

Mathematical proof of the therapeutic effect of relaxation

Fouad Ktiri

ABSTRACT: In this paper, we present a mathematical proof of the positive effects of relaxation therapy. We mathematically demonstrate that relaxation, practiced during a period of time, could relieve stress and even make us feel joyful. Based on our tri-transactional theory of stress, our demonstration uses the Ktiri-stress equation ($S=PSS+ST$) and the positive-negative stimuli notions. Our evidence of the positive effect of relaxation is based on the psychological fact that this therapy generates positive and reduces negative stimuli numbers. This phenomenon, meaning that a person practicing it will be able over time to be exposed to more positive and less negative stimuli, is

mathematically expressed by using increasing and decreasing mathematical functions ($x=at+b$). This demonstration is applied to an example of a stress situation in which a person supposed so much stressed, is much less exposed to positive stimuli which could fight his stress and much more to negative stimuli. From this demonstration, which was possible by using mathematical notions, we deduced and developed mathematically two concepts. This latter, we called crisis and critical stress periods, correspond to intervals of time at the end of which the value of a person stress state starts to be reduced and to become neutral respectively.

Biography:-

Fouad Ktiri is a clinical psychologist, a psychology teacher, a researcher and a yoga coach. His experiences in clinical psychology and yoga-relaxation allowed him to publish, in 2015, a paper book entitled "Stress-How to prevent and fight it-New psychological, spiritual, body and cognitive techniques".

From 2009, he has animated conferences and participated in many radio psychological programs. His experiences as a physics and computer graduate helped him to combine psychology and mathematics, which allowed him to elaborate a new stress numerical model and published it on 2016. Now, he is continuing to do researches in psychology and write articles weekly in Moroccan newspapers.