Medical Science

About the Cover



Exercise physiologists are trained, knowledgeable of the human structure / working conditions, exercise, its prescriptions and values to optimal health and performance. Exercise physiologists are capable of examining individuals, prescribing exercises and scheduling program of activities that keep individual fit and rehabilitate patients. They have a wide array of fitness, prevention and treatment options depending on the need of individual. Exercise routines might be the home based/gym based. Exercise physiologists can assist in the treatment, prevention and rehabilitation of medical conditions such as cardiovascular diseases, obesity, asthma, arthritis, depression, diabetes, osteoporosis as well as other health conditions. This paper points out the various roles played by exercise physiologists through interaction with existing or emerging health issues in the environment considering his ability to recognize entrepreneurial opportunities available to market his innovations and respond to it based on the identifiable opportunities to prescribe individualised exercise medicine to patients and clients of all ages (Ref: Mercy T Fatoba, Busuyi Fatoba. Entrepreneurial Opportunities in Exercise Physiology. Medical Science, 2017, 21(83), 1-7); (Image: http://ki.ill.in.ua/).

Entrepreneurial Opportunities in Exercise Physiology

Mercy T Fatoba, Busuyi Fatoba

Exercise physiologists are trained, knowledgeable of the human structure / working conditions, exercise, its prescriptions and values to optimal health and performance. Exercise physiologists are capable of examining individuals, prescribing exercises and scheduling program of activities that keep individual fit and rehabilitate patients. They have a wide array of fitness, prevention and treatment options depending on the need of individual. Exercise routines might be the home based/gym based. Exercise physiologists can assist in the treatment, prevention and rehabilitation of medical conditions such as cardiovascular diseases, obesity, asthma, arthritis, depression, diabetes, osteoporosis as well as other health conditions. This paper points out the various roles played by exercise physiologists through interaction with existing or emerging health issues in the environment considering his ability to recognize entrepreneurial opportunities available to market his innovations and respond to it based on the identifiable opportunities to prescribe individualised exercise medicine to patients and clients of all ages.

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ANALYSIS

Depression and anxiety: the bane of academic achievement among science students offering mathematics

Ajayi Titilope E, Idiong US

The alarming rate of the poor performance in the academic achievement of science students offering mathematics is not encouraging. Many students who suffer from depression and anxiety are faced with the difficulty of solving academic task in mathematics. This study identified that the mood disorders especially depression and anxiety are the bane of academic achievement among a sample of 200 science students offering mathematics in Adeyemi College of Education, Ondo, Ondo State. A Structured questionnaire of twenty-four (24) items was used to collect information for the study. Statistical Packages for Social Science (SPSS) was used to run the t-test statistical tool in the data analysis. The findings show that there is significant impact of depression and anxiety as the bane in academic achievement of science students offering mathematics because the null hypothesis was rejected at 0.05 alpha level of significance. The findings revealed that students' success is negatively related with depression and anxiety which allow them to be exposed to lower average point and spend minimum time on homework Suggestions and recommendations are highlighted for students, teachers, parents and government. Relaxation technique would be effective in reducing depression and anxiety in undergraduate science students offering mathematics and consequently improving their performance.

Medical Science, 2017, 21(83), 8-15

Promoting sexual abstinence among in-school adolescents in Ondo state using psycho-educational group therapy

Aremu AO, Owodunni AA, Adenegan TS

Prevalence of negative consequences of early sex initiation such as sexually transmitted infections and unintended pregnancies has vaulted the study of adolescent sexual behaviour to the forefront of sexuality research. While attempt at understanding why adolescents choose to engage in sexual activity at an early age has been made by researchers, examinations into the enhancement of sexual abstinence, however, have been less frequent in Nigeria. This study, therefore, applied Psycho-educational group therapy (PGT) to enhance sexual abstinence among in-school early adolescents in Ondo State, Nigeria. The study employed a pretestposttest, control group, experimental design with a 2x2x2 factorial matrix. Multi-stage sampling technique was used to select 64 inschool adolescents from the three randomly selected secondary schools. The 64 non-sexually active participants were randomly assigned into the treatment condition (PGT) and control group. Three standardized research instruments were used, namely, Sexual Abstinence Scale ($\alpha = 0.89$), Sexual Abstinence Test for Adolescents ($\alpha = 0.77$) and Peer Pressure Inventory ($\alpha = 0.80$). The treatment programme lasted eight weeks. Three null hypotheses were tested at 0.05 level of significance. The findings, which made use of Analysis of Covariance and Scheffe Post-hoc test, showed a significant main effect of treatments on sexual abstinence (F(1.62) = 87.54, P<.005, η^2 = .690) of in-school early adolescents. The enhanced sexual abstinence of participants in the experimental groups; PGT $(\bar{x} = 158.24)$ improved more significantly than those in the control group $(\bar{x} = 122.63)$. However, gender, alongside peer influence, had no significant main effect on sexual abstinence. Therefore, practicing counsellors as well as other adolescent friendly personnel should utilize the two techniques in helping early adolescents to refrain from spur-of-the moment sex, while giving attention to factors beyond gender and peer influence as underpinning factors of sexual abstinence among early adolescents. The results also provided valuable clues to parents, teachers, NGOs and even the early adolescents to maximize PGT to control the untold effects of sexual debut, among the future leaders of the Nation. These should be incorporated into civic education and school curricular.

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The need for an inclusion of construction health and safety into quantity surveying education in Nigeria

Victor Nnannaya Okorie, Chukwuemaka Patrick Ogbu

Despite the institution of explicit health and safety (H&S) practices in construction, there continue to be exceedingly high rates of fatalities and injuries cases. This study aimed at exploring the need for an inclusion of construction health and safety (H&S) into quantity surveying education in Nigerian. Questionnaire survey was then structured from literature and administered to students

and lecturers in the quantity surveying departments at the Polytechnics and Universities within the South-West Geopolitical zone of Nigeria. Interviews were conducted with lecturers and registered practicing quantity surveyors in order to validate the findings. Data was electronically manipulated using MS Excel. Results of the survey with students revealed that construction H&S is not offered as a course module, but as integral parts of other courses. Interviews conducted with lecturers and practicing quantity surveyors indicated that there is an urgent need to include construction H&S into quantity surveying curriculum. Education of future professionals and managers is fundamental to drive the desired cultural change required to improve construction H&S performance. *Medical Science*, 2017, 21(83), 29-38

PERSPECTIVES

Improving Africa Economy through Efficient and Effective Malaria Management and Prevention Programs

Adediran MB, Olabode OO, Kayode GF

Malaria, one of the most devastating parasitic infections, transmitted by mosquitoes, kills more than 1 million people annually. Pregnant women, children, and immune-compromised individuals have the highest morbidity and mortality, and Africa bears the heaviest burden. According to World Health Organization, malaria has slowed economic growth in endemic countries in Africa by up to 1.3 per cent per year. Africa's GDP would probably be in the region of US \$100 billion higher if malaria had been tackled 30 years ago, when effective control measures first became available. Even today, half a billion cases of malaria each year lead to the loss of several billion days of productive work. The estimated costs of malaria, in terms of strains on the health systems and economic activity lost, are enormous. This paper discusses the possibility of wiping off malaria in Nigeria (the most populous country in Africa), which will be a plus to the African nation economy.

Medical Science, 2017, 21(83), 39-47

Ameliorating the problems from functional disability in the aging

Akinmusere Ayo Kayode

This writer-up highlights individual factors, programmes and policies that contribute to achieving goals of healthy aging for adults experiencing functional impairment. It presents a range of elements that influence opportunities older adults have to meet, their individual aging objectives and how they can remain active members of their communities. Examples of interventions which include theoretical and assessment tools were highlighted and policy initiatives were introduced. Conclusion was arrived at and recommendations were advanced part of which is that certain types of rehabilitation services, including employment training, counselling and personal attendant assistance should be provide for older persons.

Medical Science, 2017, 21(83), 48-52

The entrepreneurial opportunities untapped in the field of human-kinetics and health education: current challenges

Akinbile PO, Bernard EA, Akinmusere AK

One of the aims of higher education is the acquisition of both physical and intellectual skills which will enable individuals develop into useful members of society as well as acquisition, development and inculcation of the proper value-orientation for the survival of the individual in the society. This happens to be the ultimate objective of Human Kinetics and Health Education as an integral part of general education. It is the intention of this paper to bring to awareness that opportunities are abound in the field of Human Kinetics and Health Education which could make a graduate of the programme an entrepreneur and sport entrepreneurs in this 21st century. The article also indicates that entrepreneurship has been an issue examined by many theorists due to its positive contributions to economic and social life at a period in human history. The paper equally highlights the current challenges that could confront a budding entrepreneur in the field of Human Kinetics and Health Education in Nigerian Universities. It is therefore being recommended that creating an enabling environment for innovation and entrepreneurship would motivate industrious students in the Human Kinetics and Health Education to go into entrepreneurship.

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