

RELATIONSHIP BETWEEN SYMPTOMS OF DEPRESSION/SOMATIZATION AND EXERCISE/SUNLIGHT EXPOSURE IN A SAMPLE OF UNIVERSITY STUDENTS

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Introduction: Exercise (workout activities), exposure to sunlight, and other physical and behavioural stressors seem to be effective in the treatment of seasonal affective disorders (SAD) and also, to some extent, in some types of non seasonal (NSD) and bipolar affective disorders. We evaluated the relationship (association) between the frequency of physical activity and exposure to sunlight and the severity of depression in an unselected sample of students at the University of Milan.

Methods: N. 78 students of the Faculty of Medicine at the University of Milan aged 20-32 (average 23) were submitted to interviews with SCL-90 Derogatis Inventory Scales for rating Depression and Somatization.

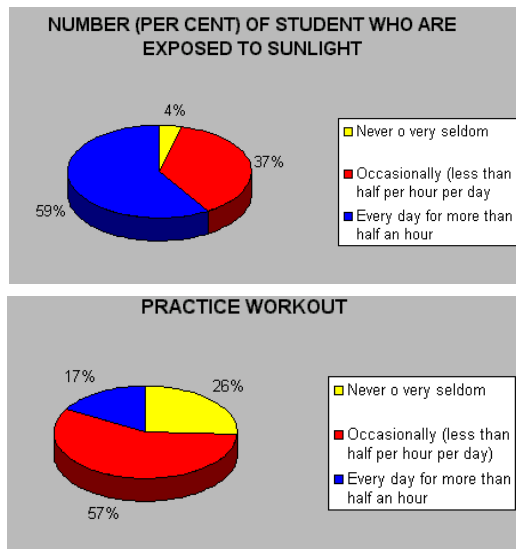
According to S.F. Dworkin's Diagnostic rating, normal ranges are the followings:

- Depression	- Somatization
normal < 0.535	normal < 0.428
moderate from 0.535 to 1.105	moderate from 0.428 to 0.857
severe > 1.105	severe > 0.857

The subjects were evaluated with the Self Assessment Chart attached to the Smiline Cards Game and Therapy (R. Ciancaglini, A. Beck, 2005). The types and the frequency of the activities as well as the frequency of sunlight exposure were taken into account and related to the severity of depression and somatization. Three subgroups of subjects both for frequency of activities and sun exposure were identified: 1) never or very seldom, 2) only occasionally (less than half per hour per day, 3) every day for more than half an hour. Depression and somatization, instead, were measured in a continuum rating (SLC-90 Derogatis Inventory Scales). Students T-Test was applied to assess the statistical significance of differences



Sample of indoor activities (21 out of 34)
The Smiline Cards, Game and Therapy
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OR

between pairs of data.

Results: The average depression and somatization of the subjects in the selected sample resulted 'moderate' (= 0.70 and 0.56 respectively). The majority of the subjects in the examined sample (45 out of 78) seem to practice workout activities quite seldom (less than 30 minutes per day). They were exposed to sunlight in a consistent amount (46 out of 78 exercised more than 30 minutes per day). A probably significant difference in depression and somatization values exists ($p < 0.0831$ and $p < 0.0869$) when comparing the subgroup performing workouts more frequently (30 minutes more per day) to those performing activities on an occasional basis (less than 30 minutes per day). Similar results seem to characterize the subjects for the factor 'exposition' to sunlight.

Conclusions: Depression and somatization symptoms seem to affect with 'moderate' severity an unselected population of university students. The subgroups performing workout activities more frequently and exposing to sunlight on a daily

basis seem, however, to exhibit less depression and somatization symptoms. Exercise and exposure to sunlight every day could be effective strategies in the prevention/treatment of depression and somatization provided that further longitudinal studies and wider samples of subjects will confirm the present preliminary results that suggest a possible relationship between the above mentioned parameters.

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