

## Editorial

# The multidisciplinary study on Sasang typology



Traditional Korean medicine is a sole practical science that has survived the harsh modernization in East Asia and nowadays gets serious attention from health care professionals.<sup>1</sup> The clinical effectiveness of medical herbs and acupuncture might be a reason; however, the integrative and person-centered perspective on biopsychosocial aspects of the human being<sup>2</sup> would be the most important one when compared to Western biomedicine.

The Sasang typology has some mores. This unique traditional Korean personalized medicine is based on the medical and philosophical heritage that has built up for thousands of years in Korea.<sup>3</sup> All Koreans know about it and want to get advice for everyday life including social relationship, physical training, character development, food, lifestyle, and residential environment along with medical conditions. Thus there are many possibilities for multidiscipline or interdisciplinary studies with innovation.

However, the efforts were not successful for three reasons.<sup>4,5</sup> First, the majority of Korean researchers consider that Sasang typology is useful only for developing new medications and the interdisciplinary work with biomedicine was promoted exclusively. Second, many disciplines in Korea were just introduced from the West, and there has not been adequate references for conjoining the East and West, especially for making new ones in medicine and social science. Last, but not least, it has been 100 years since traditional medicine lost communication with other academia and there is no experience in making a new system of academia together.

In this special issue of *Integrative Medicine Research*, outstanding researchers from psychology, physical science, social science, art, and medicine provide an example for the multidisciplinary studies on Sasang typology, which would be a new-normal of 21<sup>st</sup> century academia.

The first article is a review of Sasang typology from a philosophical viewpoint. Concerning the importance of Sasang typology in medicine, for a long time many researchers have focused only on the personalized treatment to find new drugs from it. However, Kim, Shin, and Hwang (pp. 4-9), certified

clinical specialists of Sasang medicine, show that the main concern for longevity in Sasang medicine is morality, not a medication. This article focuses on the character development with four virtues of benevolence, righteousness, courtesy, and wisdom as described in the classics of Confucianism, which needs to be nurtured for a better and healthy life. This might be the reason why we should go back to the philosophy for a better understanding of human nature along with biomedical science.

From previous studies,<sup>1</sup> it was shown that each Sasang type has distinctive characteristics in its physical and psychological traits and these features retain stable across the ages. An article by S.A. Jung (pp. 10-19) reviews previous findings on the psychological features of each Sasang types, and reconfirms that extraversion and emotional stability would be the core concept linking Western and traditional Korean psychology.<sup>6,7</sup> Actually these two personality traits have been used for the study of human-computer interaction usage patterns to which Lee<sup>8</sup> have paid attention for a substantial time. They have examined whether the Sasang type can predict the user's human-computer interaction experience and suggested Sasang typology as a native design methodology incorporating temperaments (pp. 34-40).

The Sasang Personality Questionnaire (SPQ) was developed to measure the temperament of each Sasang type and the stability was examined from ages 20 years to 60 years previously.<sup>1</sup> The article by Chae and Lee (pp. 29-33) shows that this SPQ can be used in adolescent age group which reliable diagnostic tool for Sasang typology is not provided so far.<sup>9</sup> The SPQ would be an objective and reliable tool for diagnosing Sasang types of the children and adolescent age groups with further investigation on its construct, reliability and validity.

As for the medical field, anxiety or emotional instability has been a major concern and the art has been used as a soothing method for it.<sup>10</sup> Considering that music, painting, dancing, singing, and other therapies incorporating art have

been shown to have clinical effects on reducing the negative influence of anxiety, it is not surprising that the Oriental Medicine Music Therapy by Lee, Song, and Kim (pp. 48-52) is beneficial for the So-Eum type who can be defined as introvert and neurotic temperament.<sup>6</sup>

These four articles seem simply to focus on the psychological aspects of Sasang typology; however, the results can be applied to the studies on cross-cultural difference, human-computer interaction, pediatrics, and patient care. Actually there are many reports that the psychological factors influence the progress of disease and treatment results. A commentary by J. Leem (pp. 53-56) in this issue went over a report<sup>11</sup> that skin conductance as autonomic responses to acupuncture can be modified by psychological factors.<sup>12,13</sup>

As for the physical or constitutional perspectives, an article by Ko and You (pp. 41-47) suggests that the meaning of body mass index (BMI) should be revisited since its correlation with physical fitness and body composition need to be considered for studying the physical traits of each Sasang type. They show the differences in muscle strength and fat mass between Tae-Eum and So-Yang types disappear when BMI is considered as a covariate, and suggest the possibility that the Tae-Eum type should not be defined merely as an obese type. The high BMI score of Tae-Eum type from the previous studies was considered as evidence of being fat and obese; nonetheless, the Tae-Eum type was described as “tall and big” rather than “fatted and obese” in Jae-ma Lee’s *The Principle of Life Preservation in Eastern Medicine*.<sup>14</sup>

The article by Chae and Kwon (pp. 20-28) provides bold acclaims for explaining such physical characteristics as hypothalamus hypothesis based on the analysis on BMI, ponderal index, and basal metabolic rate describing constitutional perspectives of Sasang typology.<sup>1</sup> According to their hypothesis, the Tae-Eum type has constitution with less response to outer environmental stress rather than with inborn sufferings from obesity, diabetes, and metabolic disease. The hypothalamus hypothesis in constitution standpoint might be a useful foundation for the study of pathophysiological mechanism of Sasang typology along with temperament and character inventory hypothesis in a temperament outlook.<sup>15</sup>

This special issue on a multidisciplinary approach to Sasang typology is an interesting attempt that should deliver more intriguing advances to us in the near future. The collaboration of Sasang typology and art provide intuitive understanding on human nature. Temperament studies on Sasang typology could explain the mind-body interaction between biology and psychology in more objective ways.<sup>16</sup> Physical science could show us the way to cultivate physical wellbeing as a foundation of a healthy mind rather than to struggle with the fixed corporal shape of constitution. Studies with the social network service might have a more insightful understanding on social communication with the help of Sasang typology.<sup>8</sup>

If we can thrive long enough, traditional Korean medicine may help other fields of science to resuscitate the long ignored legacy that have evolved for thousands years on Korean soil. *Integrative Medicine Research* would integrate the understanding on human nature from diverse perspectives, and overcome

the limitations with the help of open-minded and innovative collaborations between disciplines.<sup>4</sup>

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## Conflicts of interest

The author declares no conflicts of interest.

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Han Chae\*

School of Korean Medicine, Pusan National University, Busan,  
Korea

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\* *Corresponding author.* Division of Longevity and Biofunction  
Medicine, School of Korean Medicine, Pusan National  
University, 30 Jangjeon-dong, Geumjeong-gu,  
Busan 609-735 Korea.

E-mail address: [han@chaelab.org](mailto:han@chaelab.org)

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