Efficacy of mindfulness-based Taoist embodiment group therapy on depression, anxiety and stress in an integrated community mental health service in Hong Kong: a preliminary exploration

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Abstract: Existing Taoist psychotherapy often indoctrination-heavy formats and hierarchical structures, which can undermine the experiential connection to Taoist principles central to their therapeutic value. This mixed-methods study evaluated a novel, 4-week, mindfulness-based, "Embodied Taoism" group therapy intervention, designed to address these limitations, at a government-funded Integrated Community Centers for Mental Wellness in Hong Kong. The program aimed to mitigate depressive, anxiety, and stress symptoms, and cultivate cognitive flexibility, interpersonal connectedness, and Taoist principle integration. The majority of the 29 participants, aged 25-78, had diagnosed mental health disorders, while three were suspected cases. Rather than didactic presentation, the intervention employed experiential activities like mindful tea drinking, calligraphy, philodrama and philosophical discussion to facilitate embodied mindfulness practice and promote experiential understanding of the Taoist tenets such as non-interference, flowing with natural order, and "walking two roads". Quantitative analysis of pre-post assessments (Depression Anxiety Stress Scales-21) and qualitative thematic analysis of participant questionnaires and focus groups were conducted.

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Thematic analysis revealed enhanced personal agency, with participants reporting increased perceived choice and freedom in managing self-concept and interpersonal conflicts. Over two-thirds of the participants experienced clinically significant symptom improvements. Researchers posit the therapists' flexible, non-dogmatic Taoism presentation and emphasis on embodiment of the philosophy facilitated outcomes by enhancing cognitive flexibility, emotion regulation, and interpersonal connection. These preliminary findings suggest that an embodied, experiential approach to Taoist psychotherapy may hold promise for improving mental health. Further research is warranted to replicate and elucidate the intervention's mechanisms and long-term impact.

Key-words: taoist psychotherapy; philosophical counseling; stress; anxiety; depression; mindfulness;

Introduction

Mental illness in Hong Kong. Mental illness is a significant public health concern in Hong Kong, with a substantial proportion of the population experiencing various psychological disorders (Lam et al., 2015). Government data indicates that approximately 1 in 7 adults in Hong Kong, around 14% of the population, have a mental illness, with most prevalent conditions being depressive disorder (6.9% of adults) and anxiety (4.2%) (The Health Bureau of the Government of the Hong Kong Special Administrative Region, 2017). Factors contributing to the high prevalence include the high-stress environment, long working hours, stigma associated with seeking mental health support, as well as impacts of the COVID pandemic and social unrest (Ho et al., 2023; Wong et al., 2021; Zhao et al., 2020).

Service Setting. The Hong Kong government has implemented a range of initiatives to address mental health needs and promote mental health literacy. This includes the funding of 24 Integrated Community Centers for Mental Wellness (ICCMWs) since 2010, which provide onestop and district-based community support services such as counseling, social support, and rehabilitation programs (The Health Bureau of the

Government of the Hong Kong Special Administrative Region, 2017). This research was carried out in one of the ICCMWs which serves the mental health needs of a district with over 300,000 residents, and employs a recovery based model and a range of evidence-based interventions including but not limited to Cognitive-Behavioral Therapy (CBT), Psychodynamic Therapy, Family/Systemic Therapy, Acceptance and Commitment Therapy (ACT). Prior to the therapy groups involved in this research, the center had never offered any philosophical counseling, group therapy, or related workshops or training programs.

Philosophical counseling. Philosophical Counseling has emerged as a distinct approach to addressing mental health and personal growth in recent decades, offering an alternative to traditional psychotherapy. Originated in the 1980s, this discipline arose as a reaction to the perceived limitations of conventional psychotherapy, which was often criticized for its overly clinical and disconnected approach to the deeper existential and philosophical questions that individuals grapple with (Lahav & Tillmanns, 1995; Marinoff, 1999). Pioneering philosophers, such as Gerd Achenbach and Ran Lahav, were instrumental in establishing philosophical counseling, emphasizing the importance of engaging clients in Socratic dialogue and encouraging them to explore fundamental questions about the meaning of life, the nature of the self, and the human condition (Marinoff, 1999; Schuster, 2013). The therapeutic relationship in philosophical counseling is distinct from that of psychotherapy. Rather than the traditional power dynamic of the therapist as the expert and the client as the passive recipient of treatment, the philosophical counselor and the client are seen as equal partners in the process of self-discovery (Raabe, 2001). The counselor does not claim to have all the answers, but instead, acts more as a facilitator, guiding the client through philosophical inquiry, pushing the client to confront their assumptions and consider alternative perspectives, and encouraging them to think critically about their own thoughts, emotions, and experiences, often incorporating insights from a diverse array of philosophical traditions, including existentialism, phenomenology, and Eastern philosophy, to provide a distinctive and enriching experience for individuals seeking guidance and self-discovery (Marinoff, 1999; Raabe, 2001).

Philodrama, also known as philosophical drama, is an emerging philosophical practice that represents an attempt to engage the body and

senses in the act of philosophizing, potentially opening up new pathways for engaging with philosophical ideas and practices rather than remaining confined to the solitary consumption of written texts (Roth, 2021).

Whilst literature on philodrama is scant, research has suggested that psychodrama, a form of experiential psychotherapy developed by Jacob Moreno in the 1920s, may be effective in the treatment of conditions such as anxiety and depression (Kellermann, 1992; Blatner, 2000). The researcher of this paper posits that philodrama can incorporate core principles of psychodrama including guided drama, role-playing, and spontaneous enactments to explore and address personal and interpersonal issues (Blatner, 1996; Moreno, 1946) and through engaging research participants to philosophize in the process, render a greater understanding of philosophical texts, self-awareness, cognitive flexibility, and potentially even improvement in mental health outcomes.

Taoist philosophy. The origins of Taoist philosophy can be traced back to ancient China, with the foundational texts being the Tao Te Ching and the Zhuangzi. Having emerged during the Warring States period (from approximately 475 BCE to 221 BCE), Taoist philosophy focuses on disengagement from conflicts and comparisons, and engagement in peace and self-preservation of the integrity and thriving of the mind and spirit. Moreover, the Taoist recognizes perspectives on perspectives (Hansen, 2007) and adopts a fluid and adaptive approach to human interaction known as "walking two roads" - by not competing or arguing to win or be right but recognizing the oneness in two, a state of grace and equanimity can be achieved. At the heart of Taoist philosophy is the concept of the Tao, or the "way," which is believed to be the underlying principle and source of all existence. A key principle in Taoist thought is the concept of wuwei, often translated as "non-action" or "non-interference", which the researcher understands as non-scheming and non-imposing, is essential in flowing with the Tao and living in harmony. The chapter 16 in Tao Te Ching states that "This return to the root is called Quietness; Quietness is called submission to Fate; what has submitted to Fate has become part of the always so. To know the always-so is to be Illumined; Not to know it, means to go blindly to disaster" (Estate, Waley, 2005), underscoring the importance of stillness and presence in Taoist thought. To flow and be one with the Tao, Taoist practitioners often engage in mindfulness practice. The preparation and consumption of tea is seen as a meditative act,

allowing the practitioner to flow with Tao and connect with the natural world (Lin, 2013). Similarly, the practice of Chinese calligraphy is traditionally deeply intertwined with Taoist thought whereby the act of wielding a brush with dynamic strokes is viewed as a form of observing and incorporating the naturalness and expressing even the slight changes (Qian & Fang, 2007).

Taoist psychotherapy. The roots of Taoist -inspired psychotherapeutic interventions, such as Taoist psychotherapy, could be traced back to 1970s when it was first developed by Prof. Rhee Dongshick (Criag, 2007; Korean Academy of Psychotherapists, 2003). Chinese Taoist Cognitive Psychotherapy (CTCP), also known as Chinese Taoist Cognitive Therapy (CTCT), was developed about a decade later and integrated traditional Taoist concepts into Western psychotherapeutic frameworks, teaching clients Taoist ideas of acceptance and flexible adaptation to natural laws to treat their maladaptive view of the world as predictable and controllable (Chang et al., 2020; Ding et al., 2020; Zhang et al. 2000; Zhang et al., 2002). Research has noted a hierarchical nature of the therapist-client relationship in Rhee's Taoist psychotherapy, where the therapist is viewed as a "master" and the client is expected to show respect and obedience (Craig, 2007). Similarly, "doctrine direction" being one of the "Five Stages of CTCT" (Ding et al., 2020), also signifies a hierarchical therapist-client relationship and an indoctrination format that could undermine clients' autonomy, causing them to ask the therapist questions instead of self-exploration. A systematic review and meta-analysis has found that the CTCT interventions were mostly conducted in a group therapy setting with significant positive effects on depressive symptoms, yet the uncertainty of the effect on anxiety as well as "mechanisms of action through which CTCT can improve psychological outcomes" need to further researched (Ding et al., 2020).

Research Questions:

1. Can a short-term Taoist psychotherapy group intervention incorporating mindfulness and experiential activities (e.g., tea drinking, calligraphy, philodrama), with the therapist emphasizing on a non-dogmatic approach, effectively reduce symptoms of depression, anxiety, and stress among service users in an Integrated Community Center for Mental Wellness (ICCMW) setting?

- 2. How do the participants perceive Taoist philosophy do they find it therapeutic and applicable in their life?
- 3. What might be the underlying mechanisms of the intervention responsible for the participants' psychological outcomes?

The researcher hypothesizes that this intervention will produce clinically significant improvements in mental health outcomes, and enable participants to find therapeutic values in Taoist philosophy as well as ways to apply it in their life. Moreover, the researcher hypothesizes that the undogmatic, experiential and group formats will provide an experience of interpersonal connectedness and a supportive and welcoming environment to practice cognitive flexibility, ultimately leading to psychological improvements.

Method

Recruitment. The researcher utilized a multi-pronged approach to recruit participants: recruitment posters advertising the group therapy intervention cum research were prominently displayed in the ICCMW center, and social workers were briefed on the program details, encouraging them to refer eligible clients. Prior to the recruitment process, the researcher obtained approval from the clinical supervisor at the center.

During pre-screening telephone calls, the researcher assessed participants' suitability for the group-based intervention. Exclusion criteria included: 1) prior formal training in philosophy or calligraphy, as the program was designed as an introductory experience, 2) intellectual disability or mental retardation, as the program required adequate cognitive functioning, 3) imminent risk of self-harm or harm to others, as the group setting would not be appropriate for individuals presenting with significant safety concerns, and 4) concurrent participation in other therapeutic interventions. Individuals who met the eligibility criteria and provided written informed consent were enrolled in the group therapy program. The consent form emphasized the voluntary nature of participation and the right to withdraw from the study at any time without penalty or loss of benefits. Confidentiality was also explicitly outlined in the consent documentation. This recruitment strategy enabled the researcher to reach a diverse pool of potential participants already engaged with community mental health services, while ensuring all

individuals met the necessary criteria for the group-based intervention. The pre-screening process also allowed for accommodations based on participants' individual needs and mental health status.

Outcome measures. The primary outcome measures for this study included the Depression Anxiety Stress Scales-21 (DASS-21) to assess depression, anxiety, and stress symptoms. Participants completed this selfreport measure at both the pre-intervention and post-intervention time points. The DASS-21 is a well-established and psychometrically sound measure used to assess symptoms of depression, anxiety, and stress over the past week (Antony et al., 2021). Responses are given on a 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time) scale. The DASS-21 yields separate scores for depression, anxiety, and stress, with higher scores indicating more severe symptoms in each domain. The DASS-21 has demonstrated strong psychometric properties across diverse populations (Lovibond & Lovibond, 1995). To determine clinically significant improvement in the current study, the researcher utilized the criteria proposed by Lovibond and Lovibond (1995) that the difference between scores at Time 1 and Time 2 is 5 or more, and the patient moves to a different severity level. This guideline for interpreting meaningful changes in DASS-21 scores has been widely adopted and utilized in both research and clinical applications of the instrument over the past two and a half decades (Osman et al., 2012; Sinclair et al., 2012). The proposed clinically significant change threshold has become an important benchmark for evaluating the real-world impact of interventions and treatments assessed using the DASS-21 (Ronk et al., 2013). In addition to the standardized outcome measure, participants completed a brief postintervention questionnaire evaluating their subjective experiences with the group therapy program. This questionnaire included two questions assessing perceived therapeutic value of Taoist philosophy, and Taoist principle integration. Participants also had the opportunity to provide open-ended feedback about any aspects of the program. Finally, the researcher conducted focus group discussions with a subset of participants (n = 7) following the completion of the group therapy intervention. These semi-structured discussions explored participants' personal experiences, the perceived impact of the program on their mental health and well-being, and suggestions for future program refinement. The focus group data was analyzed using a thematic analysis approach to identify key themes and

patterns. The combination of the standardized DASS-21 outcome measure, participant questionnaires, and focus group discussions provided a comprehensive assessment of the feasibility, acceptability, and preliminary effectiveness of the group therapy intervention for this community-based sample.

Intervention

The intervention program consisted of a 4-week, weekly session format, with each session lasting 60 to 90 minutes. A total of 29 participants were randomly assigned to one of three treatment groups, all of which had the same standardized session plan, with one starting on April 6, 2024, another on May 22, 2024, and the last on June 1, 2024. The therapy groups were held at the ICCMW facilities, and provided free of charge by the author and researcher, a full time employee as a case worker in the center who is also a logic-based therapist certified by the National Philosophical Counseling Association. The researcher/therapist prepared and supplied all necessary materials, including calligraphy pens and paper, as well as four types of tea leaves, one for each session, ensuring consistency across the groups. The sessions primarily featured mindfulness practices, such as tea drinking, as well as philosophical discussions and philodrama activities. While some calligraphy was incorporated into the sessions, participants were primarily encouraged to continue this practice independently at home. Additionally, the therapist provided participants with excerpts from the Tao Te Ching and Zhuangzi between sessions, which served as reference material for both their calligraphy practice and personal reflection.

Overview of session one. The session began with a tea tasting exercise. Participants were encouraged to appreciate the subtle differences between the three brews and reflect on the constancy of change. The therapist then introduced the group to the concept of philosophizing by inviting the group to take turns expressing their personal outlooks on life using two cups and some water. The therapist emphasized the importance of active listening and respect for each other's perspectives during this activity. It was then followed by an introduction to the multifaceted meanings of the first sentence of the Tao Te Ching, which delved into the concepts of "Tao" and its inherent ineffability. Inside

an activity room, the therapist guided the participants in imagining a journey of walking from one end to the other of a vast grassland. Through bodily movements and expressions, this "walking the Tao" exercise prompted the group to notice and contemplate their preconceptions that limit interpretation of the many possibilities and diverse manifestations of the Tao. The therapist then debriefed the participants about the Taoist self-preserving way using the story of Cook Ding, which is to observe and follow nature and find out what works through actual practice.

Overview of session two. In the beginning, participants engaged in a tea tasting exercise, where they were encouraged to appreciate the subtleties between the brews and notice their personal likings and disliking's. The group then explored the concepts of "usefulness" and "uselessness" and the value in embracing different modes of being through discussions and excerpts from Taoist texts, including the Tao Te Ching and Zhuangzi's "Equality of Things", using his stories about the large gourd and the useless tree. The therapist then engaged participants to share views on what it means to be a good wife/partner, understand their own preconceptions and learn different perspectives and possibilities from the group. Participants were also encouraged to write down any questions they had for Zhuangzi to be discussed in the next session.

Overview of session three. After mindful stretching, participants were engaged in a tea tasting exercise, this time voluntarily pouring tea for one another as a practice of being of service. The therapist then led participants in a lineup exercise, asking them to stand in line according to their own perceived height, blood pressure, house size, and public exam scores to prompt them to reflect on the human nature to compare and the arbitrary nature and at times illegitimacy of societal or self-imposed comparative frameworks, as well as to process some long held emotions towards their lifelong experiences of comparisons. It was followed by a discussion of questions participants had for Zhuangzi with the therapist not providing any finite answers but merely more context of Zhuangzi's philosophy such as the era that he was born and anecdotes of how he treated his friend Huizi and faced the death of his wife to facilitate the group's reflection and discussion. The session concluded with an exploration of the Taoist principle of "the highest form of goodness is like water" and its place in interpersonal relationships.

Overview of session four. The session began with participants pouring tea for one another and then an embodied activity, where they mimicked the unfolding of the flower tea through body movements. In pairs, participants imitated each other's movements, discovering the diversity of ideas and perspectives within the group. The therapist then invited the participants to engage in a tea-themed improve drama, assigning them to play characters such as tea leaves, tea pot, soil, tea drinker to practice speaking up, switching perspectives and being present and flexible in the flow of things. The therapist debriefed the participants on the attitude of playfulness and its place in Taoism pointing out how well life flows when all is perceived as a game sans attachment to being right/wrong and winning/losing. The session concluded with a discussion of Kunpeng's story and life's pursuits, spiritual growth, as well as ways to apply Taoist philosophy in everyday lives.

Results

Demographics

The sample for this study consisted of 29 participants who were recruited from the ICCMW. The mean age of participants was 60.4 years (SD = 11.9), with a range from 25 to 78 years old. The majority of the sample identified as female (n = 26, 89.7%), while 3 participants (10.3%) identified as male. In terms of marital status, 5 participants (17.3%) were single, 12 (41.4%) were married or in a domestic partnership, 8 (27.6%) were divorced or separated, and 4 (13.8%) were widowed. Regarding educational attainment, 3 participants (10.3%) had primary education, 21 (72.4%) received secondary school education, and 5 (17.2%) had tertiary level education. As for occupations, 3 participants (10.3%) were employed full time, 1 (3.5%) was employed part-time, 25 (86.2%) reported being retired or unemployed. Regarding mental health history, 26 participants (89.7%) reported having received a previous mental health diagnosis, including depression (n = 12, 41.4%), anxiety disorders (n = 5, 17.2%), mixed anxiety and depressive disorder (n = 4, 13.8%), adjustment disorders (n = 2, 6.9%), dysthymia (n = 2, 6.9%), early psychosis (n = 1, 3.4%), while three participants were suspected cases. This diverse sample represents the target population for the group therapy intervention, with participants demonstrating a range of demographic characteristics and mental health backgrounds typical of those seeking community-based mental health services in Hong Kong.

DASS-21 Depression subscale outcomes

The DASS-21 depression sub-scale was used to assess depressive symptoms in the study. This sub-scale measures constructs such as dysphonia, hopelessness, devaluation of life, self-deprecation,

and lack of interest/involvement, anhedonia, and inertia.

According to normative data provided by Lovibond and Lovibond (1995), the following severity levels are associated with scores on the DASS-21 depression sub-scale: Normal: 0-9; Mild: 10-13; Moderate: 14-20; Severe: 21-27; Extremely Severe: 28. The sample showed a mean reduction in depression scores from pre-intervention (M = 21.7, SD = 10.9, Range = 0-40) to post-intervention (M = 13.5, SD = 8.8, Range = 0-30), and 14 participants experienced clinically significant improvement of depressive symptoms. Figure 1 therefore indicates that the intervention was effective at reducing depressive symptoms from the severe range to within the moderate range.

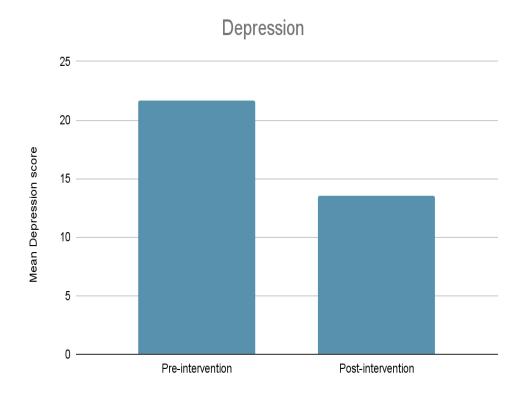


Figure 1. DASS-21 Depression scores for study sample pre- and post- intervention

DASS-21 Anxiety subscale outcomes

The DASS-21 anxiety sub-scale was used to assess anxiety symptoms measuring constructs such as autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. According to normative data provided by Lovibond and Lovibond (1995), the following severity levels are associated with scores on the DASS-21 anxiety sub-scale: Normal: 0-7; Mild: 8-9; Moderate: 10-14; Severe: 15-19; Extremely Severe: 20+. The sample showed a mean reduction in anxiety scores from pre-intervention (M = 18.8, SD = 7.8, Range = 0-32) to post-intervention (M= 13.2, SD = 7.9, Range = 0-28), and 13 participants experienced clinically significant improvement of anxiety symptoms. Figure 2 therefore indicates that the intervention was effective at reducing anxiety symptoms from the severe range to within the moderate range.

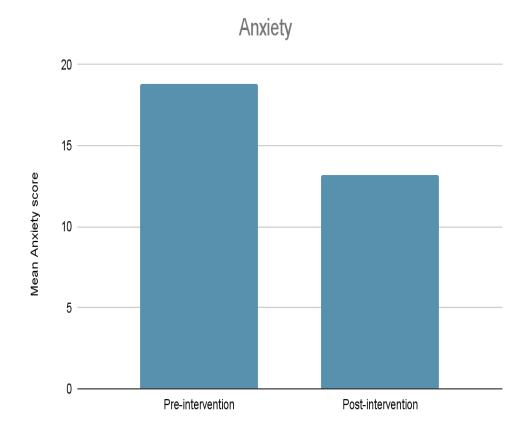


Figure 2. DASS-21 Anxiety scores for study sample pre- and post-intervention

DASS-21 Stress subscale outcomes

The DASS-21 stress sub-scale was used to assess stress symptoms measuring constructs such as nervous tension, difficulty relaxing, irritability and negative affect. According to normative data provided by Lovibond and Lovibond (1995), the following severity levels are associated with scores on the DASS-21 stress sub-scale: Normal: 0-14; Mild: 15-18; Moderate: 19-25; Severe: 26-33; Extremely Severe: 34+. The sample showed a mean reduction in stress scores from pre-intervention (M = 22.3, SD = 9.4, Range = 2-42) to post-intervention (M = 16.5, SD = 10.2, Range = 0-40), and 11 participants experienced clinically significant improvement of stress symptoms. Figure 3 therefore indicates that the intervention was effective at reducing stress symptoms from the moderate range to within the mild range.

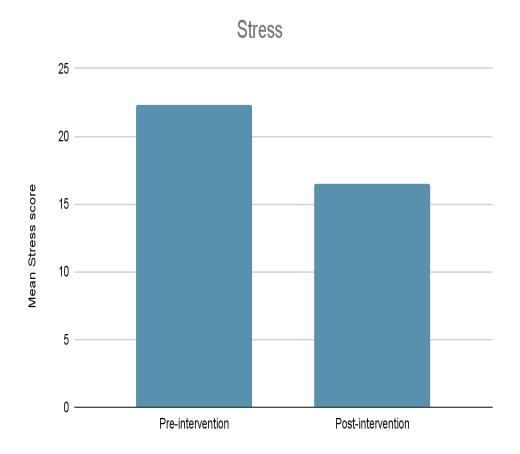


Figure 3. DASS-21 Stress scores for study sample pre- and post-intervention

Questionnaire feedback

The participant feedback questionnaire was distributed and collected through online messenger after at least a month has passed since the conclusion of the last session of each therapy group, and was consisted of two questions:

- Do you feel that you can to some extent put Laozi and Zhuangzi's philosophy into practice?
- For you, does Laozi and Zhuangzi's philosophy have healing value? The 14 participants who responded to the questionnaire post-intervention reported overall positive experiences, with 12 concurring that Taoist philosophy had therapeutic and healing value, 1 being uncertain, and 1 expressing indifference.

While 13 participants expressed they had been incorporating or learning to incorporate Taoist ideas of such as "going with the flow," "non-attachment," and "equanimity" into their lives to varying degrees to manage stress, pressure, and uncontrollable external circumstances, some noted their application of Taoist ideas was difficult, as they had previously been accustomed to different mindsets.

Although some participants expressed difficulty in fully embracing these ideas and integrating the concepts to the fullest extent, the respondents consistently found the Taoist philosophical concepts to be meaningful and relevant to their lived experiences across diverse life stages and contexts. They described how these Taoist principles enabled them to break free from rigid thought patterns, and discover alternative approaches to problems.

Participant α : "Sometimes when I am faced with difficulties, I will recall that exercise where the therapist invited us to walk from point A to point B. I remember the therapist meant to illustrate that "the Tao that can be taught is not Tao" then I try to think outside the box and find more other ways."

Participants also conveyed that the philosophy assisted them in accepting themselves, alleviating stress and conflicts and cultivating a more relaxed, accepting, and harmonious outlook on life, particularly in the realms of interpersonal relationships and personal growth. The philosophical narratives and precepts were seen as providing valuable reflection, perspective, and a sense of freedom and ease.

Participant β: "Zhuangzi's carefree attitude and freedom from customs and other people's opinions was therapeutic to me and made me feel free."

Participant γ : "I was used to pleasing others. Now before I agree or praise others, I will practice mindfulness, and be aware of my feelings, and then say what I really want to express. If the other person doesn't like me, treats me coldly, or even attacks me maliciously, I know that self-worth does not depend on them. I can choose how to respond, and there are millions of choices."

Participant δ : "I am now more able to let things take their own course and not sacrifice myself. In the past, I would endure self sacrifice, but now I have changed and advocate for myself. I hope to learn to be more open-minded in the future."

Anecdotally, one participant's engagement with Taoist ideas was found to have inspired and encouraged creative work, as exemplified by their produce of an art piece that they deemed valuable, irrespective of others' opinions, which they had felt inhibited to do so before the intervention.

Focus group feedback

On August 8th, 2024, a focus group was held involving seven participants from the previous intervention groups. The participants, ranging in age from 37 to 78, included one man and six women, all of whom had demonstrated significant improvements in their depressive, anxiety, or stress symptoms. The session was conducted by the therapist in a sitaround table format, with the group sharing tea and reflecting on their therapy group experiences. Verbal consent was obtained from the participants to record the session and to include the content in the research, ensuring the anonymity of the individuals involved.

The discussion was semi-structured and guided by a set of predetermined questions displayed on a projector screen, which include:

- What are your biggest gains and feelings from participating in this group? To what extent does it meet your needs and expectations?
- How do you think participating in this group affects your thinking, emotions, and behavior?
- What do you think of the format and design of the group? Does it make you feel safe and comfortable to express your thoughts and opinions?

- Is drinking tea and calligraphy useful? If so, what impact does it have?
- Have you attended other therapy groups before this group? Do you feel they are different from this group?
- Before this group, did you discuss your outlook on life with a therapist or anyone else? Did the group help you think about life better? If so, what aspects of life did you think about?
- What do you think are the advantages of group therapy over individual counseling? How well does it meet your needs?
- What benefits do you feel about sharing and exchanging experiences with other group members? How does this type of interaction impact you?
- Can you describe any instances of mutual support and empathy among group members? How did this impact you?
- What role does the group therapist play in the group? How good are they at leading discussions, providing insights and suggestions, and setting the mood? How important is their role?
- What Taoist concepts and practices did you learn in the group? How did they help you cope with life's challenges?
- Looking back on the entire group, what lasting changes and effects do you think it had on you? What lessons does this experience teach you for the future?
- Is there anything you wish the group could discuss more?

The analysis of the meeting transcript indicates the following themes: progress in emotional regulation and mindfulness, successful integration of Taoist philosophy, appreciation of the interactive learning, group format and characteristics of the therapist. Some of their comments are included below.

Participant A: "I remember Zhuangzi's story of the useless tree. I had always disliked myself and found fault with myself. I went along with what everyone said and had no personality. Now I pay more attention to my liking and disliking and discover my personality."

Participant B: "Before this group I had never told anyone about my outlook on life, not even social workers, because my personal thinking is rather pessimistic, and I fear that sharing my thoughts will affect other people...I used to be quick to get angry when someone mistakenly addressed me as a man, but someone did this recently and I still held the

door of the elevator for him before he thanked me and called me madam. I have more grace to not react emotionally."

Participant C: "Before I had never talked to anyone about my outlook on life but I really want to talk to others about the meaning behind and why there is so much suffering in life...I felt that the group helped each other. I made a few friends and went to see a movie together."

Participant D: "My boss called me out for being inflexible in thinking. I recognized that I have problems with being inflexible and that has prohibited and scared me from socializing with others. I am learning to be more flexible.... In this group I learned and felt what sharing and communication truly is."

Participant E: "I prefer and enjoy the interactive format and think it would have been boring had we had to journal day after day.... I remember that tea-leaves-themed drama was used as a metaphor for life. I had many experiences in life and they are like tea stains in a pot hard to get rid of. Thinking of different characters gave me more perspectives."

Participant F: "Other social workers may not know how to handle discussions, but the therapist makes the atmosphere so comfortable that everyone can talk in a peaceful atmosphere."

Participant G: "I was pleasantly surprised that the therapist was able to use simple exercises such as resembling the movement of the flower tea to explain a profound philosophy that correlates to our current living conditions. The philosophy was etched into my heart, as it was made very easy to absorb."

The participants expressed appreciation for and retention of Zhuangzi's stories and metaphors, as well as the interactive and experiential nature of the intervention, being able to recall various activities and the improvisational drama. They unanimously preferred this interactive approach over a potential alternative that would involve simply discussing the philosophical text and completing written reflections. The participants found these experiences to be highly engaging and effective in translating philosophical knowledge into practical understanding which enabled them to reflect more deeply on life and manage interpersonal conflicts with greater awareness and equanimity, compared to their past tendencies to dwell on negative thoughts or react impulsively in difficult situations. Additionally, some participants reported having adopted new habits and interests, such as calligraphy and tea drinking, which they plan

to continue pursuing in the future. The participants also unanimously expressed a strong preference for the group setting over individual counseling, emphasizing the sense of mutual understanding and support they experienced, as well as the therapist's ability to foster an atmosphere that facilitated open sharing and discussion. They expressed a desire for longer sessions and great interest in further dialogue with philosophers, reflecting their motivation for continued self-exploration and their belief in the beneficial impact of philosophy on their lives.

Discussion

Strengths and limitations

The study demonstrates methodological rigor through its mixed-methods design and relatively large sample size of 29 participants. The integration of both qualitative and quantitative data, including questionnaires and focus group discussions, strengthens the study's capacity to capture the multifaceted experiences and outcomes of the participants. Another strength is the inclusion of participants with pre-existing mental health diagnoses, which enhances the study's ecological validity and relevance to real-world therapeutic practice. The group-based format and the incorporation of various Taoist-inspired activities, including philodrama, philosophical discussion, tea drinking, calligraphy and mindful stretching, further distinguish the approach and may foster a sense of community and shared learning among participants. This inclusive design feature accommodates individuals with diverse literacy levels and educational backgrounds.

Another notable strength is the brevity and efficiency of the intervention. The study examined the effects of a relatively short-term, 4-week group therapy program, which is considerably shorter than many other therapeutic interventions. Despite the concise duration, the study was able to demonstrate positive outcomes for participants, suggesting that the Taoist-inspired therapeutic approach is not only effective, but also economical and time-efficient.

The diversity of participant diagnoses in Taoist Embodiment Therapy research represents both a strength and a limitation. On one hand, recruiting a heterogeneous sample can enhance the external validity of the findings, suggesting the intervention's broad applicability across mental health conditions. However, this participant diversity may also obscure any disorder-specific effects, necessitating subgroup analyzes to tease apart differential impacts. Furthermore, adapting the protocol to effectively address the unique needs of participants with varied clinical presentations may require extensive refinement of the intervention. Careful consideration of sample composition and analytical approaches will be crucial in navigating this methodological tradeoff in future studies.

A key limitation of the study is the reliance on self-reported data, which can be subject to biases. Moreover, regarding the post-intervention questionnaire, a respondent highlighted the fact that the integration of the philosophy in their life could be so well but still they found it hard to pinpoint or elaborate. Since some research participants had low literacy levels and struggled to express themselves through words, the intervention activities were designed to be experiential and inclusive, yet the evaluation of the efficacy was limited in design and failed to capture responses from some of them. Additionally, the gender imbalance and involvement of only one therapist raise questions about the generalizability and replicability of the findings.

Another significant limitation is the lack of a control group, which threatens the internal validity of the study and makes it difficult to attribute the observed improvements directly to the intervention. In addition, the absence of a retest component to evaluate the long-term effects of the intervention limits the ability to draw conclusions about the sustainability of the observed benefits.

Considerations for future research

Future studies on the intervention should include a control group to allow for a robust evaluation of the intervention's efficacy (Higgins & Green, 2011). Researchers should also conduct longitudinal follow-up assessments to evaluate the long-term sustainability of the observed benefits (Ioannidis, 2016). Additionally, researchers should aim to recruit a larger and more diverse sample of participants to enhance the generalizability of the findings.

Future research should also incorporate objective outcome measures, such as clinician-rated assessments or physiological indicators, to provide a comprehensive and reliable evaluation of the intervention (Kazdin, 2003). Examining the role and characteristics of the therapist, as well as investigating the underlying mechanisms of change, could help

refine and optimize the intervention (Crits-Christoph et al., 2013). Researchers should also consider using multiple raters or assessors to establish the reliability of the outcome measures, and explore the convergent and discriminant validity of the assessment tools by comparing them with other established measures of psychological well-being (Ryff, 1989), mindfulness (Baer et al., 2006), and body awareness (Mehling et al., 2012). This would help ensure that the study's findings are robust and the measurement tools are accurately capturing the intended outcomes.

Conclusion

The findings of the present study demonstrate that a group-based intervention incorporating Taoist philosophical principles was effective in alleviating symptoms of depression, anxiety, and stress within the sample. Participants exhibited clinically meaningful improvements, with mean scores on the DASS-21 subscales decreasing from the severe/mild range to moderate/normal range. and qualitative feedback further corroborating the therapeutic value of the Taoist philosophy-informed group therapy, as they described how the philosophical concepts empower self-agency, mood management and a more harmonious psychological outlook. Importantly, the undogmatic approach utilized experiential activities to facilitate philosophical concept comprehension and allow greater room for self-exploration, in contrast to the more didactic, hierarchical style of prior Taoist psychotherapies. Taken together, these findings indicate that the integration of Taoist philosophical principles into group-based therapeutic interventions holds potential for expanded utilization of philosophical counseling methodologies within integrated community mental health frameworks, warranting further research to expand upon these preliminary results.

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