Behave It or Not: A Novel Methodology for Health Integrating Behaviorism by Means of Mobile Devices

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WHO has suggested that bad habits cause NCDs and provided a lot of health advice but in general, the number of people with NCDs is still not optimistic. Therefore, we want to make people become healthier by increasing their likelihood of healthy behaviors! We hypothesized that people don't adjust their behaviors because the WHO advice are too general so we think of "BASIC"—Behavior Adjustment Suggested by the Identification of Constitution, which help people become healthier by changing behaviors. We made use of thousands students' data to do T-test, Chi-square Test to analyze statistically the correlation between 117 items (behaviors, bodily indexes, basic information) and 9 constitutions which are classified by Traditional Chinese Medicine Constitution theory. According to multiple regression analysis, we can get the most important "behavior adjustment guidelines" for 9 constitution types. Users' situation can be tracked in 24/7 through mobile device and application designed with the principle of reinforcement and punishment in behaviorism so as to build up a personal behavior modification policy. This methodology is variable in its ways of input, which can be fitted into any indicators of health classification and any mobile devices can get various data in the future. We have done some case studies with a dozen secondary students who show typical features among the group. The result shows that the majority has changed their frequency of behaviors and several participants show a tendency for their improvement on constitution and behaviors. In conclusion, this is a novel methodology that integrating behaviorism by means of mobile device for everyone's use to improve personal health particularly. It has a huge potential to implement to all over the world for health!

Awards Won: