

Validation of a Simplified 18-Item Japanese Five-Constitution Model Based on Traditional Chinese Medicine Constitution Theory and Implementation of a BCT-Based Web Application

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内容梗概

Background: Japan's aging society requires preventive medicine managing "Mibyo" (presymptomatic) states via Traditional Chinese Medicine (TCM). However, standard assessment tools are burdensome and lack Japanese validation. Additionally, a gap exists between assessment and behavior change.

Objectives: This study aimed to (1) validate a simplified "Japanese Five-Constitution Model" (Study 1) and (2) implement a web-based support system integrating this model with Behavior Change Techniques (BCTs) (Study 2).

Methods: Study 1 analyzed 851 Japanese adults. Hierarchical clustering on an 18-item questionnaire identified the structure, and a decision-tree predicted types. Study 2 developed a web application using this logic. To promote behavior change, it integrated BCTs specifically "Feedback on Outcome" (radar charts) and action plans.

Results: Study 1 confirmed a five-constitution model, representing a "Psychosomatic Severity Spectrum" driven by mental stress rather than discrete types. The 18-item decision tree achieved 81.6% accuracy. Study 2 implemented this logic into a web system that visualizes psychosomatic balance and generates personalized advice.

Conclusion: This research establishes the 18-item questionnaire as a practical tool. Its integration into a BCT-based platform bridges the gap between assessment and action, offering a scalable solution for personalized preventive medicine.