Physical activity relates inversely to depression and positively to resilience in adolescence.

The higher physical activity, the better it is.

Background:
The aims of this Norwegian cross-sectional study were to explore the association between sex, age and physical activity in relation to resilience and depression.

Method:
n=1100 adolescents (response rate 98%), 51% girls and 49% boys, 13–18 years old, participated. Physical activity was measured with one item: “During the last four weeks, how many days per week have you participated in sports or physical activity so hard that you had high respiratory frequency, sweated, or had an increased heart rate for at least 20 min.?” Depression was assessed by a 15 items scale for measuring non-clinical depression. Resilience was measured with a 28-items scale (READ). A two-way between groups ANOVA and a three-way between groups MANOVA were used.

Results:
High frequency of physical activity gave significantly higher resilience (p < .001) and lower depression (p = .008) than low activity. Girls scored significantly lower (p < .001) in physical activity than boys. Girls scored higher in depression than boys (p < .001). There was no significant sex difference in resilience. Physical activity was significantly highest in the 17–18 years of age group and lowest in the 13–14 years of age group among boys. There were no significant age differences among girls. Adolescents 13–14 years of age group scored significantly higher in resilience and lower in depression than the other age groups.

Conclusion:
High physical activity seems to be important in promoting mental health in adolescents.