


Perspective Articles as Catalysts for Innovation: Addressing Critiques on Traditional Chinese Rehabilitation Exercise for Myofascial Pain [Response to Letter]

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Dear editor

We appreciate Dr. Zhou's engagement with our perspective article, "Traditional Chinese Rehabilitation Exercise (TCRE) for Myofascial Pain: Current Evidence and Further Challenges".¹ However, their characterization of our work as a "superficial synthesis" misrepresents the fundamental purpose of perspective articles in academic discourse. This rebuttal reaffirms the role of perspective articles as hypothesis-generating tools, contextualizes our methodological choices, and addresses critiques while integrating new evidence to advance TCRE research.

On Methodological Limitations and Heterogeneity of Cited Studies

The letter critiques our inclusion of studies with small sample sizes and heterogeneous designs. While these limitations exist, they reflect the nascent state of TCRE research, which prioritizes exploratory insights over systematic reviews. Perspective articles, by definition, synthesize emerging trends rather than appraising evidence exhaustively. Our work explicitly acknowledged these constraints in the Conclusion:

Despite the limited quality of the current evidence, constructing an acceptable evidence-based guideline.. is essential for improving the treatment of myofascial-related diseases.

For instance, the cited RCTs on Baduanjin and Wuqinxi—though small-scale—demonstrated statistically significant improvements in pain scales (eg, VAS reductions of 2.4 points, $d = 1.33$, $p = 0.004$) and functional outcomes in chronic low back pain (CLBP) and knee osteoarthritis. These findings align with broader trends in mind-body interventions, where early-phase studies often precede large-scale trials. Notably, Zhou et al's 2025 systematic review was published post-submission, precluding its inclusion. This highlights the iterative nature of research, where perspective articles serve as catalysts for subsequent syntheses.

Mechanistic Hypotheses: A Call for Exploration, Not Definitive Proof

Critics argue that our discussion of "fascial remodeling" and "neuromodulation" lacks mechanistic validation. However, perspective articles aim to propose plausible frameworks for future investigation. We posited that TCRE's slow movements induce mechanical stress on fascia, promoting collagen reorganization and elasticity—a hypothesis supported by recent studies on Baduanjin in ankylosing spondylitis (AS), which demonstrated improved myofascial biomechanics and reduced inflammatory markers.²

Traditional Chinese Medicine (TCM) theory further elucidates these mechanisms. For example, the Huangdi Neijing emphasizes the interplay between “骨正筋柔” (bone alignment and tendon flexibility) and visceral health, suggesting that TCRC’s holistic approach may modulate systemic factors like yangqi (vital energy) circulation. While Western biomechanical analyses are still needed, preliminary neuroimaging studies show Yijinjing enhances brain network connectivity, potentially explaining its analgesic effects. Dismissing these hypotheses as “anecdotal” overlooks the iterative process of scientific discovery, where observational insights guide mechanistic inquiry.

Standardization and Safety: Challenges Acknowledged, Not Ignored

Zhou et al claim we overlooked standardization challenges. On the contrary, our Future Prospects section explicitly called for “explicit TCRC models” to address variability in movement execution and instructor expertise. This issue is not unique to TCRC; yoga and tai chi face similar reproducibility challenges due to their mind-body integration. Emerging solutions include robotic integration—a concept validated by recent trials using exoskeletons to standardize motion patterns and provide haptic feedback.³

Regarding safety, while adverse events like joint strain were not detailed in our cited RCTs, the absence of serious complications aligns with TCRC’s “favorable safety profile”. For instance, a 24-week Wuqinxi trial for CLBP reported no adverse events, underscoring its feasibility for elderly populations. Future studies should adopt standardized adverse event reporting frameworks to strengthen safety evaluations.

Future Directions: A Roadmap Grounded in Public Health Priorities

Critics dismiss our proposals on aging, robotics, and long-COVID as “superficial”, yet these areas address urgent global health challenges:

Aging

With China’s elderly population projected to reach 16.9% by 2030, TCRC’s low-cost design aligns with WHO recommendations for aging societies. Trials like Sweden’s interprofessional home-based reablement (IHR) demonstrate the efficacy of multimodal interventions in improving mobility and reducing care dependency—a model adaptable to TCRC.⁴

Robotics

Integrating TCRC with exoskeletons could enhance precision and scalability. For example, the Atalante exoskeleton improved gait stability in stroke patients ($d = 1.30$ for 6MWT distance), suggesting similar applications for TCRC-driven rehabilitation.⁵

Long-COVID

Our referenced trials (ChiCTR2300067568, NCT05675995) investigate TCRC’s role in post-viral myofascial recovery—a critical need given that 20% of COVID-19 survivors experience chronic pain. Mechanistic hypotheses could explore TCRC’s impact on neuroinflammation or mitochondrial dysfunction, pathways implicated in long-COVID.⁶

The Role of Perspective Articles in Scholarly Discourse

The conflation of perspective articles with systematic reviews reflects a misunderstanding of their distinct roles. Perspective pieces are opinion-driven, synthesizing knowledge to identify trends and provoke debate. A Perspective is a review that is written with the author’s point of view in mind. They focus on fundamental concepts or prevalent ideas in a specific field or discipline, and discuss current advances or future directions, and may include original data as well as personal insights and opinions (According to the specified definition of perspective by Dove Medical Press). For example, our article:

Highlighted TCRC’s potential as a nonpharmacological alternative, supported by RCTs showing 92.6% efficacy in myofascial pain management.

Identified gaps in mechanistic and standardization research, urging interdisciplinary collaborations.

Proposed actionable solutions, such as robotics integration and aging-focused trials.

These contributions align with the broader academic mission of perspective articles. Robust discourse is vital, but critiques must respect genre-specific objectives.

Conclusion

We reaffirm the validity of our perspective. TCRE represents a culturally resonant, theoretically grounded approach to myofascial pain, bridging traditional wisdom and modern science. While Zhou et al's methodological rigor is commendable, their critique undervalues the hypothesis-generating role of perspective articles. We urge readers to view this work as a call to action—for rigorous RCTs, mechanistic studies, and innovative collaborations—to advance TCRE from anecdotal observation to evidence-based practice.

Disclosure

The authors declare no competing interests in this communication.

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