

Heart rate, blood pressure in male teens associated with later risk for psychiatric disorders

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Higher resting heart rate and higher blood pressure in late adolescence were associated with an increased risk in men for the subsequent development of obsessive-compulsive disorder, schizophrenia and anxiety disorders, according to a new article published online by *JAMA Psychiatry*.

Autonomic nervous system functioning regulates the inner workings of the body. Besides resting [heart rate](#), changes in [blood pressure](#), regulated by the autonomic nervous system, have been observed in some patients with [psychiatric disorders](#) but the results have been inconsistent.

Antti Latvala, Ph.D., of the University of Helsinki, Finland, and coauthors used register data for more than 1 million men in Sweden whose resting heart rate and blood pressure were measured at military conscription (average age 18) from 1969 to 2010 to examine whether differences in cardiac autonomic function were associated with psychiatric disorders.

Analyses based on up to 45 years of follow-up data suggest men in their late teens with resting heart rates above 82 beats per minute had a 69 percent increased risk for later [obsessive-compulsive disorder](#) (OCD), a 21 percent increased risk for schizophrenia and an 18 percent increased risk for [anxiety disorders](#) compared with those whose resting heart rates were below 62 beats per minute. The authors report similar associations

for blood pressure.

Lower resting heart rate and blood pressure were associated with substance use disorders and violent behavior, the study also reports.

The authors note their results cannot establish causality.

"These associations should be confirmed in other longitudinal studies, and the underlying mechanisms should be studied with more detailed measures of autonomic functioning and designs that can more clearly elucidate causal processes," the article concludes.

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