Development of a Small-Group Teaching Method for Enhancing the Learning of Basic Acupuncture Manipulation Optimized with the Theory of Motor Learning

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Abstract : This study developed a method for teaching acupuncture manipulation in small groups optimized with the theory of motor learning. Sixty acupuncture students and their teacher participated in our research. Motion videos were recorded of their manipulations using the lifting-thrusting method. These videos were analyzed using Simi Motion software to acquire the movement parameters of the thumb tip. The parameter velocity curves along Y axis was used to generate small teaching groups clustered by a self-organized map (SOM) and K-means. Ten groups were generated. All the targeted instruction based on the comparative results groups as well as the videos of teacher and student was provided to the members of each group respectively. According to the theory and research of motor learning, the factors or technologies such as video instruction, observational learning, external focus and summary feedback were integrated into this teaching method. Such efforts were desired to improve and enhance the effectiveness of current acupuncture teaching methods in limited classroom teaching time and extracurricular training.

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