

Introduction

Recent research has identified a notable correlation between youth ATOD use and symptoms of depression. Most of this research has taken place in a clinical setting,¹ and/or used clinical measures of depression such as the American Psychiatric Association Diagnostic and Statistical Manual²⁻⁵ or the Center for Epidemiological Studies Depression inventory.⁶⁻⁸

Given the strength of the relationship between clinical depression and substance use, it would seem valuable to more closely examine the relationship between sub-clinical depression symptoms and adolescent substance use. This paper examines ATOD use and symptoms of depression using a recent statewide probability sample.

Methods

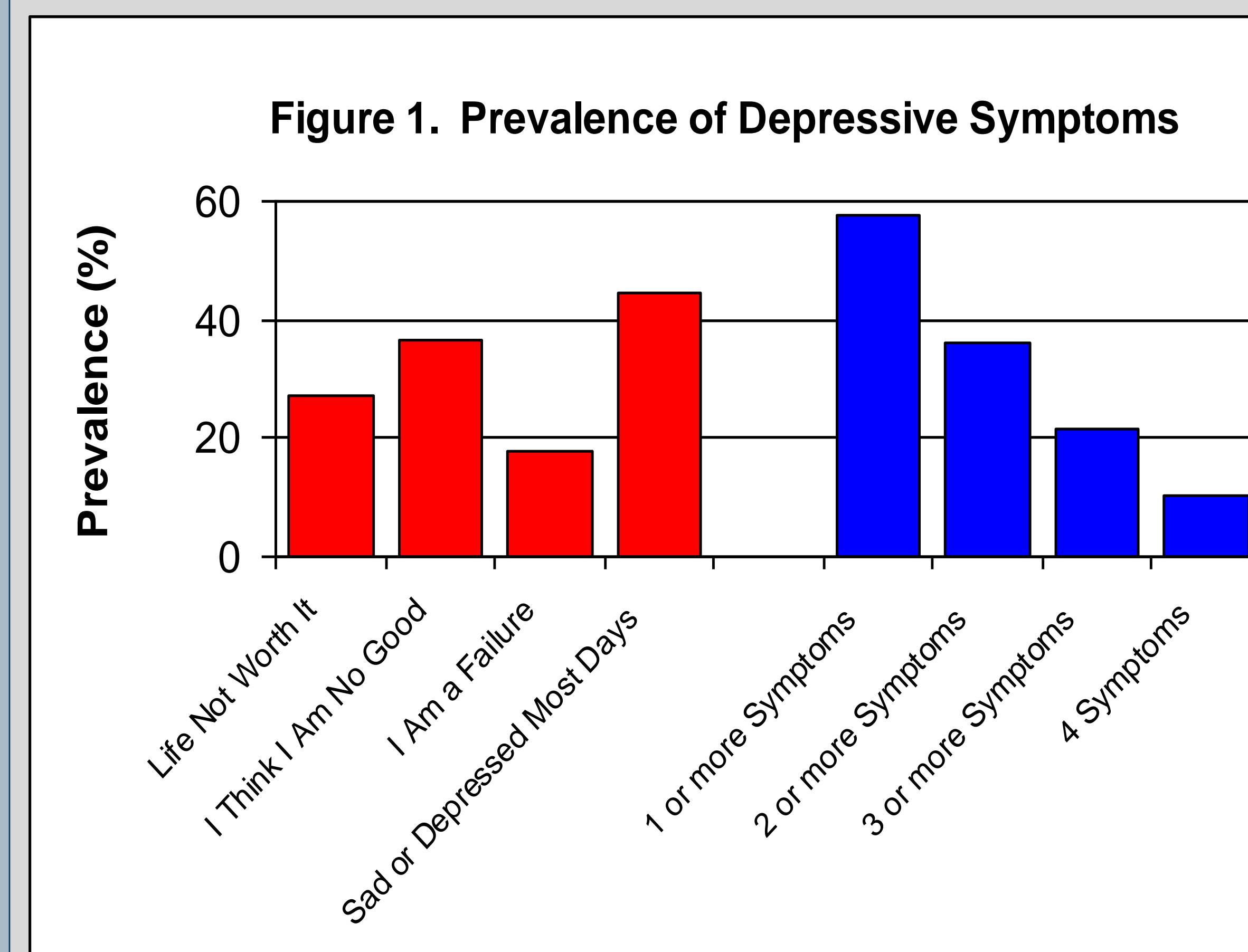
Data for this analysis come from the Florida Youth Substance Abuse Survey (FYSAS) – a modified version of the Communities That Care (CTC) survey.⁹ The 2006 FYSAS was administered to more than 57,000 Florida public school students in grades 6 through 12. SPSS 12.0 was used for all data analyses. Descriptive analyses were conducted to examine the prevalence of depressive symptoms and demographic differences, and logistic analyses were conducted to investigate the relationship between depressive symptoms and substance use.

The depression indicators included in the survey ask respondents to agree/disagree with the following 4 statements:

- **Life is not worth it**
- **I think that I am no good at all**
- **I am a failure**
- **I'm depressed on most days**

Results

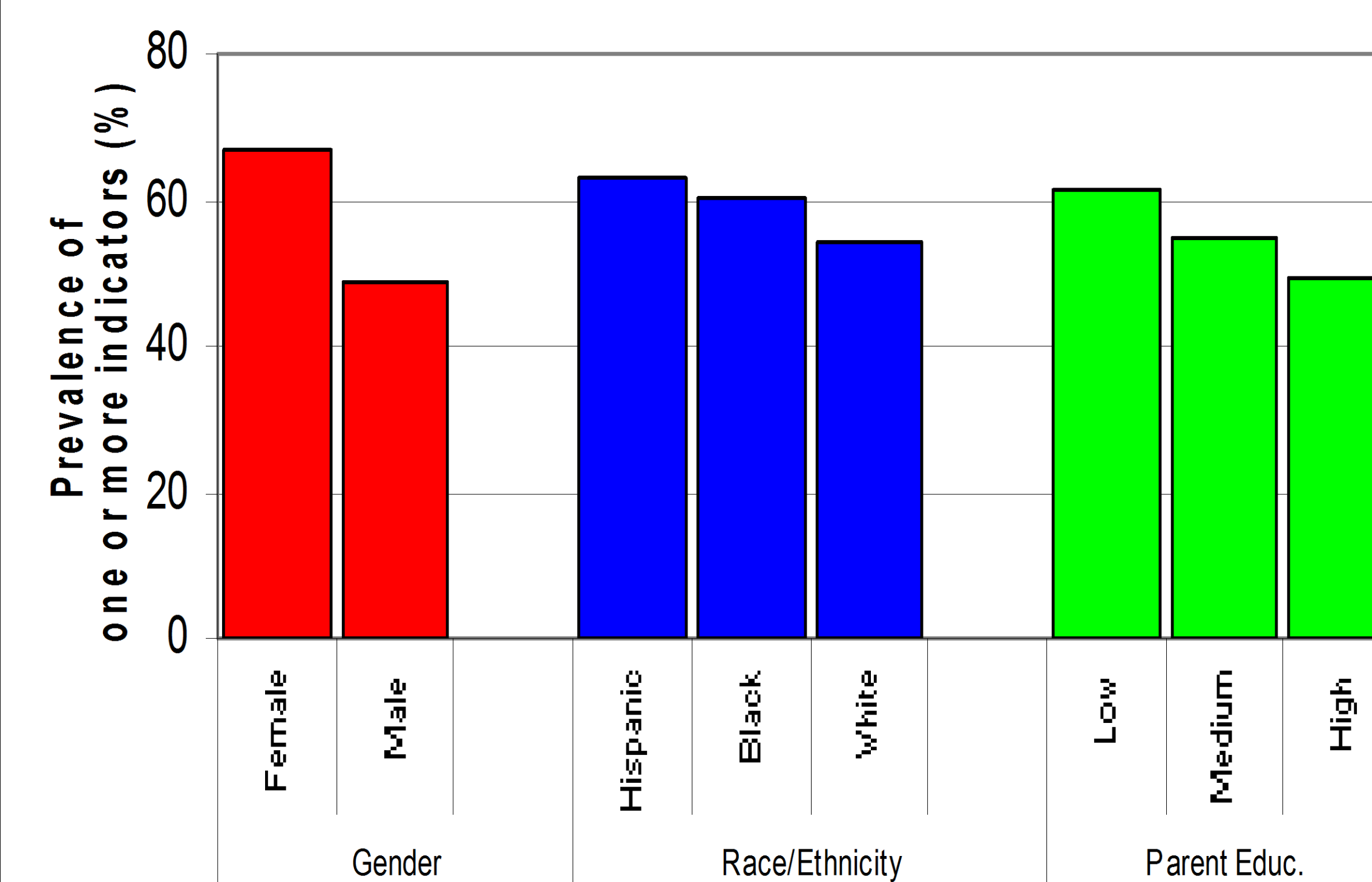
More than 45% of respondents reported feeling “depressed or sad most days,” and 36% agreed that “At times I think I am no good at all.” Nearly 60% of surveyed students reported one or more symptoms of depression, and 22% reported three or more symptoms (Figure 1).



Female respondents were more likely than males, and minority students were more likely than white students to report symptoms of depression. Parents' education—the best indicator of socioeconomic status on the survey—also emerged as an important correlate, with respondents from low parental-education families being most likely to report symptoms of depression (Figure 2). Students who reported symptoms of depression were notably more likely to also report current ATOD use. Table 1 shows the results of logistic regression analyses. All four depression indicators displayed an increased risk for use of each substance examined. The strength of the relationship varies somewhat, with odds ratios varying from 1.321 to 3.009. The increased risk for substance use among those

reporting depression symptoms is especially strong for cigarette use and use of illicit drugs other than marijuana. There is no consistent difference in level of risk between the four measures of depression.

Figure 2. Demographic differences in depression indicators



Discussion

A substantial proportion of Florida youth report symptoms of depression. These findings are especially strong among girls and ethnic minorities. Additionally, youth from families of low socioeconomic status, as defined by parental education, are at higher risk for depression symptoms.

The findings also confirm the ATOD-depression relationship identified in other studies. Youth who report having any of the four measures of depression included in this study are between 30% and 300% more likely to use substances, particularly cigarettes and illicit drugs other than marijuana.

Given these findings, it would seem imperative that substance abuse prevention programs include a self-esteem building component. While cause and affect can not be determined here, it is almost certainly a bi-lateral relationship requiring consideration of both

	No	Yes	OR	99% CI
Past 30 day Alcohol				
Life is not worth it	34.6	46.8	1.782	1.754 - 1.810
I think I am no good at all	34.6	42.7	1.526	1.503 - 1.548
I am a failure	35.8	46.1	1.640	1.610 - 1.669
I'm depressed most days	33.7	43.8	1.691	1.667 - 1.716
Binge Drinking				
Life is not worth it	18.4	25.3	1.636	1.606 - 1.666
I think I am no good at all	19.2	22.0	1.321	1.306 - 1.353
I am a failure	18.8	26.8	1.750	1.714 - 1.786
I'm depressed most days	18.0	23.7	1.612	1.585 - 1.640
Past 30 day Cigarettes				
Life is not worth it	10.9	22.6	2.469	2.421 - 2.518
I think I am no good at all	11.5	18.5	1.876	1.842 - 1.914
I am a failure	12.2	22.8	2.284	2.235 - 2.334
I'm depressed most days	10.6	19.7	2.230	2.187 - 2.274
Past 30 day Marijuana				
Life is not worth it	12.0	19.5	1.906	1.867 - 1.945
I think I am no good at all	12.5	16.5	1.535	1.505 - 1.565
I am a failure	12.8	19.6	1.789	1.757 - 1.839
I'm depressed most days	12.0	17.2	1.710	1.677 - 1.744
Past 30 day Any other Illicit				
Life is not worth it	6.1	16.2	2.970	2.902 - 3.039
I think I am no good at all	6.2	13.3	2.331	2.277 - 2.386
I am a failure	6.9	18.1	3.009	2.937 - 3.083
I'm depressed most days	5.7	13.7	2.639	2.578 - 2.702

Table 1. The relationship between depression indicators and odds of using selected substances.

depression symptoms and substance use as causes and affects, in order to grow healthy adolescents into healthy, productive adults.

References

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