



Emerging Adulthood, Emergent Health Lifestyles: Socio-demographic Determinants of Trajectories of Smoking, Binge Drinking, Obesity, and Sedentary Behavior

Jonathan Daw,¹ Department of Sociology and Criminology, and Population Research Institute, Pennsylvania State University

Rachel Margolis, Department of Sociology, University of Western Ontario

Laura Wright, Department of Sociology, University of Saskatchewan

During the transition to adulthood, adolescents develop many unhealthy behaviors that in turn shape their behavior, health, and mortality in later life. In this study, we examine variation in health behavior trajectories, the tendency for trajectories to cluster together, and differences in the likelihood of experiencing various behavior trajectories

based on sociodemographic characteristics. We chart the most common health trajectories over the transition to adulthood for cigarette smoking, alcohol consumption, obesity (we refer to this as a behavior for rhetorical convenience), and sedentary behavior. Using latent class analysis to identify these groupings across behaviors and time, we find that health behavior trajectories cluster together in seven joint classes and that sociodemographic factors (including gender, parental education, and race/ethnicity) significantly predict membership in these joint trajectories.

Main Findings

Our analysis provides us with two primary findings on this important topic (see table 1).

Did You Know?

Cigarette smoking is linked to about 20% of deaths in the United States every year, and mortality rates are about three times higher for smokers compared to people who have never smoked.

Source: CDC (2016).

Related Articles

Daw, J., R. Margolis, L. Wright. (Forth.) “Emerging Adulthood, Emergent Health Lifestyles: Sociodemographic Determinants of Trajectories of Smoking, Binge Drinking, Obesity, and Sedentary Behavior.” *Journal of Health and Social Behavior*.

Daw, J., R. Margolis, A. Verdery. (2015). “[Siblings, Friends, Course-Mates, Club-Mates: How Adolescent Health Behavior Homophily Varies by Race, Class, Gender, and Health Status.](#)” *Social Science and Medicine* 125: 32-39.

Daw, J., K. Nowotny, J. Boardman. (2013). “[Changing Patterns of Tobacco and Alcohol Co-use by Gender in the United States, 1976-2010.](#)” *Demographic Research* 28 (22): 637-48.

¹ Please forward correspondence to Jonathan Daw at jud36@psu.edu.

First, we find strong variation in how much pairs of health behavior trajectories cluster together. Some groups exhibit consistently healthy or unhealthy behaviors. For example, our Consistently Healthy group (19.2% of the sample) and Least Healthy group (8.5% of the sample) are composed of respondents with relatively stable behavior trajectories throughout the transition to adulthood. However, most of the sample does not fall into these stable healthy or unhealthy trajectories where health profiles align so strongly, generally having an increased tendency toward unhealthy behavioral profiles. Over time, respondents in all classes become more likely to be obese even though they are simultaneously less likely to be sedentary. Similarly, all classes but one become more likely to binge drink with increasing age. However, we do not find any consistent age pattern for smoking across classes.

Table 1: Percentage Engaging in Health Behaviors by LCA Class and Wave in the National Longitudinal Study of Adolescent Health, 1994 to 2008 (N = 9,783).

Class Group	Class Label	% of Sample	Wave	Smoking	Binge Drinking	Obesity	Sedentary Behavior
Most Healthy	Consistently Healthy	19.2	1	6	4	0	19
			2	6	6	0	18
			3	2	26	1	22
			4	7	30	22	21
	Healthy but Increasingly Obese	12.4	1	2	6	30	42
			2	5	9	44	44
			3	9	34	91	43
			4	17	31	96	33
Smokers & Drinkers	Active, Thin Smokers & Drinkers	17.3	1	86	67	0	42
			2	92	68	0	36
			3	79	67	3	34
			4	75	62	17	39
	Adult-Onset Smoking, Drinking, & Activity	15.6	1	12	2	0	65
			2	38	15	1	67
			3	84	68	4	45
			4	85	66	21	43
Sedentary Drinkers	Sedentary, Drinking Ex-Smokers	8.7	1	23	67	1	68
			2	35	85	0	59
			3	5	78	12	58
			4	8	76	26	59
	Adult-Onset Drinking & Increased Activity	18.4	1	2	2	0	90
			2	5	3	0	91
			3	2	48	2	67
			4	10	53	21	59
Least Healthy	Active, Increasingly Obese Smokers & Drinkers	8.5	1	62	45	34	48
			2	82	55	51	39
			3	69	62	89	39
			4	72	54	96	36

Second, we find that groups that generally have poorer health, such as racial/ethnic minorities and those with poorly educated parents, are not always more likely to be in groups with very risky health behavior trajectories. Examining this issue by race/ethnicity, we find that blacks have higher propensities than whites to be in several of the healthy groups and are less likely to be in the consistently unhealthy groups. For instance, blacks are nearly twice as likely as whites to be rated as consistently healthy in their behaviors; are more likely to be in the Adult-Onset Drinking and Increased Activity classes than whites; and are much less likely to fall into the Least Healthy, Smokers and Drinkers, Sedentary, or Drinking Ex-Smokers classes.

Gender shows similarly strong but varied effects. Women are generally more likely to be in the more healthy behavior clusters and less likely to be in the least healthy clusters. However, among the less healthy groups, women are more likely to be located in the Active, Thin Smokers, and Drinkers classes and slightly more likely than men to be in the Least Healthy class. Men are more common in all other groups.

Turning to parental education, we also find that those with low parental education are not always significantly more likely to be in the less healthy trajectory clusters and are least likely to be in the healthy groups. The clusters where these groups depart by a large margin are the Least Healthy group (10% for lower-educated parents versus 6% for higher-educated parents) and the Adult-Onset Drinking & Increased Activity group, where respondents with high socioeconomic status are more common. However, these differences are generally smaller than those seen for gender and race/ethnicity.

Conclusion

Why do so many people adopt some unhealthy behaviors but not others over the transition to adulthood? Several possibilities exist. One possibility is that physiological processes or common genetic dispositions may partially explain the connection between these behaviors. Second, healthy behavioral profiles may be jointly pursued with a common goal in mind, as individuals may quit smoking, reduce drinking, and increase physical activity with the goal of promoting overall health and/or reducing their BMI. Finally, it may be that respondents are trading off one behavior against another—for instance, someone who has worked out that day may feel that they have earned a slice of pie or a cigarette.

References

Centers for Disease Control and Prevention. (2016). Fast Facts and Fact Sheets: Tobacco-Related Mortality. Accessed March 23, 2017 at
https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality

Copyright © Population Research Institute, Pennsylvania State University, University Park, PA 16802, USA.

Suggested citation: Daw, Jonathan, Rachel Margolis, and Laura Wright. (2017). "Emerging Adulthood, Emergent Health Lifestyles: Socio-demographic Determinants of Trajectories of Smoking, Binge Drinking, Obesity, and Sedentary Behavior." *Spotlight: Research Brief*, April, 2017.

Spotlight is published by the Population Research Institute (PRI) at Pennsylvania State University and features research conducted by its faculty.

PRI at Pennsylvania State University encourages, organizes, and supports innovative research and training in the population sciences. With the talents of more than 60 outstanding scholars, PRI provides a supportive and collegial environment to stimulate collaborative externally funded research. PRI is an NICHD-supported population center, *grant no. 2P2CHD041025*.