

# A System Dynamics Model of Development the Taiwanese TaeKwonDo Single-item Athletic

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## ABSTRACT

The sport industry plays a vital role in economics. The flourishing growth of the sport industry is not only a benefit to the personal health but also an opportunity to gain international status and economics as well. Taekwondo, a sport which has been around for nearly millennium, will mark the first time as an official part of Olympic Games. Thanks to Olympic style sparring, Taekwondo is now the largest martial art in the world, especially when Taiwan won its first gold medal in Taekwondo in 2004. Taekwondo originated in Korea and was introduced to Taiwan since 1966, as a combat skill for the military. And then it 's become a national sport, entered into the international stage and eventually stood out in the crowd. The growth of Taekwondo is related to the government, nations, athletes, instructors, students and so on, which causes the growth of Taekwondo in Taiwan is a complicated and dynamic issue. In fact, the development of the Taekwondo industry is affected by the government policy on physical education, importing foreign instructors, the number of times for tournament and probability of getting hurt by players. Therefore, our research is based on System Dynamics to discuss the system structure of Taekwondo in Taiwan with attempting to perceive how to increase learning population, numbers of medal in Olympic Games and promote nation 's reputation. The system simulation shows that whenever to gain two instructors, which can promote the competitive abilities and increase the quantities of medals as well 2020 Olympic Games medal will reach 33 medals. Also, it will decrease the probability of getting hurt, increase government subsidizes and learning population. Besides, we will have more choice to select better players and gain our competitive abilities by the increasing number of times of tournament.

Keywords : Taekwondo, System dynamics, Policy simulation, Athletics policy

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