's disease: The potential mediating roles of anxiety and depression. *Annals of Behavioral Medicine, 56*(10), 1068–1081. https://doi.org/10.1093/abm/kaac005

Kwok, J. Y. Y., Smith, R., Chan, L. M. L., Lam, L. C. C., Fong, D. Y. T., Choi, E. P. H., Lok, K. Y. W., Lee, J. J., Auyeung, M., & Bloem, B. R. (2022b). Managing freezing of gait in Parkinson's disease: A systematic review and network meta-analysis. *Journal of Neurology, 269*(6), 3310–3324. https://doi.org/10.1007/s00415-022-11031-z

Kwok, J. Y. Y., Auyeung, M., Pang, S. Y. Y., Ho, P. W. L., Yu, D. S. F., Fong, D. Y. T., Lin, C. C., Walker, R., Wong, S. Y., & Ho, R. T. H. (2023). A randomized controlled trial on the effects and acceptability of individual mindfulness techniques - meditation and yoga - on anxiety and depression in people with Parkinson's disease: A study protocol. *BMC Complementary Medicine and Therapies, 23*(1), 241. https://doi.org/10.1186/s12906-023-04049-x

Lo, H. H. M., Ng, S. M., & Chan, C. L. W. (2015). Evaluating compassion-mindfulness therapy for recurrent anxiety and depression: A randomized control trial. *Research on Social Work Practice, 25*(6), 715–725. https://doi.org/10.1177/1049731514537686

Mahoney, J. R., Holtzer, R., Izzetoglu, M., Zemon, V., Verghese, J., & Allali, G. (2016). The role of prefrontal cortex during postural control in Parkinsonian syndromes: A functional near-infrared spectroscopy study. *Brain Research, 1633*, 126–138. https://doi.org/10.1016/j.brainres.2015.10.053

Malpass, A., Carel, H., Ridd, M., Shaw, A., Kessler, D., Sharp, D., Bowden, M., & Wallond, J. (2012). Transforming the perceptual situation: A meta-ethnography of qualitative work reporting

patients' experiences of mindfulness-based approaches. *Mindfulness, 3*(1), 60–75. https://doi.org/10.1007/s12671-011-0081-2

Mathews, G., & Anderson, C. (2021). The lived experience of learning mindfulness as perceived by people living with long-term conditions: A community-based, longitudinal, phenomenological study. *Qualitative Health Research, 31*(7), 1209–1221. https://doi.org/10.1177/1049732321997130

Niazi, A. K., & Niazi, S. K. (2011). Mindfulness-based stress reduction: A non-pharmacological approach for chronic illnesses. *North American Journal of Medical Sciences, 3*(1), 20–23. https://doi.org/10.4297/najms.2011.320

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications.

Rush, S. E., & Sharma, M. (2017). Mindfulness-based stress reduction as a stress management intervention for cancer care: A systematic review. *Journal of Evidence-Based Integrative Medicine, 22*(2), 347–359. https://doi.org/10.1177/2156587216661467

Savica, R., Grossardt, B. R., Rocca, W. A., & Bower, J. H. (2018). Parkinson disease with and without dementia: A prevalence study and future projections. *Movement Disorders, 33*(4), 537–543. https://doi.org/10.1002/mds.27277

Seewald, A., & Rief, W. (2023). How to change negative outcome expectations in psychotherapy? The role of the therapist's warmth and competence. *Clinical Psychological Science, 11*(1), 149–163. https://doi.org/10.1177/21677026221094331

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*(3), 373–386. https://doi.org/10.1002/jclp.20237

Sirois, F. M., Molnar, D. S., & Hirsch, J. K. (2015). Self-compassion, stress, and coping in the context of chronic illness. *Self and Identity, 14*(3), 334–347. https://doi.org/10.1080/15298868.2014.996249

Stanley-Hermanns, M., & Engebretson, J. (2010). Sailing the stormy seas: The illness experience of persons with Parkinson's disease. *The Qualitative Report, 15*(2), 340–369. https://doi.org/10.46743/2160-3715/2010.1156

Susan, M. O., & Lizabeth, R. (2005). Acceptance and mindfulness-based approaches to anxiety: Conceptualization and treatment. *Springer*. https://doi.org/10.1007/b136521

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care, 19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Vandenberg, B. E., Advocat, J., Hassed, C., Hester, J., Enticott, J., & Russell, G. (2019). Mindfulness-based lifestyle programs for the self-management of Parkinson's disease in Australia. *Health Promotion International, 34*(4), 668–676. https://doi.org/10.1093/heapro/day021

Wong, S. Y. S., Sun, Y. Y., Chan, A. T. Y., Leung, M. K. W., Chao, D. V. K., Li, C. C. K., Chan, K. K. H., Tang, W. K., Mazzucchelli, T., Au, A. M. L., & Yip, B. H. K. (2018). Treating subthreshold depression in primary care: A randomized controlled trial of behavioral activation with mindfulness. *Annals of Family Medicine, 16*(2), 111–119. https://doi.org/10.1370/afm.2206

Authors and Affiliations

Jojo Yan Yan Kwok[1,2] · Charis Ann Lai[1] · Wilfred Wing Fung Sin[1] · Lily Man Lee Chan[1] · Yuki Yuk Shum[1] · Edmond Pui Hang Choi[1] · Jung Jae Lee[1] · Kris Yuet Wan Lok[1] · Shirley Yin Yu Pang[3] · Man Auyeung[4] · Samuel Yeung-shan Wong[5] · Rainbow Tin Hung Ho[2,6]

✉ Jojo Yan Yan Kwok
jojo.yykwok@gmail.com; jojoyyk@hku.hk

Charis Ann Lai
charisal@hku.hk

Wilfred Wing Fung Sin
u3010478@connect.hku.hk

Lily Man Lee Chan
cmlily@connect.hku.hk

Yuki Yuk Shum
yukishum@hku.hk

Edmond Pui Hang Choi
h0714919@connect.hku.hk

Jung Jae Lee
leejay@hku.hk

Kris Yuet Wan Lok
krislok@hku.hk

Shirley Yin Yu Pang
pangyys@ha.org.hk

Man Auyeung
mandydbs@gmail.com

Samuel Yeung-shan Wong
yeungshanwong@cuhk.edu.hk

Rainbow Tin Hung Ho
tinho@hku.hk

[1] School of Nursing, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong SAR

[2] Centre On Behavioral Health, Faculty of Social Sciences, The University of Hong Kong, Pokfulam, Hong Kong SAR

[3] Department of Medicine, Queen Mary Hospital, Pokfulam, Hong Kong SAR

[4] Department of Medicine, Pamela Youde Nethersole Eastern Hospital, Chai Wan, Hong Kong SAR

[5] The Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong, Shatin, Hong Kong SAR

[6] Department of Social Work & Social Administration, Faculty of Social Sciences, The University of Hong Kong, Pokfulam, Hong Kong SAR