

Letter to Editor

The Impact of Vigorous-Intensity Aerobic Exercise Training on Lifestyle Behavior and Mental Health of Male Problem Gamblers

Dear Editor,

An exercise intervention study was conducted in Lagos State, Nigeria, from July 2016 to August 2017, with the aim of assessing the cardiovascular and mental health of individuals addicted to sports gambling and the possible effects of exercise on the cardiovascular and mental health of these individuals.^[1] Around 368 male volunteers aged between 35 and 55 years were enrolled in the randomized controlled trial, they were confirmed as problem gamblers from the results obtained after the analysis of South Oaks Gambling Screen (SOGS) questionnaire, which they filled.^[1] After the exclusion of 168 participants, 200 participants were randomly assigned to the control group ($n = 100$) and treatment group ($n = 100$), respectively.^[1] Participants in the treatment group participated, in a supervised vigorous-intensity aerobic exercise training program, which was accomplished by jogging for 30 min/day, at an estimated intensity of 6.32 metabolic equivalents (METs), 3 times/week, consistently for 1 year.^[1] Mental health problems prevalent among sports gamblers which are depression, anxiety, self-esteem, cognitive performance, and sleep quality^[2] were assessed before and after the 1-year exercise training using the 15 minutes psychiatric assessment screening which is in accordance with the Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5).^[3]

Lifestyle behaviors were measured using the Fantastic Lifestyle Questionnaire.^[4] The study was conducted in accordance with the Declaration of Helsinki 1964 as revised in 2000.

Figure 1 indicates Chi-square analysis showing the level of association of physical activity, cigarette smoking, and alcohol consumption among subjects in the treatment group before and after 1-year regular exercise intervention. The result of the analysis shows a clear significant decrease ($P < 0.05$) in cigarette smoking ($P < 0.000$), alcohol consumption ($P < 0.000$), and an increase in physical activity ($P < 0.000$) among subjects in the exercising group.

Figure 2 reveals Chi-square analysis showing the level of association of depression, anxiety, self-esteem, cognitive performance, and sleep quality among the subjects in the treatment group before and after 1-year regular exercise intervention. There was a significant decrease ($P < 0.05$) in the level of depression ($P < 0.053$), improvements in cognitive performance ($P < 0.000$) and sleep quality ($P < 0.000$) after 1-year exercise training.

Figure 3 shows the analysis of sports gambling cessation and relapse prevention among subjects in the treatment group after one-year regular exercise intervention based

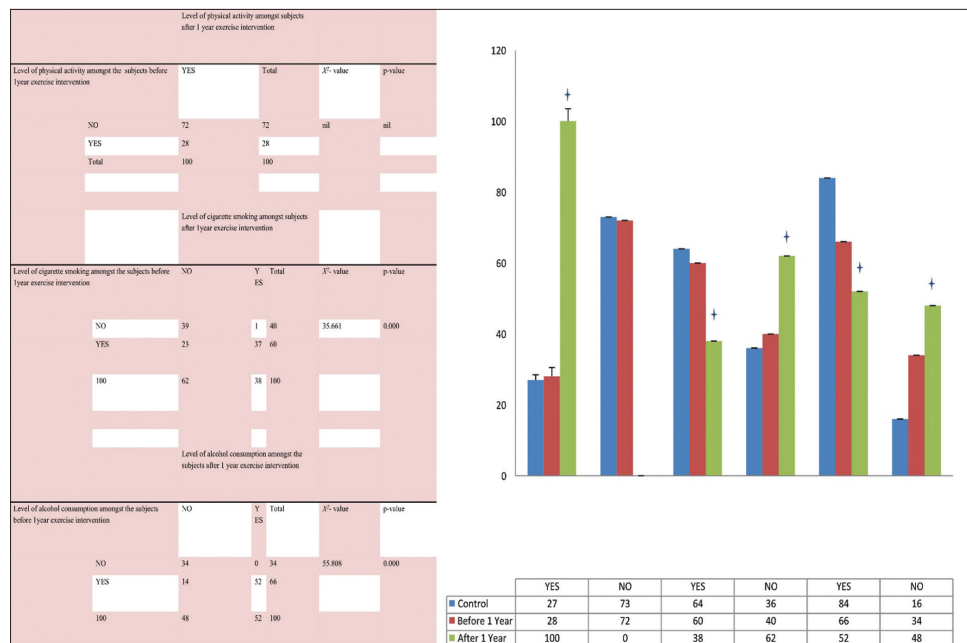


Figure 1: Chi-square analysis showing the level of association of physical activity, cigarette smoking, and alcohol consumption among subjects in the treatment group before and after 1-year regular exercise intervention

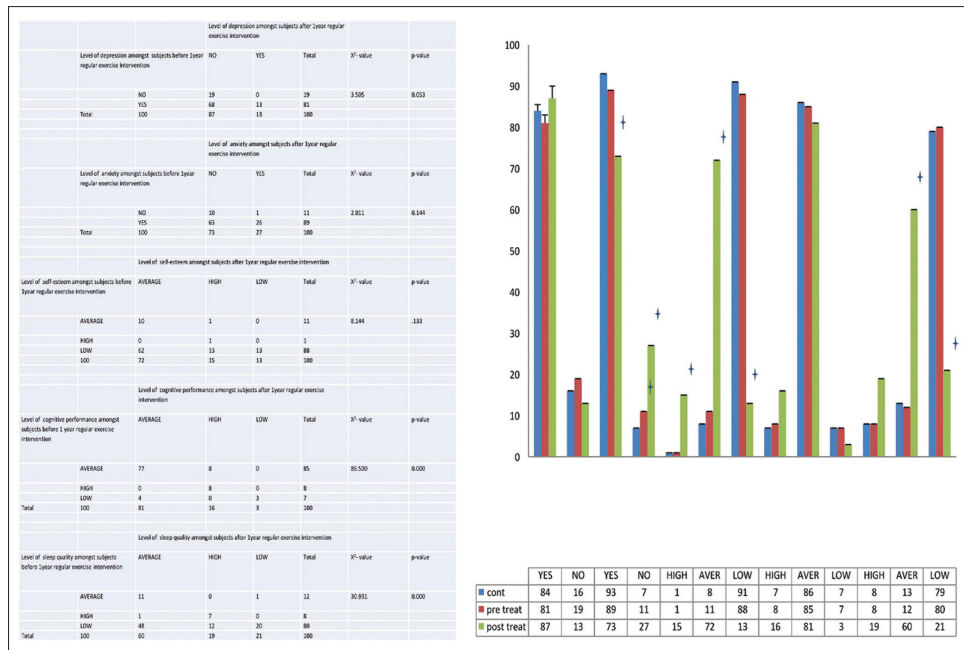


Figure 2: Chi-square analysis showing the mental health assessment parameters of subjects in the treatment group before and after 1 year of regular exercise intervention

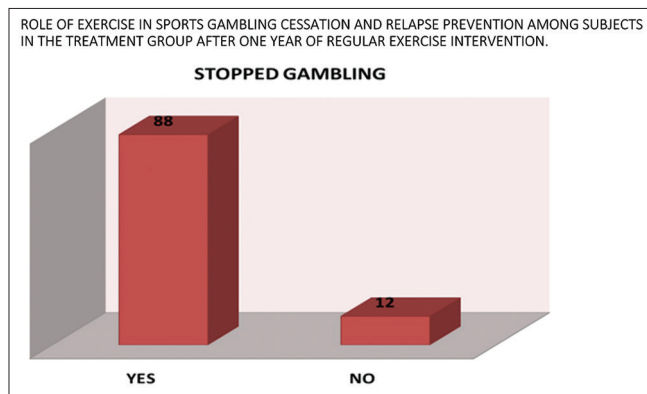


Figure 3: The analysis of sports gambling cessation and relapse prevention among gamblers in the treatment group

on self-report by the participants. The result shows that 88 subjects stopped gambling after participating in the 1-year regular exercise intervention with no occurrence of relapse while 12 subjects were having an incidence of relapse and were in the process of quitting sports gambling. This shows that regular exercise has a significant effect on sports gambling cessation and relapse prevention.^[5] This proves the effectiveness of physical activity in the prevention and treatment of sports gambling addiction.

In conclusion, a supervised vigorous-intensity aerobic exercise training program, which was achieved by jogging for 30 min/day, at an estimated intensity of 6.32 metabolic equivalents (METs), 3 times/week, consistently for 1-year improved mood by preventing depression, increases self-esteem, cognitive performance, sleep quality, led

to decrease in cigarette smoking, alcohol consumption, prevented sports gambling, and relapse among male problem gamblers.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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