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第79回 スポーツサイエンス研究会

Global COE Report 8

The 79th Sport Science Seminar

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6月15日(火)、早稲田大学所沢キャンパスにて、「第79回スポーツサイエンス研究会」を開催した。早稲田大学グローバルCOEプログラム"アクティヴ・ライフを創出するスポーツ科学"と箇所間協定を結んでいるNational Taiwan Normal University(台湾)よりProfessor Frank Chin-Lung Fang をお迎えし、「The Comparative

Study of the Level of Fatigue, Physical Activity and Cardiovascular Fitness of Primary School Teachers」というテーマで、疲労のレベルと身体活動・心肺体力の関連性についてご発表頂いた。以下は講演の要旨である。

The Comparative Study of the Level of Fatigue, Physical Activity and Cardiovascular Fitness of Primary School Teachers

Frank Chin-Lung Fang
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Background:

The fatigue level will affect the quality of learning, working and living conditions of each individual. The higher level of physical activity (PA) and Cardiovascular fitness (CVF) may decrease the level of fatigue (LF); however, the relationship among these factors is not much investigated before.

The purposes of this study were to compare the differences of each variable of primary school teachers with different level of LF, PA and CVF and the correlation among the LF, PA and CVF.

Methods:

The primary school teachers in Taipei City, Taiwan

were randomly selected to fill out questionnaires and 733 copies of valid samples were thus used for this study. The LF and PA were evaluated using the Chinese version of Checklist Individual Strength Questionnaire (CIS-20) and Exercise Behavior Questionnaire (which included frequency, intensity, duration, and sense of joy of exercise). Based on the previous standard, CIS>76 was classified as the fatigue group, CIS \leq 76 as the non-fatigue group. Furthermore, 94 teachers (36 of fatigue group and 58 of non-fatigue group, with the average age of 42.07±6.74) were asked to perform 6-minute walk test to measure CVF. The collected data was then analyzed with descriptive statistics, independent-samples test, one-way ANOVA, Tukey's

Honestly Significant Difference, and Pearson's Correlation using the SPSS14.0 software.

(p<.01) whereas PA was positively correlated to CVF (p<.01).

Results:

- 1. There was 30.2% of the primary school teachers suffered from fatigue potentially.
- 2. Teachers who exercised regularly or with more PA were significantly less fatigue than those who exercised less or did not work out at all. (p<.05)
- The CVF of the teachers of non-fatigue group was significantly better than those of the fatigue group. (p<.05)
- 4. The CVF of those who exercised more frequently was better than those who exercise less. (p<.05)
- 5. The LF was negatively correlated to PA and CVF

Conclusion:

The elementary school teachers who exercise regularly, with higher PA, or with better CVF are less prone to fatigue and the LF is related to PA and CVF.

Fang 先生は、所属大学の特別研究期間を利用して早稲田大学スポーツ科学学術院にて 1 ヶ月間研究活動を行われていた。その中で講演を行っていただいた。グローバル COE の登録学生からも多くの質疑があり、活発な議論が行われた(写真)。



写真 講演後の質疑応答の様子