

Preliminary Proposal of the Sanjiao-Vital Function Score (S-VFS)

—A Conceptual Model for Evaluating Vital Functions—

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Introduction

Over the past sixteen years, the Research Association for Geriatric Diseases has organized practical seminars on Sanjiao Acupuncture (Han Jingxian & Kawanami Oichi.), and has trained approximately 300 Gold-QPD acupuncturists (Cupids with Gold-Arrow-Needles after Greek Mythology). In clinical practice, Sanjiao Acupuncture has been applied to older adults and individuals with various health conditions, including mild cognitive impairment (MCI), behavioral and psychological symptoms of dementia (BPSD), post-COVID-19 conditions, and neurological disorders. Clinical observations have suggested potential benefits; however, further systematic investigation is required to clarify its effectiveness (“Acupuncture Renaissance”, published by Kokusho Kankokai, 2022).

While these achievements are highly significant, we have raised a fundamental question: “Is disease improvement alone sufficient to evaluate the value of Sanjiao Acupuncture?”

Improvement in dementia symptoms or mitigation of post-COVID sequelae are certainly meaningful clinical outcomes. However, the primary objective of Sanjiao Acupuncture is the restoration of the body's inherent vital functions. Symptom improvement may be viewed as one important consequence of this more fundamental process.

The traditional medical principle underlying Sanjiao Acupuncture, “Yiqi Tiaoxue, Fuben Peiyuan” (益氣調血 扶本培元; benefiting qi, regulating blood, strengthening the fundamental constitution, and cultivating vital essence), emphasizes the restoration of the circulation of qi, blood, and body fluids while enhancing the body's intrinsic vitality, resilience, and adaptability. Therefore, evaluating Sanjiao Acupuncture solely by disease-specific improvement rates is insufficient.

The more essential question is not, “How much has the disease improved?”, but rather, “To what extent have vital functions been restored?” Disease improvement should be recognized as a consequence of this restoration.

In practical terms, these vital functions include:

- The ability to sleep,

- The ability to eat,
- The ability to move,
- The ability to think and engage socially, and
- The will and motivation to live.

These capacities constitute the foundation of human life and vitality.

When individuals lose the ability to sleep, they decline physically and mentally. When they cannot eat, they weaken. When they cannot move, functional capacity deteriorates. When social connections and hope are lost, the fundamental drive to live diminishes. Sanjiao Acupuncture primarily acts upon these foundational aspects of human life.

Proposal of the Sanjiao-Vital Function Score (S-VFS)

The Research Association for Geriatric Diseases proposes the Sanjiao-Vital Function Score (S-VFS) as a preliminary clinical framework for describing changes in vital functions associated with Sanjiao Acupuncture. The present article is intended as a conceptual proposal rather than a formal scale-development study. The S-VFS is not intended to measure disease severity or disease-specific improvement. Rather, it is a framework designed to visualize and objectively evaluate human vitality, recovery capacity, and adaptive capacity.

The aim of this study is to quantitatively evaluate improvements in vital functions following Sanjiao Acupuncture and to develop a universal assessment framework that can be applied across the field of acupuncture medicine.

Introduction of the SPACE Model

The five SPACE domains were selected based on long-term clinical observations of practitioners of Sanjiao Acupuncture. These domains were considered to represent fundamental aspects of daily functioning that frequently appear to change during the clinical course of treatment. The present framework should therefore be regarded as a clinically derived model that requires future validation.

SPACE represents the essential functional capacities required for healthy living:

- S: Sleep
- P: Physical Activity
- A: Appetite and Nutrition
- C: Cognition and Communication
- E: Emotion and Motivation

It should be noted that cognition and communication, as well as emotion and motivation, represent distinct constructs. In the current preliminary framework, these elements were grouped together for pragmatic clinical use. Future refinement of the model may require their separate evaluation.

Example of a SPACE Score

Each SPACE component is evaluated on a scale from 0 to 10 points, and the total score constitutes the **SPACE Score**.

At present, the scoring method is intended for exploratory clinical use. Because numerical ratings may be influenced by evaluator judgment, future studies are necessary to establish operational definitions, inter-rater reliability, validity, and appropriate weighting of individual domains.

Scoring is based on the patient's actual functional condition. For example, suppose a patient is evaluated as follows:

- Sleep: 4 points
- Physical Activity: 5 points
- Appetite: 6 points
- Cognition and Communication: 4 points
- Emotion and Motivation: 3 points

The pre-treatment S-VFS would therefore be 22 points.

Following treatment with Sanjiao Acupuncture, suppose the scores improve to:

- Sleep: 8 points,
- Physical Activity: 7 points,
- Appetite: 9 points,
- Cognition and Communication: 7 points and
- Emotion and Motivation: 6 points.

The total SPACE Score would increase to 37 points. Accordingly, the patient's overall vital functional capacity can be interpreted as having expanded from 22 to 37 points.

Sanjiao-Vital Function Score		
	治療前	治療後
S	4	8
P	5	7
A	6	9
C	4	7
E	3	6
	22	37

Establishment of the Vital Function Zone

When the SPACE Score is represented as a radar chart, the overall condition of vital functions can be visualized comprehensively.

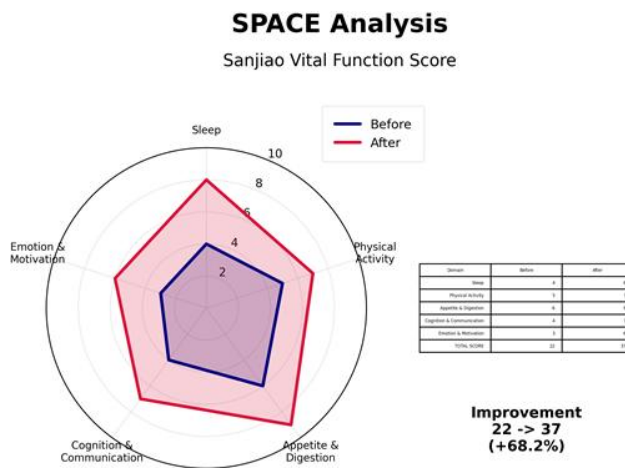
The area enclosed by this radar chart is termed the Vital Function Zone.

The interpretation is straightforward:

- A larger area indicates greater vitality and functional capacity.
- A smaller area indicates diminished vital function.
- Expansion of the area reflects recovery of vital function.

Thus, the SPACE Score provides a quantitative measure of vital function, while the Vital Function Zone offers a visual representation of its extent.

This approach enables intuitive and objective assessment of the overall functional effects of Sanjiao Acupuncture. An example of the SPACE radar-chart representation is shown below.



Clinical Significance

In clinical practice, improvements in SPACE parameters may be accompanied by clinically meaningful changes such as

- Reduced incidence of falls,
- Improved mental health,
- Improvement of urinary and fecal incontinence,
- Enhanced activities of daily living (ADL), and
- Reduced level of care dependency.

These outcomes represent important clinical consequences of restored vital function and correspond directly to outcomes valued by patients, family members, caregivers, and healthcare professionals.

Future research should therefore focus not only on evaluating vital function through SPACE but also on systematically developing frameworks for assessing these clinically meaningful outcomes.

Future Perspectives

S-VFS and the SPACE Score are not intended solely as evaluation tools for Sanjiao Acupuncture. Further studies are necessary to establish the reliability, validity, and clinical utility of the SPACE framework.

In the future, they may serve as foundational measures of vital function across a wide range of fields, including:

- Dementia care,
- Healthy aging and longevity support,
- Palliative care,
- Preventive medicine,
- Mental health care,
- Home-based medical care, and
- Frailty prevention.

Furthermore, integration with artificial intelligence and longitudinal data analysis may enable the continuous assessment of vital functions, prediction of future health trajectories and outcomes, and development of a novel framework for medical evaluation in acupuncture medicine. Future studies should examine the psychometric properties of the SPACE framework, including reliability, construct validity, responsiveness, and clinical applicability. Further refinement of domain structure and scoring methodology will also be required.

Conclusion

The Sanjiao-Vital Function Score (S-VFS) is proposed as a preliminary framework for visualizing and describing changes in vital functions associated with Sanjiao Acupuncture. The validity and reliability of this framework remain to be established through future research.

S-VFS aims to make the restoration of vital function visible and measurable, while providing a new framework for communicating, evaluating, and sharing its value. Ultimately, the goal is to treat people rather than diseases, and to evaluate vital function rather than symptoms.