

## **Sedentary Behaviour and Metabolic Rate among Adults Professionals: An Intervention Approach (E-Mobile)**

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**Abstract :** The aim of this study is to measure the relationship between sedentary behaviour and metabolic rate among adult professionals. An intervention (e-mobile) approach was used for gathered the information from the participants. A total of 40 participants (men = 30, and women = 10) with an average age of (36.53 years  $\pm$  8.85) were randomly assigned to an intervention group (n= 20) and control group (n= 20). All the participants completed the Sedentary Behaviour Questionnaire (SBQ) and The International Physical Activity Questionnaire (IPAQ) at baseline and at the end of eight weeks. The participants in the intervention group were given physical activity guidelines targeted at increasing physical activity levels during daily activities. On the other side, the control group was advised to continue with their routine daily physical activity. Statistical analyses, including descriptive statistics and inferential analysis like mean, SD, T-tests, and ANOVA, were used to analyze the data and determine relationships between variables. After analyzing the data, the results showed that significant difference in pre and post metabolic rate scores (1488.31  $\pm$  179.13 to 1468.44  $\pm$  128.19) ( $f = 10.83$ ,  $p < 0.000$ ) were noted in the experimental group after eight week. The experimental group increased their walking (863.78 METs per week to 1625.55 METs per week), moderate activity (295 METs per week to 743 METs per week) and vigorous activity (362 METs per week to 1366 METs per week) physical activity (all  $p < 0.001$ ). There were no significant differences observed in any outcome measured before and after eight weeks in the control group. These findings suggest that engaging in physical activity can effectively improve metabolic rate and reduce sedentary behavior among physically active adults.

**Keywords :** sedentary behavior, metabolic rate, adult's professionals, physical activity

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