



Depressive Symptoms & Health-Risk Behaviours among High School Students

Does depression lead to greater substance use over time or does substance use lead to greater depression over time?

What is this research about?

Depression and health-risk behaviours are major public health problems, which have negative consequences for both individuals and society as a whole. Adolescence, in particular, is an age associated with the onset of depressive symptoms, as well as significant increases in *health-risk behaviours*. Depressive symptoms and health-risk behaviours often co-occur among adolescents – however, it is not clear whether depressive symptoms predict increases in health-risk behaviours over time (*self-medication hypothesis*) or whether health-risk behaviours predict increases in depressive symptoms over time. To address this question, Dr. Teena Willoughby implemented longitudinal examinations of depressive symptoms and substance use across the high school years.

How did they do it?

Dr. Willoughby and colleagues focused on a sample of 4,412 adolescents (49% female) who were followed from grade nine to 12. Adolescents reported on their depressive symptoms and specific health-risk behaviours (i.e., smoking, marijuana, and hard drug use).

Results

Adolescents who had higher depressive symptoms in grade nine reported faster increases than their peers in *smoking, marijuana, and hard drug use* across the high school years (see Figures 1-3), supporting the self-medication hypothesis. There was no support for the opposite direction. Overall, higher levels of depressive symptoms in grade nine seem to set the stage for faster increases in health-risk behaviours across the high school years in comparison with adolescents with lower levels of depressive symptoms in grade nine.

So what – Where can this research be used in schools?

The results are important because they suggest that by targeting depressive symptoms in the early years of high school, educators and treatment programs may prevent increases in the frequency of health-risk behaviours over time.

Figure 1: Change over time in frequency of smoking from Gr9-12

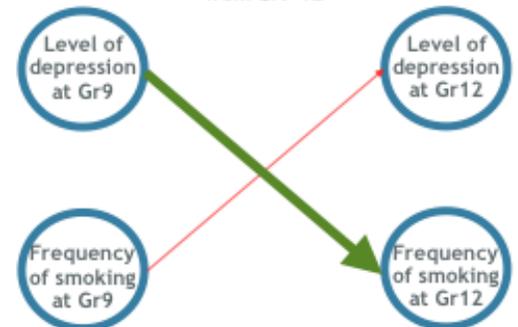


Figure 2: Change over time in frequency of marijuana use from Gr9-12

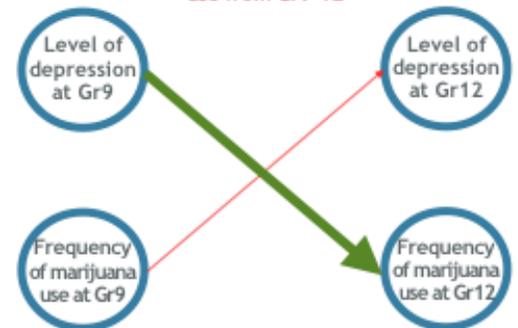
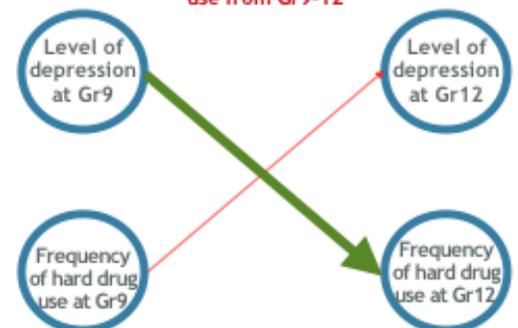


Figure 3: Change over time in frequency of hard drug use from Gr9-12



NB: For all figures green arrows indicate a significant relationship, red arrows indicate a non-significant relationship

Want to read more on this research?

Find it online here: <http://www.sciencedirect.com/science/article/pii/S1054139X11001959>

Citation: Hooshmand, S., Willoughby, T., & Good, M. (2012). Does the direction of effects in the association between depressive symptoms and health-risk behaviours differ by behaviour? A longitudinal study across the high school years. *Journal of Adolescent Health, 50*(2), 140-147.

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