

**EFFECTS OF SKYRUNNER ON THE HEALTH-RELATED ASPECTS OF  
PHYSICAL FITNESS AMONG FIREFIGHTERS OF BALAI RAHANG,  
SEREMBAN, NEGERI SEMBILAN**

**ABSTRACT**

In the advancement of technology and the production of a variety of new gadgets that facilitate human work has made human being physically inactive. This situation not only leads to the decreasing in health-related physical fitness but also increase the possibility of having chronic disease. Skyrunner is a new sport that is gaining popularity abroad. This sport combines elements of running and jumping that stimulate the adrenaline hormone to trigger pleasure and excitement to the wearer. The purpose of this study is to determine the health-related fitness such as cardiorespiratory fitness, muscles strength and endurance and body composition before and after the 8 weeks of intervention using Skyrunner and also to compare the effects of Skyrunner on the health-related aspects of physical fitness between test and control group before and after the intervention programme. This controlled intervention study was conducted on 30 firefighters from Balai Rahang, Seremban aged between 20 to 35 years. The sample has been chosen using convenient sampling but for designation of group, participants were classified using a matched case-control study based on three categories of age to avoid bias and cofounding. Firefighters fitness were assessed using anthropometric measurements and two types of fitness tests which is 2.4 km run and sit-up test. The results showed that Skyrunner have positive impact on health-related physical fitness which is all results showed that there is a significant changes  $p < 0.05$  for all health-related physical fitness parameter after the intervention. For comparing the impact between case and control group, results showed that there is no significant difference for fat percentage, waist hip ratio, 2.4 km run and sit-up,  $p > 0.05$ . Eventhough there is no significant different between case and control group, but there is a huge difference in mean score between two group. Findings not only will give a baseline data that Skyrunner has a good impact on health-related physical fitness but also as a proof that physical activity is sufficient to improve physical fitness. This findings also will give a new alternative to start an active lifestyle.