ACADEMIC IMPACTS OF YOUTH SUBSTANCE USE:

Application to Community and School-Based Substance Use Prevention

AMELIA M. ARRIA, PH.D.
ASSOCIATE PROFESSOR
DIRECTOR, CENTER ON YOUNG ADULT HEALTH AND DEVELOPMENT
DEPARTMENT OF BEHAVIORAL AND COMMUNITY HEALTH
UNIVERSITY OF MARYLAND SCHOOL OF PUBLIC HEALTH
AARRIA@UMD.EDU

SUMMER COALITION LEADERSHIP INSTITUTE

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If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

John Quincy Adams

PART 1:
Downstream - The Challenges

PART 2:
Mechanisms – the Whys

PART 3:
Moving Upstream:
Strategies and Solutions

PART 1: Downstream - The Challenges

- **Disconnection**

- **High school dropout**

- **College graduation rates and post-college preparedness**

- **Substance use**

- **Connections between substance use and academic achievement**

And if those weren't enough...

Syrian Refugees: Flight Into the Unknown

MARCH 2015

NATIONAL GEOGRAPHIC

CLIMATE CHANGE DOES NOT EXIST

EVOLUTION NEVER HAPPENED

THE MOON LANDING WAS FAKE

VACCINATIONS CAN LEAD TO AUTISM

GENETICALLY MODIFIED FOOD IS EVIL

THE WAR ON SCIENCE

A WORKER ADJUSTS A DIORAMA
OF A MOON LANDING AT THE
KENNEDY SPACE CENTER.

Disconnected Youth, 2012

YOUTH AND WORK
restoring teen and young adult
connections to opportunity

policy report
KIDS COUNT

The Annie E. Casey Foundation

- Nationally, 13% of 16-19 year olds and 20% of 20-24 year olds are "disconnected"—defined as not enrolled in school and not working.

In total, 6.5 million young people are disconnected.

- Employment rates among 16-24 year olds are at their lowest level since WWII.

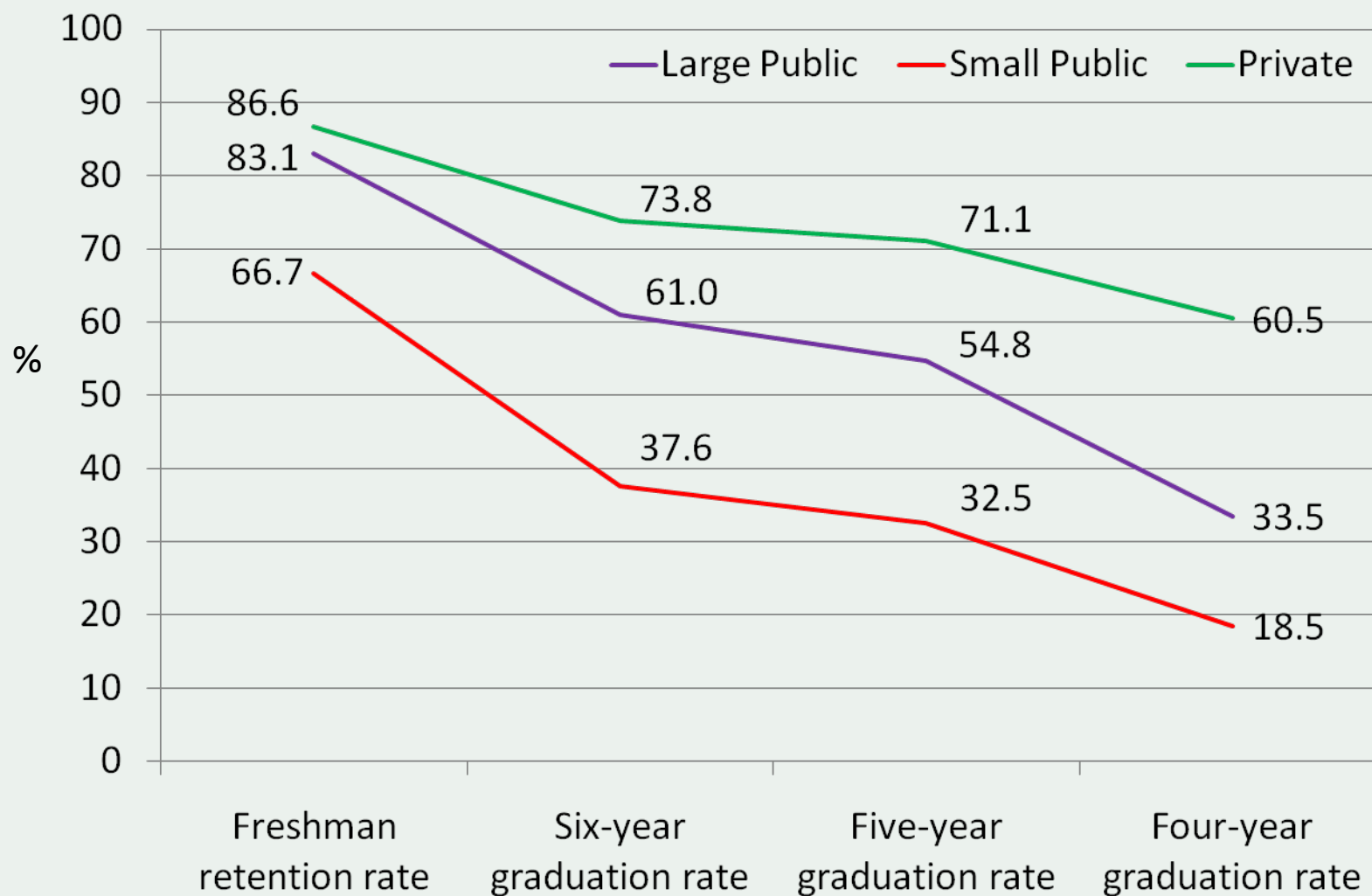- Cost: 1.56 trillion dollars (Belfield, 2012)

High School Dropout in the United States

- **16% of individuals ages 16-24 (6.2 million people) are high school dropouts.**

- **Dropout creates enormous societal costs: Unemployment, adverse health consequences, criminal involvement…**

- **Each year 1 million students drop out of high school.**

- **Pathways to dropping out are complex and synergistic.**

College Students

- They comprise a very large segment of the population (~14.5 million individuals)

- Large societal and familial investment

- Given our investment, they aren't doing as well as we might have hoped.

Measures of Academic Success among Universities in the United States

Legend: Large Public · Small Public · Private

	Freshman retention rate	Six-year graduation rate	Five-year graduation rate	Four-year graduation rate
Large Public	83.1	61.0	54.8	33.5
Small Public	66.7	37.6	32.5	18.5
Private	86.6	73.8	71.1	60.5

%

IMPACT ON GLOBAL COMPETITIVENESS

Junior Achievement®
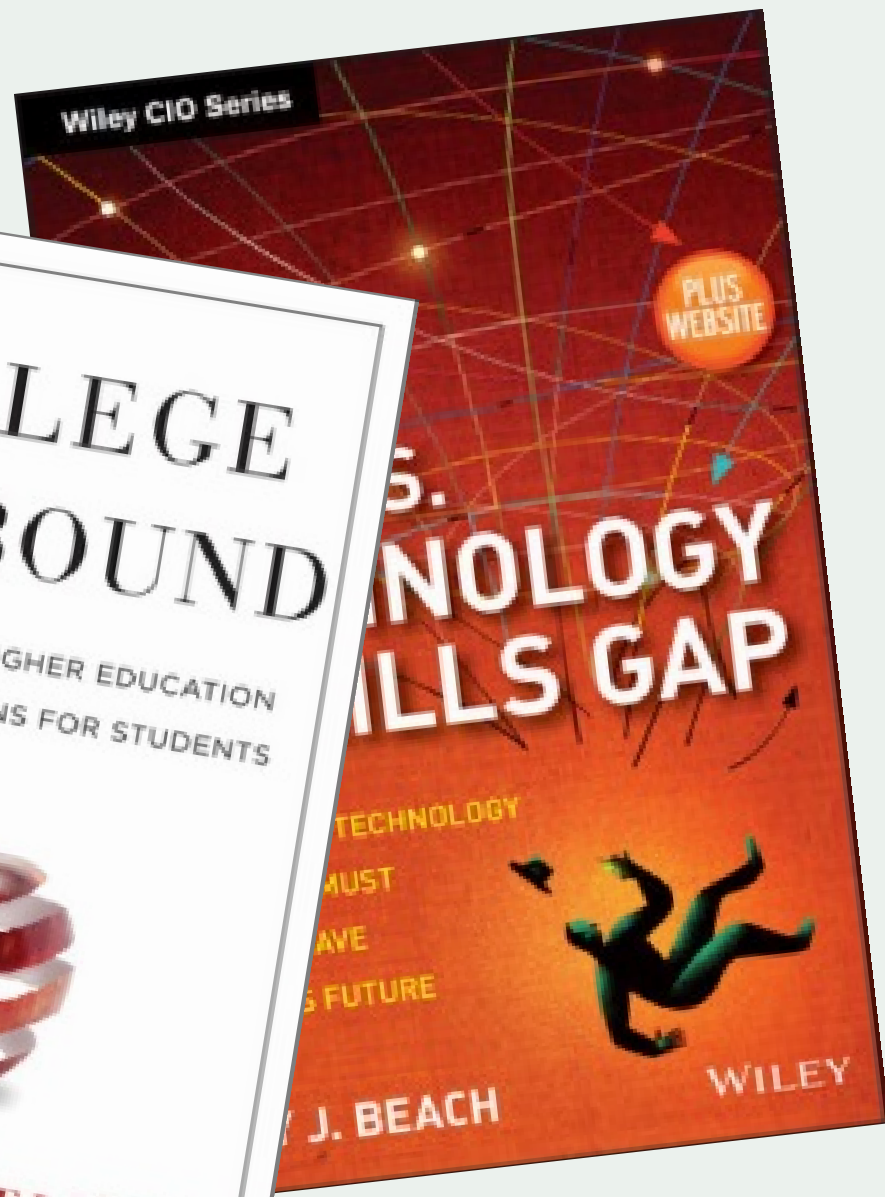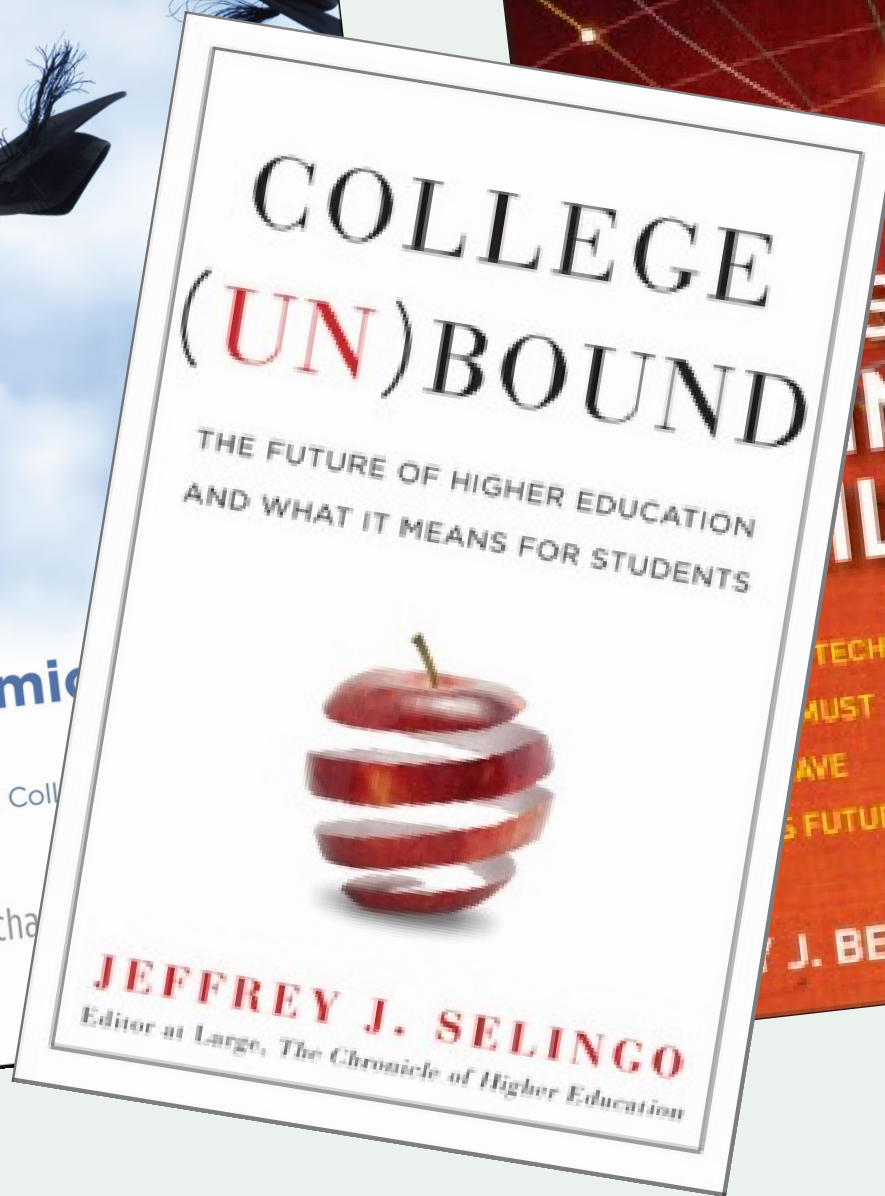*Empowering young people to own their economic success*

"America's schools face unprecedented challenges to prepare students for postsecondary education and entry into the U.S. and global workforce. The skills of the current and future workforce are closely tied to our nation's ability to thrive in a global economy."
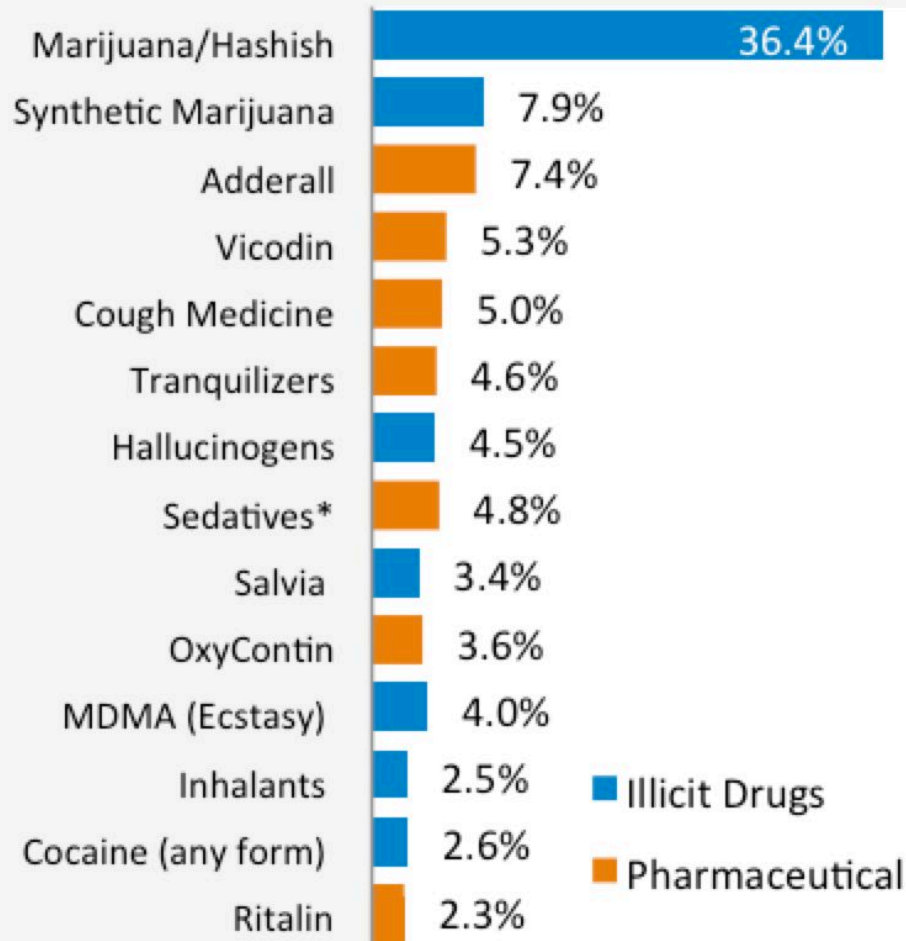
Source: *The Role of Common Core Standards in College and Career-Readiness Education, July 2013*

READINESS FOR EMPLOYMENT

*"When it comes to the types of skills and knowledge that employers feel are most important to workplace success, **large majorities of employers do NOT feel that recent college graduates are well prepared.** This is particularly the case for applying knowledge and skills in real-world settings, **critical thinking skills, and written and oral communication skills** — areas in which fewer than three in 10 employers think that recent college graduates are well prepared. Yet even in the areas of ethical decision-making and working with others in teams, many employers do not give graduates high marks."*
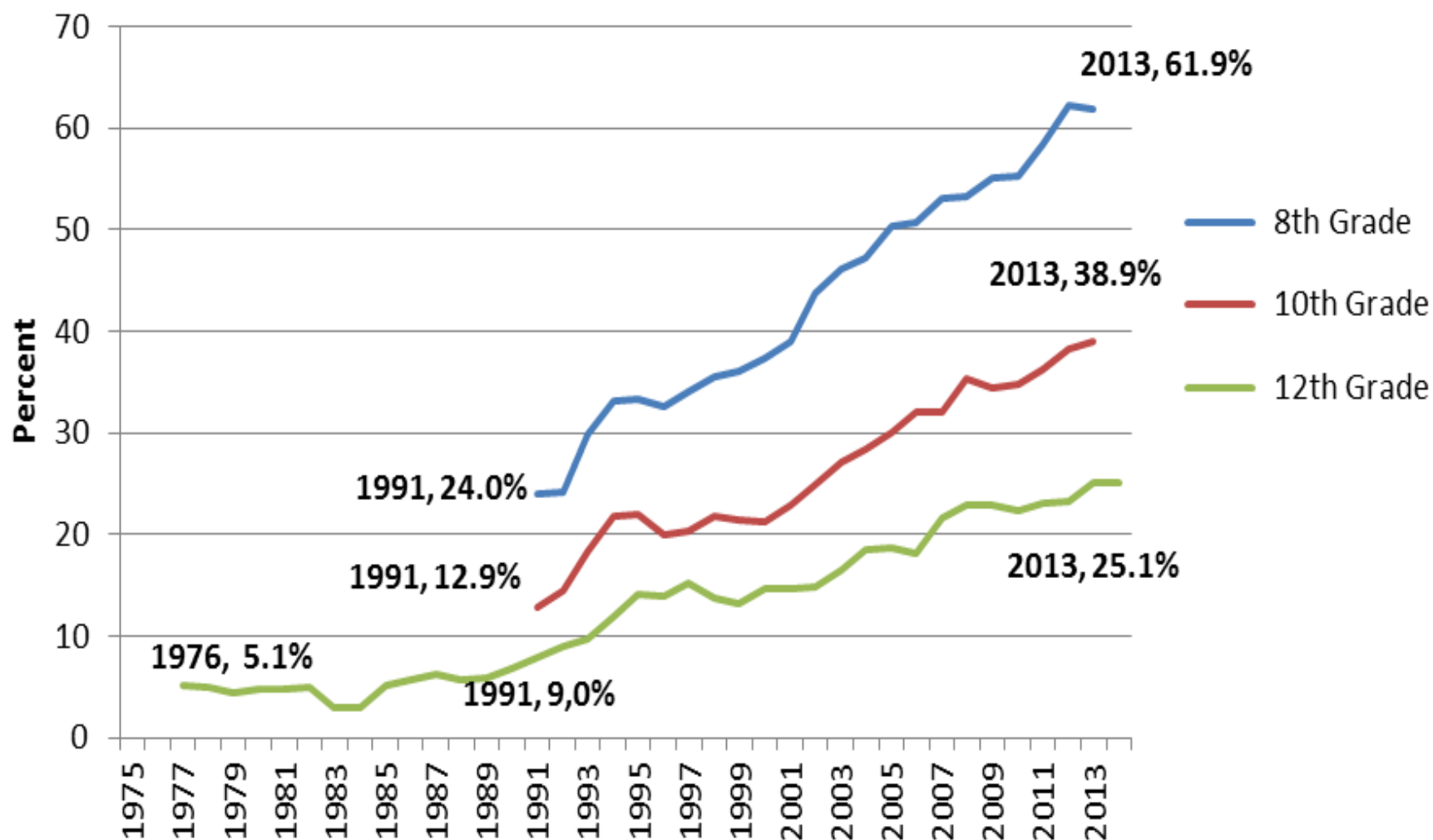
Association of American Colleges and Universities

Source: *Falling Short? College Learning and Career Success, January 2015*

Academic...

Limited Learning on Coll...

Richa...

Wiley CIO Series

COLLEGE (UN)BOUND

THE FUTURE OF HIGHER EDUCATION
AND WHAT IT MEANS FOR STUDENTS

JEFFREY J. SELINGO
Editor at Large, The Chronicle of Higher Education

PLUS WEBSITE

s.

NOLOGY
LLS GAP

TECHNOLOGY
MUST
AVE
FUTURE

J. BEACH

WILEY

Past-Year Use of Various Drugs by 12th Graders (Percent)

Drug	Percent
Marijuana/Hashish	36.4%
Synthetic Marijuana	7.9%
Adderall	7.4%
Vicodin	5.3%
Cough Medicine	5.0%
Tranquilizers	4.6%
Hallucinogens	4.5%
Sedatives*	4.8%
Salvia	3.4%
OxyContin	3.6%
MDMA (Ecstasy)	4.0%
Inhalants	2.5%
Cocaine (any form)	2.6%
Ritalin	2.3%

Legend: Illicit Drugs / Pharmaceutical

SOURCE: University of Michigan, 2013 Monitoring the Future Study

Trends in Abstaining from Illicit Drugs, Alcohol and Cigarettes - Lifetime

2013, 61.9%

2013, 38.9%

1991, 24.0%

1991, 12.9%

2013, 25.1%

1976, 5.1%

1991, 9,0%

- 8th Grade
- 10th Grade
- 12th Grade

Percent

TIME
Ideas

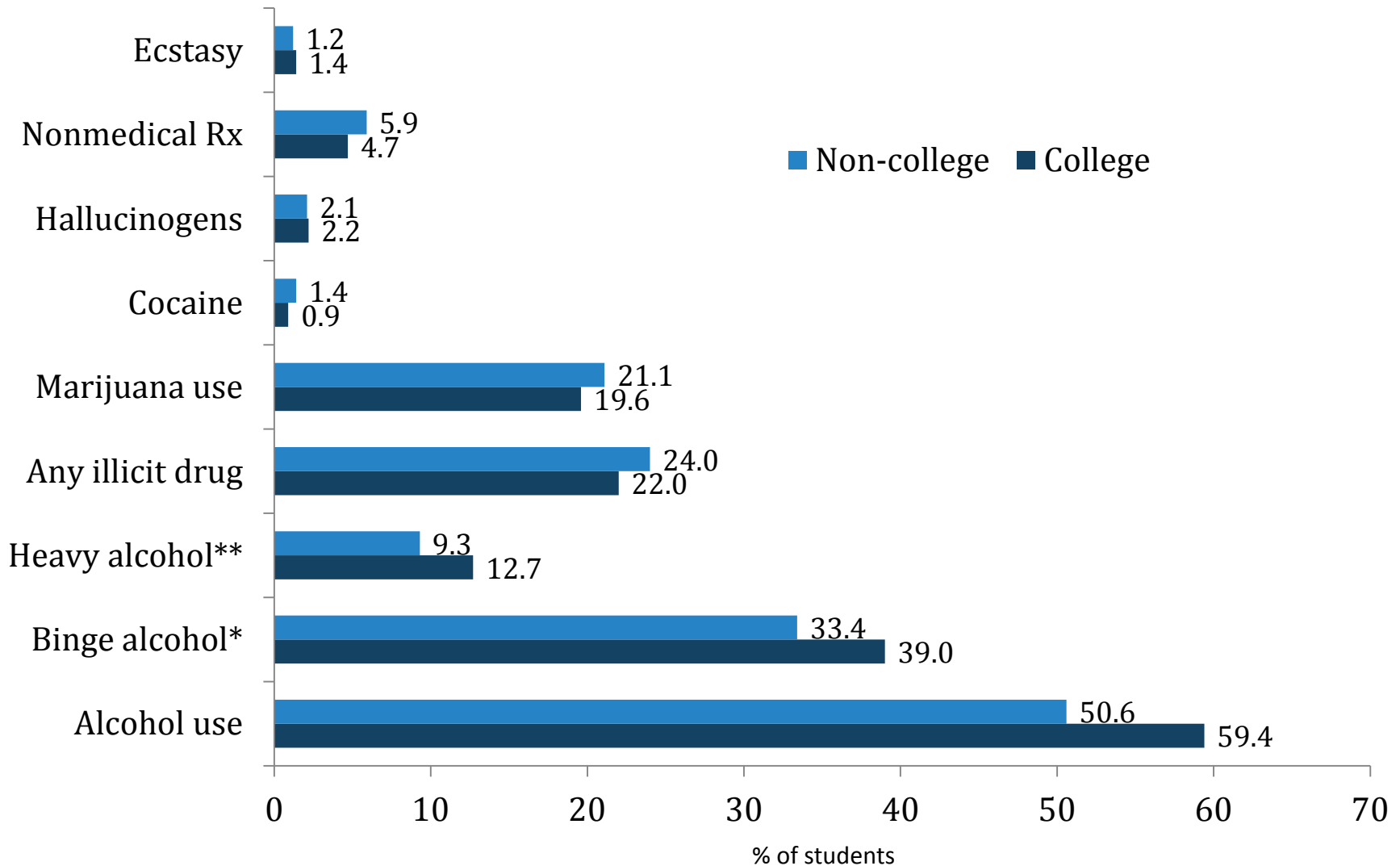EDUCATION

Does College Put Kids on a 'Party Pathway'?

By Annie Murphy Paul | Jan. 23, 2013 | 36

A fair amount of schadenfreude greeted the release last week of a study showing that the kids of parents who pay for college return their families' largesse by achieving lower grades. The study, conducted by University of California at Merced professor Laura Hamilton and published in the *American Sociological Review*, offered those of us who worked our way through college — or took out burdensome student loans — a rare opportunity to gloat. But our self-congratulation is mistaken, or at least beside the point. Hamilton's work, and that of other researchers, demonstrates that we should all be concerned about the state of higher education in the U.S. today and that college students enjoying a four-year paid vacation courtesy of their parents are merely a symptom of a larger problem.

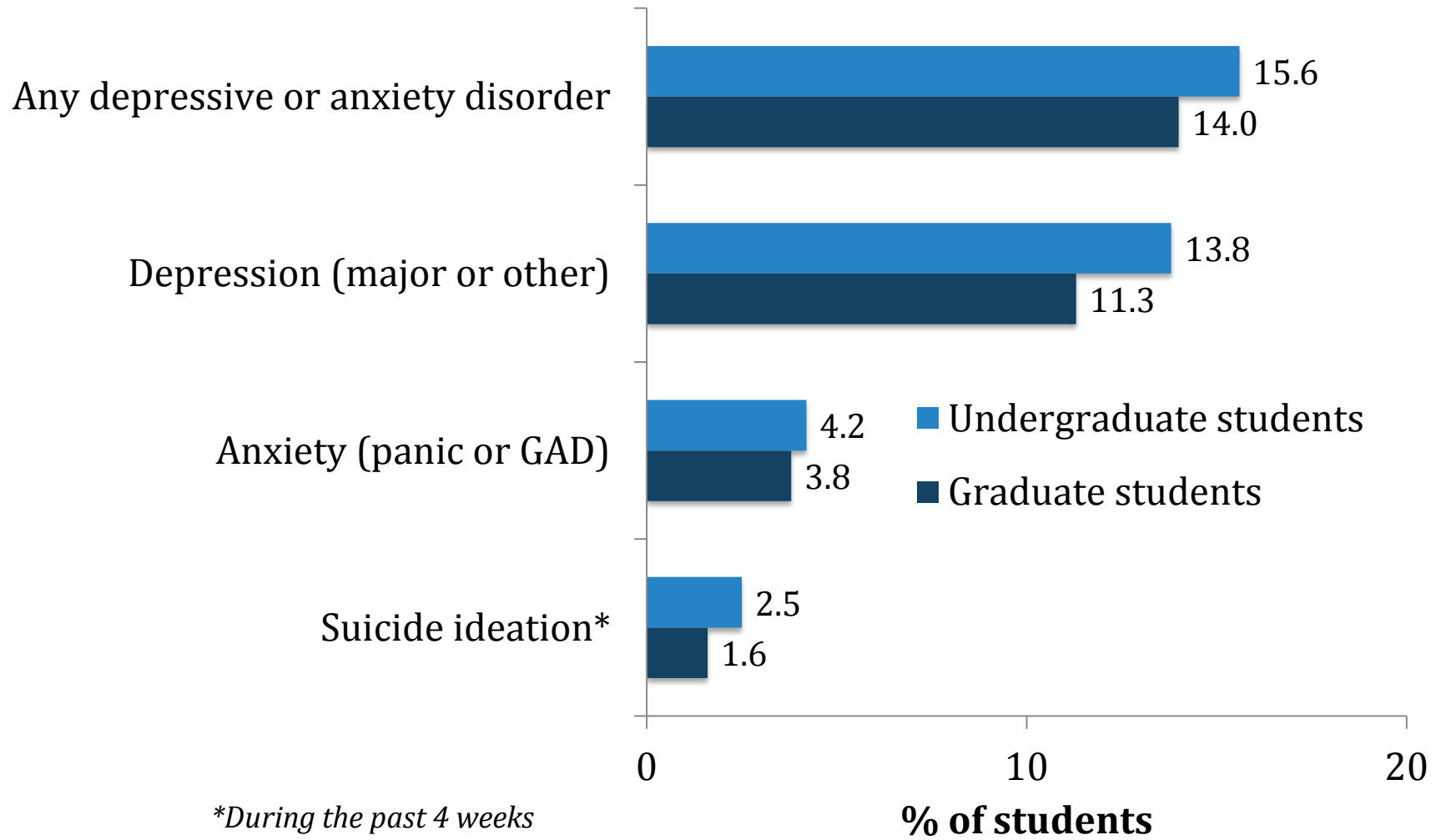KATIE HUISMAN / RK STUDIO / GETTY IMAGES

National data: Past-month alcohol and other drug use among 18 to 22-year-olds, by college enrollment

Legend: Non-college (light blue), College (dark blue)

Substance	Non-college	College
Ecstasy	1.2	1.4
Nonmedical Rx	5.9	4.7
Hallucinogens	2.1	2.2
Cocaine	1.4	0.9
Marijuana use	21.1	19.6
Any illicit drug	24.0	22.0
Heavy alcohol**	9.3	12.7
Binge alcohol*	33.4	39.0
Alcohol use	50.6	59.4

% of students

*"Binge use" defined as "Five or more drinks on the same occasion at least once in the past 30 days."
**"Heavy use" defined as "Five or more drinks on the same occasion on each of 5 or more days in the past 30 days."

How many college students screen positive for <u>current</u> mental health problems?

*During the past 4 weeks

% of students

	Undergraduate students	Graduate students
Any depressive or anxiety disorder	15.6	14.0
Depression (major or other)	13.8	11.3
Anxiety (panic or GAD)	4.2	3.8
Suicide ideation*	2.5	1.6

Eisenberg D, Gollust SE, Golberstein E, Hefner, JL. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. American Journal of Orthopsychiatry. 77(4), 534-542.

Estimated probabilities of developing alcohol dependence based on drinking level at college entry (College Life Study)

Drinking level at **college entry**:

High-risk Drinkers: 26% (6+ drinks/day)

Medium Risk Drinkers: 40% (3-5 drinks/day)

Low-risk Drinkers: 22% (1-2 drinks/day)

Non-drinkers: 12%

Estimated probability of developing **alcohol dependence**

High-risk: Year 1: 22.3%, Year 2: 25.0%, Year 3: 22.4%, Year 4: 19.0%

Medium Risk: Year 1: 15.1%, Year 2: 17.2%, Year 3: 15.2%, Year 4: 12.8%

Low-risk: Year 1: 5.2%, Year 2: 5.9%, Year 3: 5.2%, Year 4: 4.3%

Non-drinkers: Year 1: 2.3%, Year 2: 2.7%, Year 3: 2.3%, Year 4: 1.9%
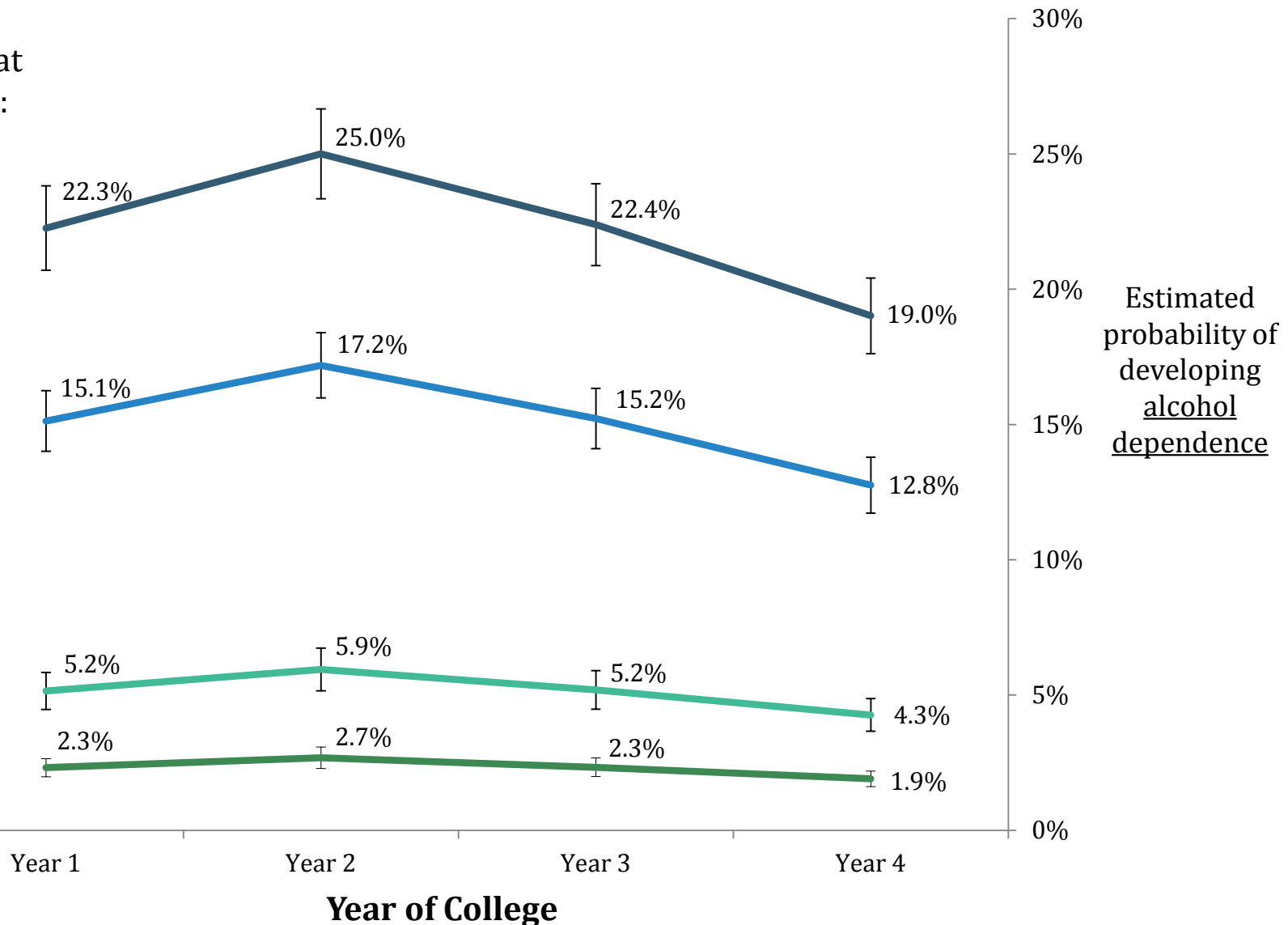
Year of College

Illicit and nonmedical drug use in the first four years of college

Weighted percent of students who used drug at least once in lifetime

- Year 4
- Year 3
- Year 2
- Year 1
- Pre-College

Categories: Marijuana, Prescription Analgesics, Prescription Stimulants, Hallucinogens, Inhalants, Prescription Tranquilizers, Ecstasy, Amphetamines, Cocaine, Heroin

Labeled values (Year 4): 63%, 23%, 30%, 16%, 8%, 13%, 7%, 3%, 13%, 1%
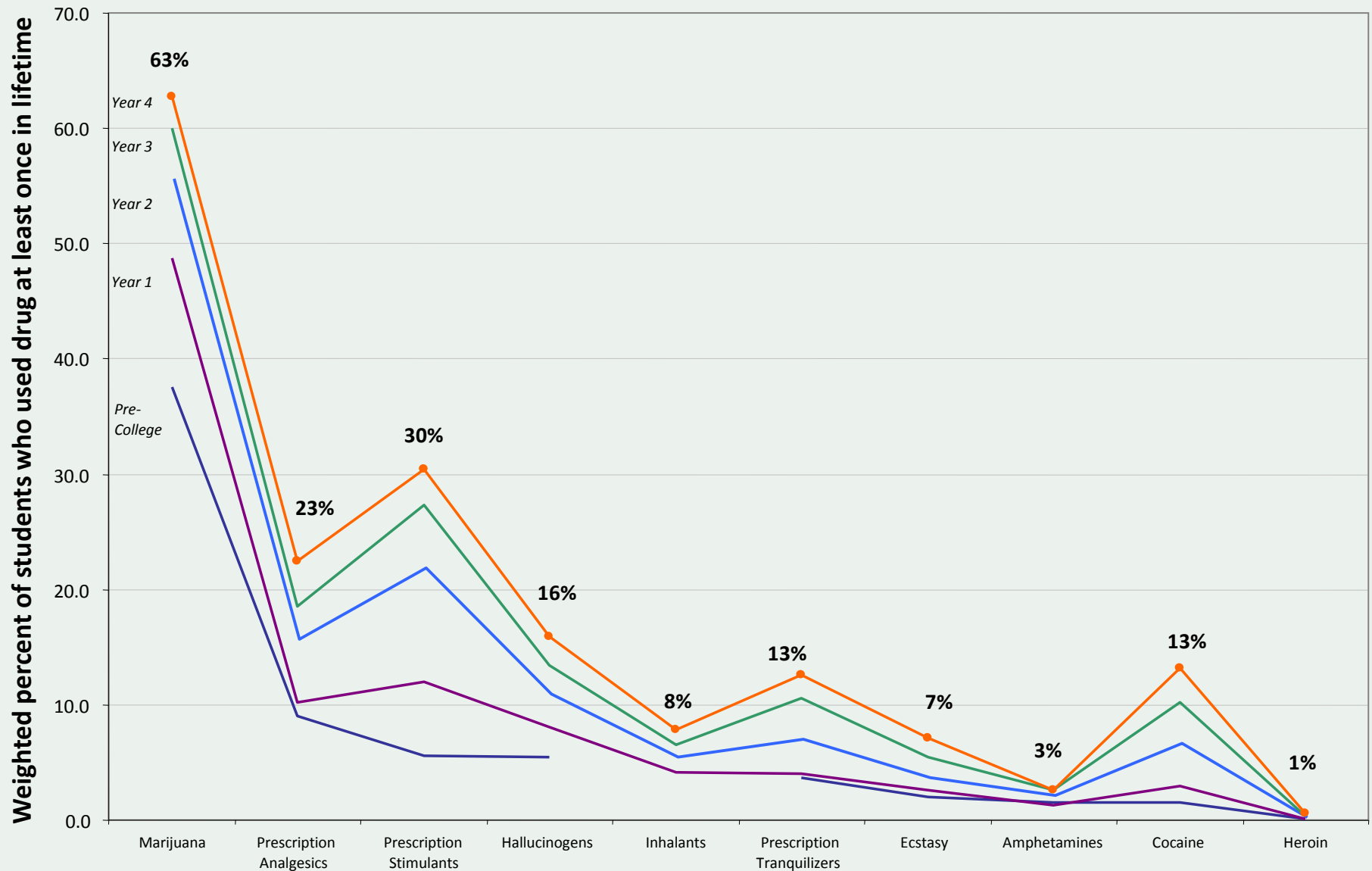
Substance Use and Academic Achievement

Academic Performance Problems → Substance Use → ?

Substance Use → Academic Performance Problems → ?

Mrs. Helen DuPont

Thanks, Amelia...I appreciate the recognition of me and IBH. Helen however is the real hero of the story from IBH.

Bob

Dr. Robert DuPont

America's Dropout Crisis:

The Unrecognized Connection
To Adolescent Substance Use

"There is no problem so bad that alcohol and drugs will not make it worse."

March, 2013

Available online at www.cyahd.umd.edu

Cross-sectional research

Method 1.
Compare substance users with non-users, and see how they differ on academic performance.

Substance Users vs. Substance Non-Users
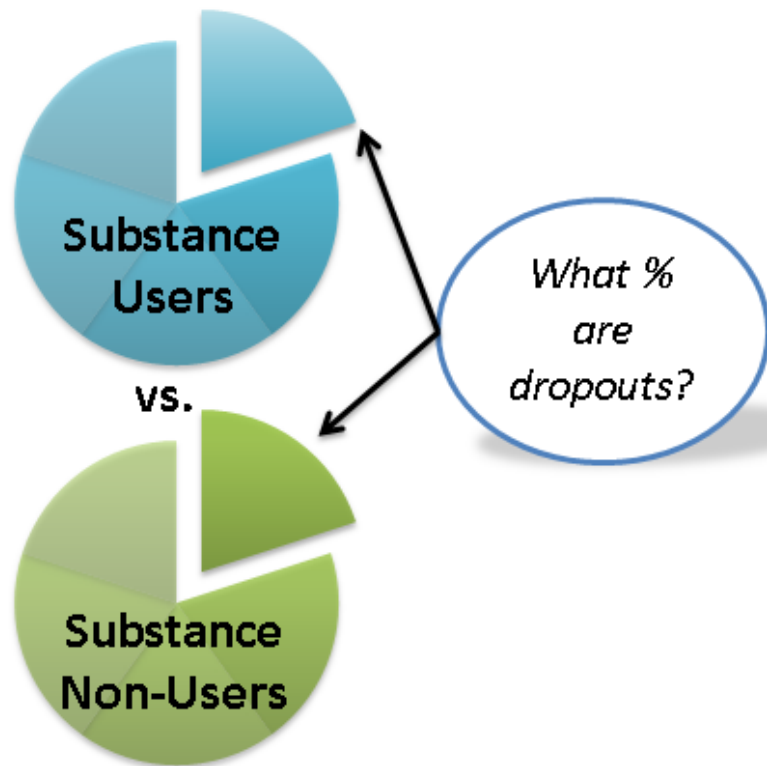
What % are dropouts?

Method 2.
Compare dropouts with non-dropouts, and see how they differ on substance use.

Dropouts vs. Non-Dropouts

What % are substance users?
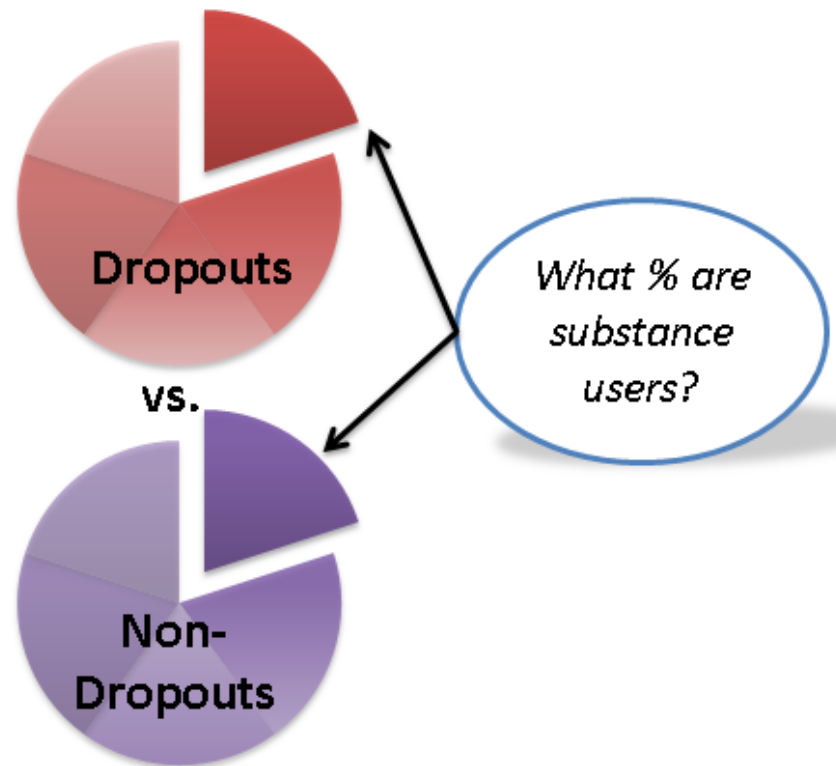
Academic achievement among 12- to 17-year-olds by lifetime substance use, 2002 to 2005[a]
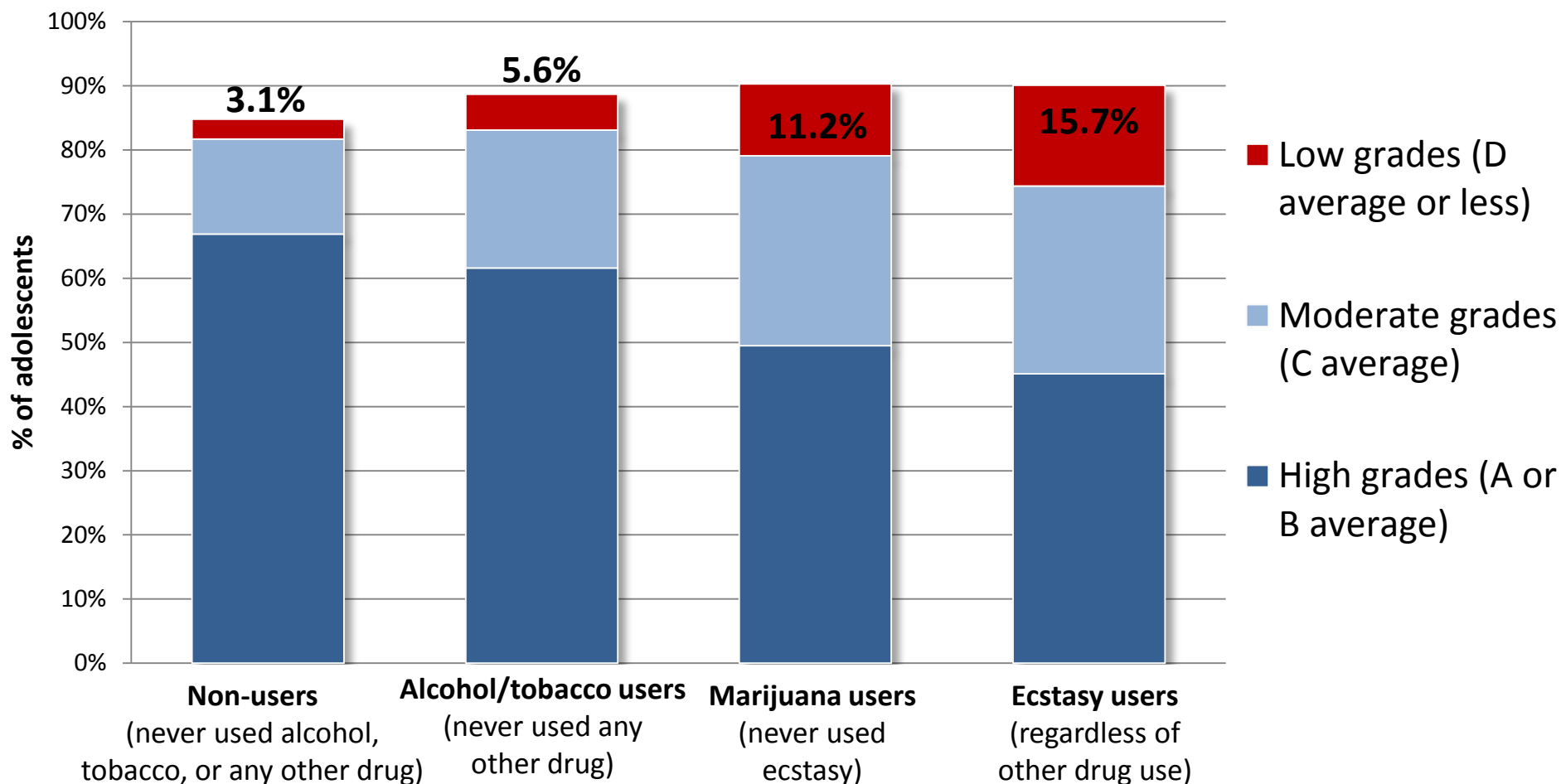
[a] Data retrieved from Martins, S.S., Alexandre, P.K. (2009). The association of ecstasy use and academic achievement among adolescents in two US national surveys. *Addictive Behaviors, 34*(1), 9-16.

Lifetime prevalence of substance use among 1,512 seventh through twelfth graders in the Southwestern United States, by dropout status and race/ethnicity[a]
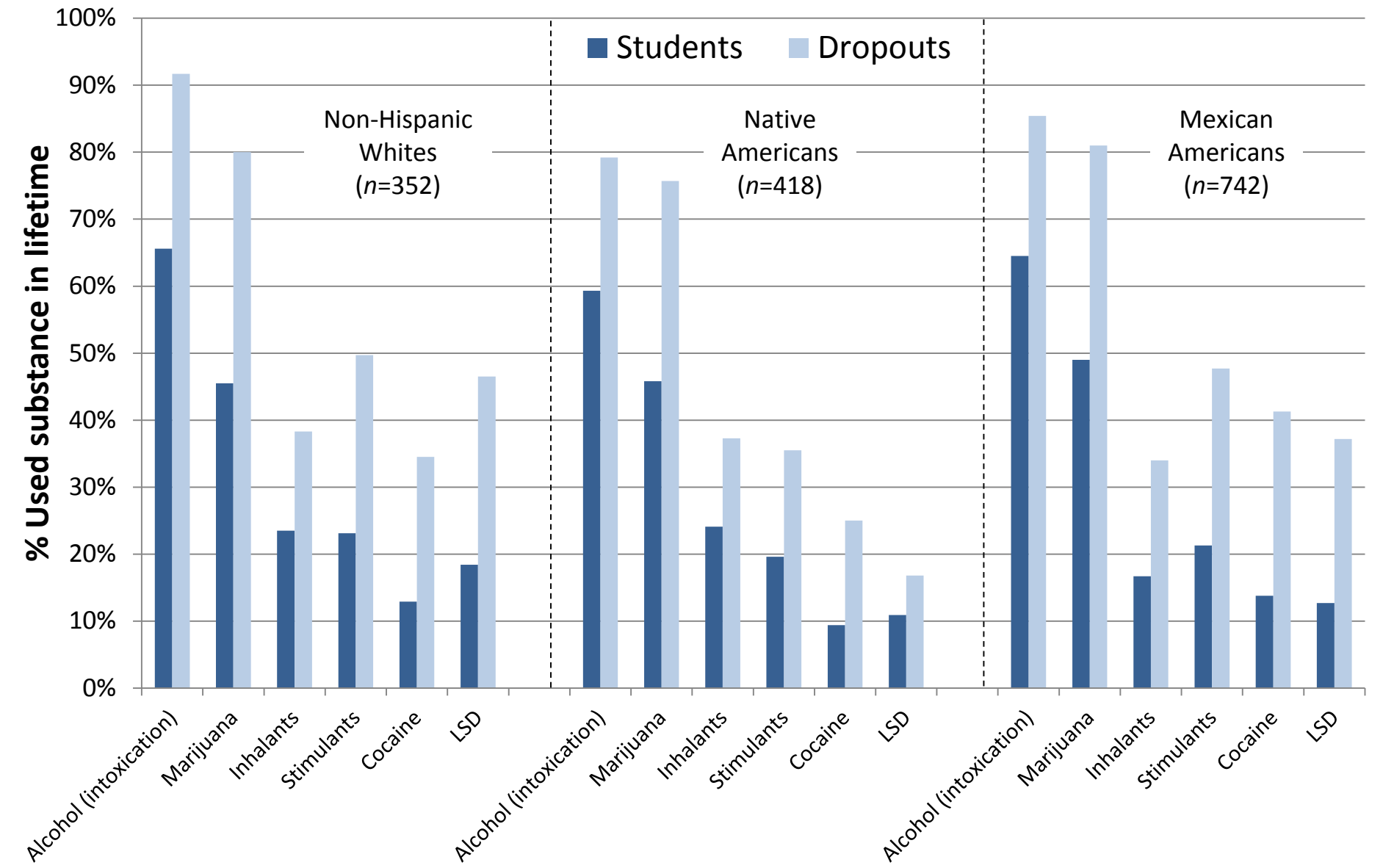
[a] Data retrieved from Swaim, R. C., Beauvais, F., Chavez, E. L., & Oetting, E. R. (1997). The effect of school dropout rates on estimates of adolescent substance use among three racial/ethnic groups. *American Journal of Public Health, 87*(1), 51-55.

# Adverse outcomes of marijuana use: Association with frequency of use

Palamar, J.J., Fenstermaker, M., Kamboukos, D., Ompad, D.C., Cleland, C.M., Weitzman, M. (2014). Adverse psychosocial outcomes associated with drug use among US high school seniors: A comparison of alcohol and marijuana. *American Journal of Drug and Alcohol Abuse.* 40(6):438-46.
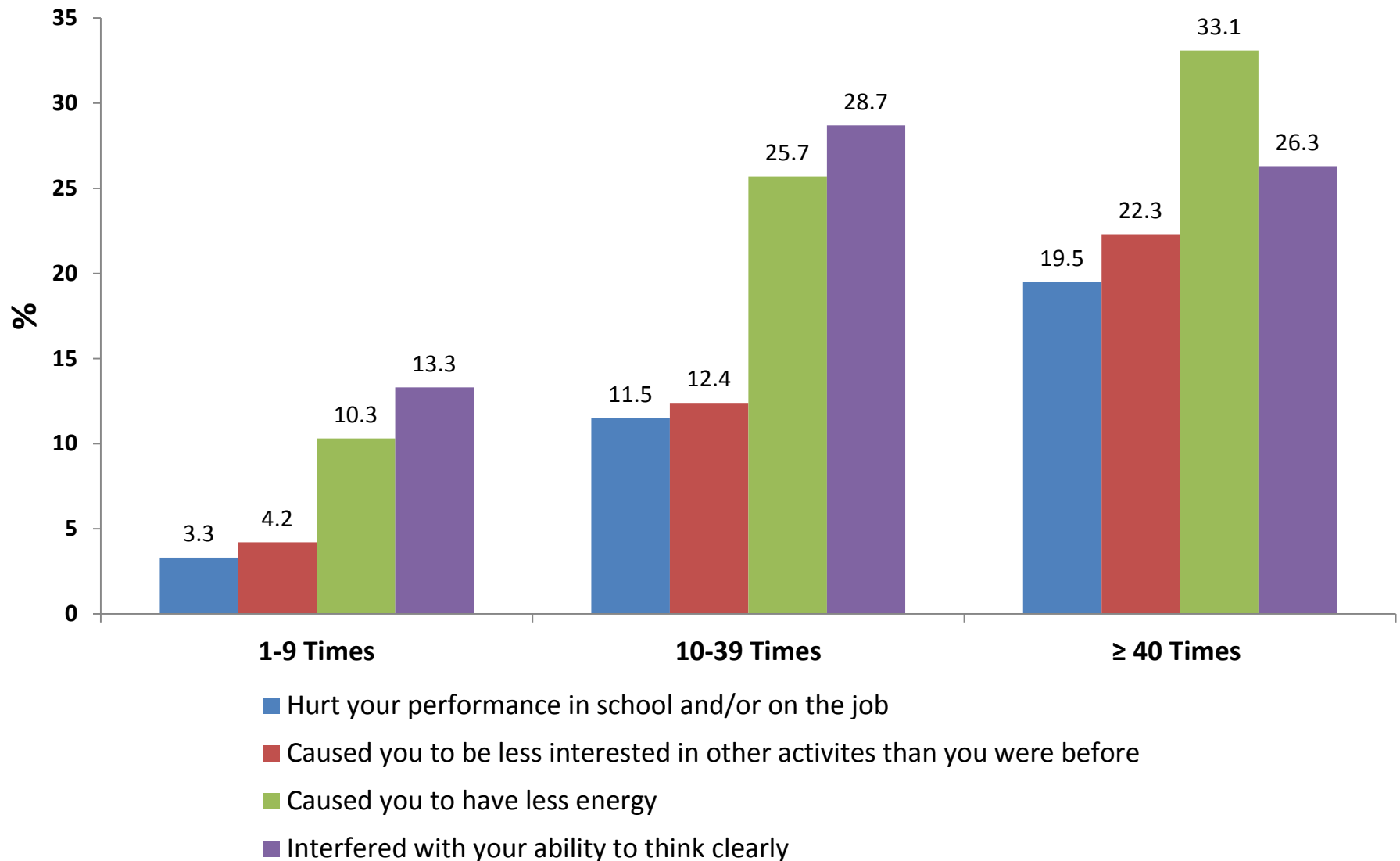
Longitudinal research
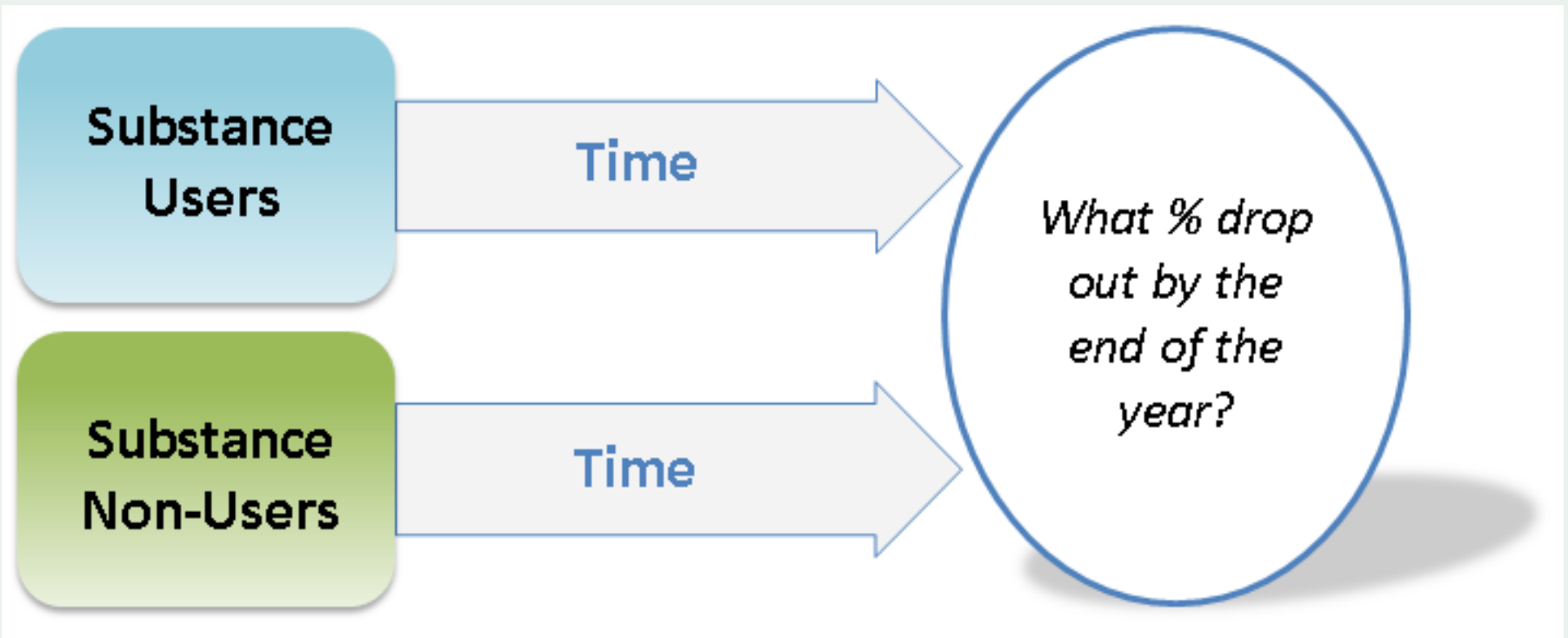
High school dropout by age 18 among 496 female middle school students in a large United States city, by substance abuse developmental trajectory group membership[a]
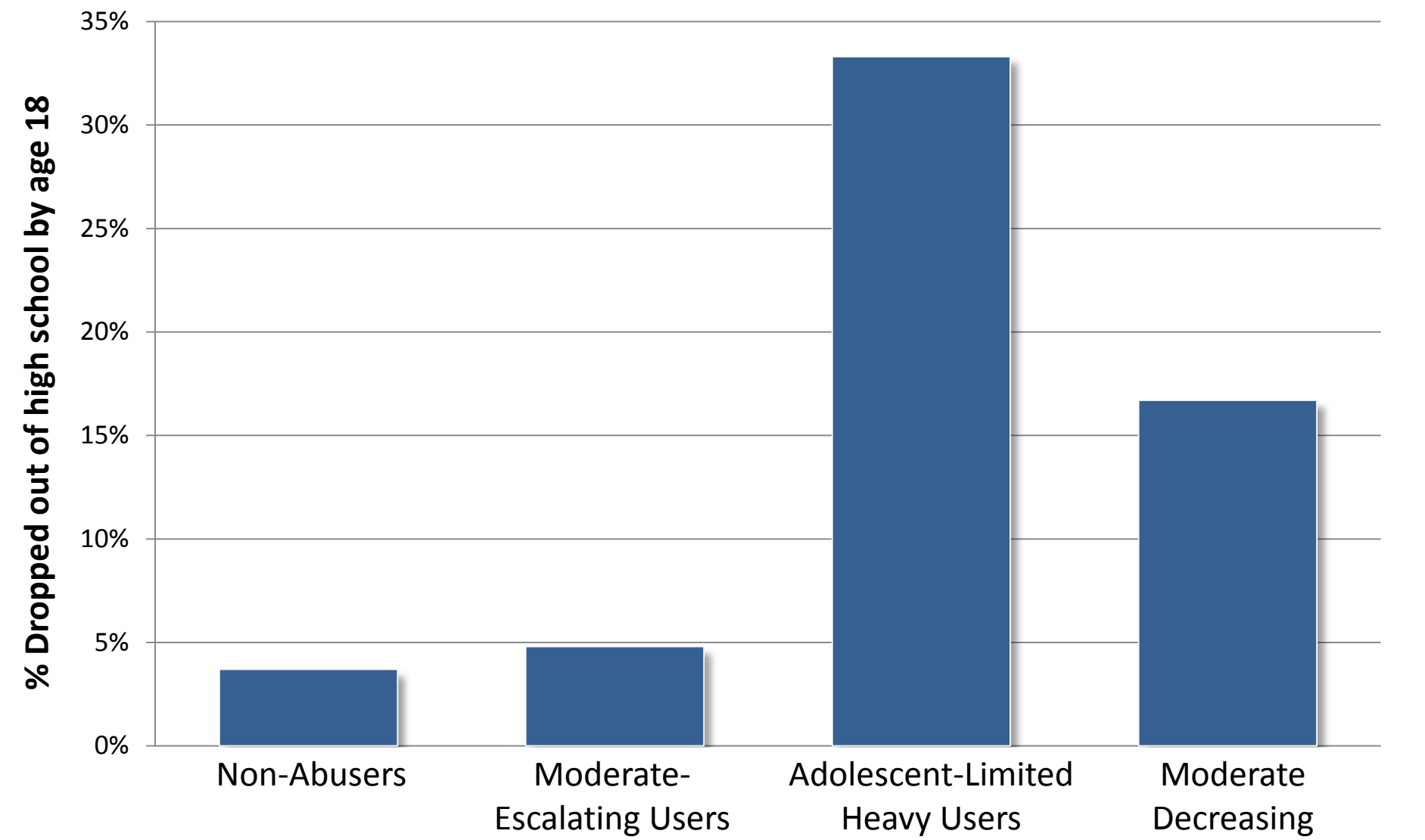
[a] Data retrieved from Marti, C. N., Stice, E., & Springer, D. W. (2010). Substance use and abuse trajectories across adolescence: A latent trajectory analysis of a community-recruited sample of girls. *Journal of Adolescence, 33*(3), 449-461.

Cumulative Frequency of Cannabis Use and Educational Outcomes
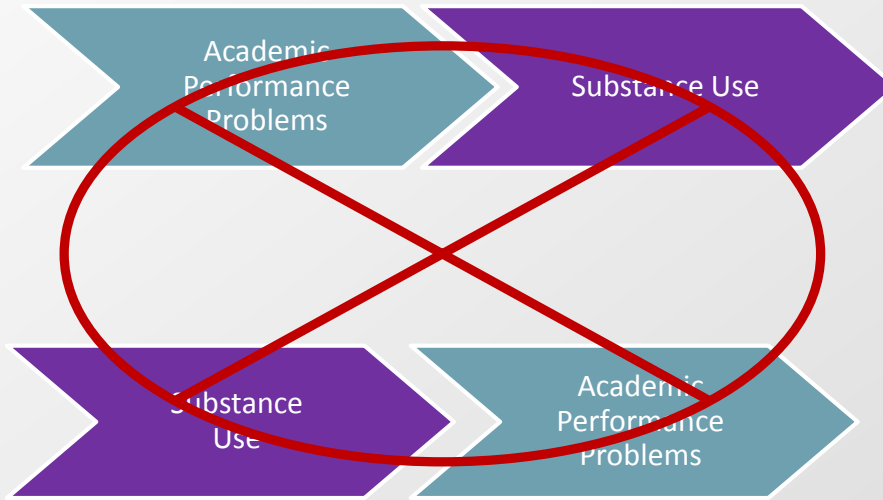
(Fergusson et al., 2003)

Fergusson DM, Horwood LJ, Beautrais AL (2003). Cannabis Use and Educational Achievement. *Addiction* 98:1681–1692.
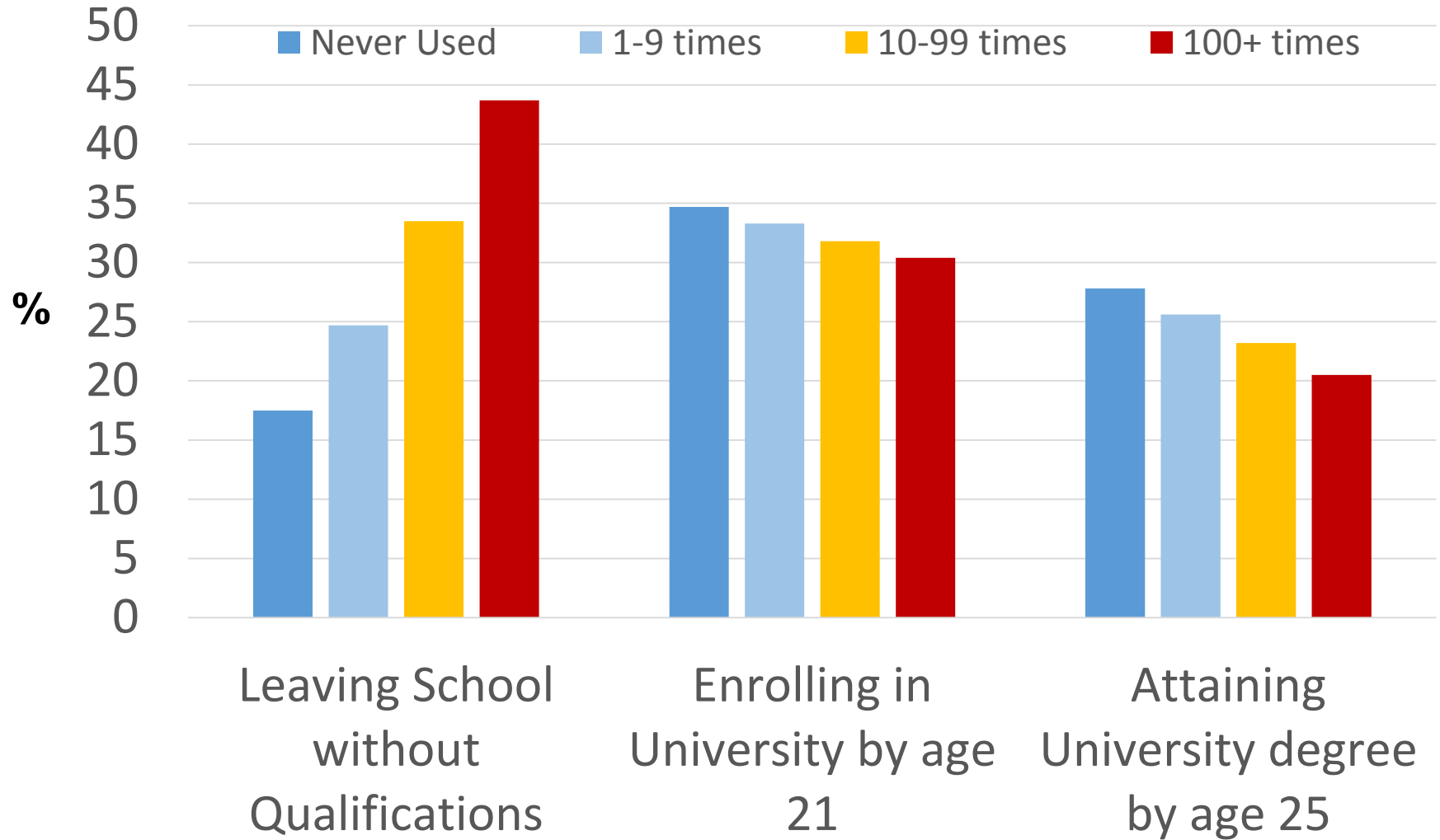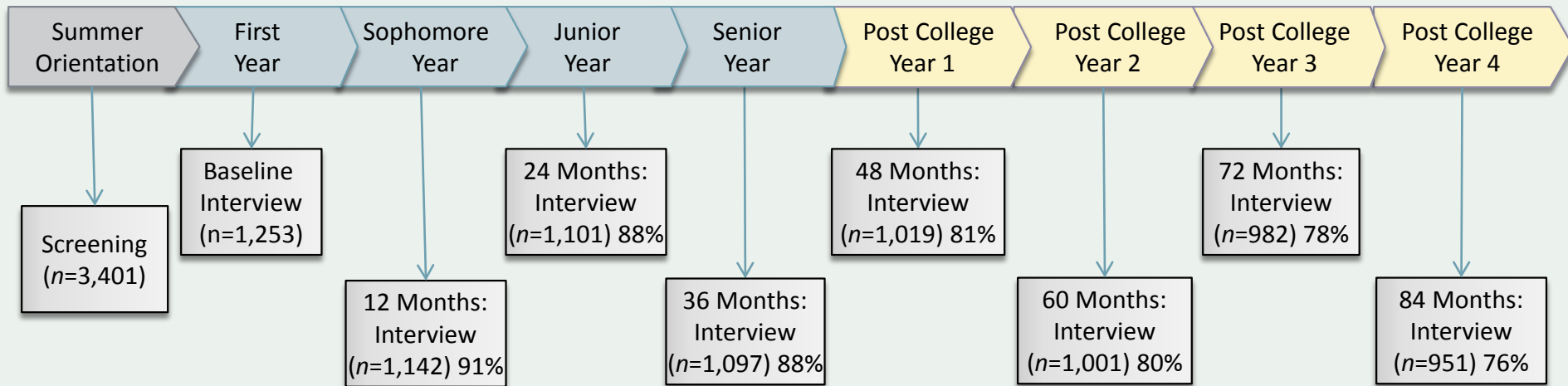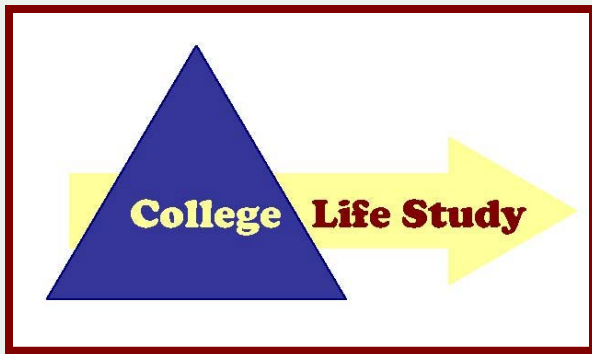
Cessation *of substance use is associated with improvements in academic performance and school attendance.*

High school graduation among 153 adolescents following inpatient drug treatment, by substance use trajectory group membership[a]
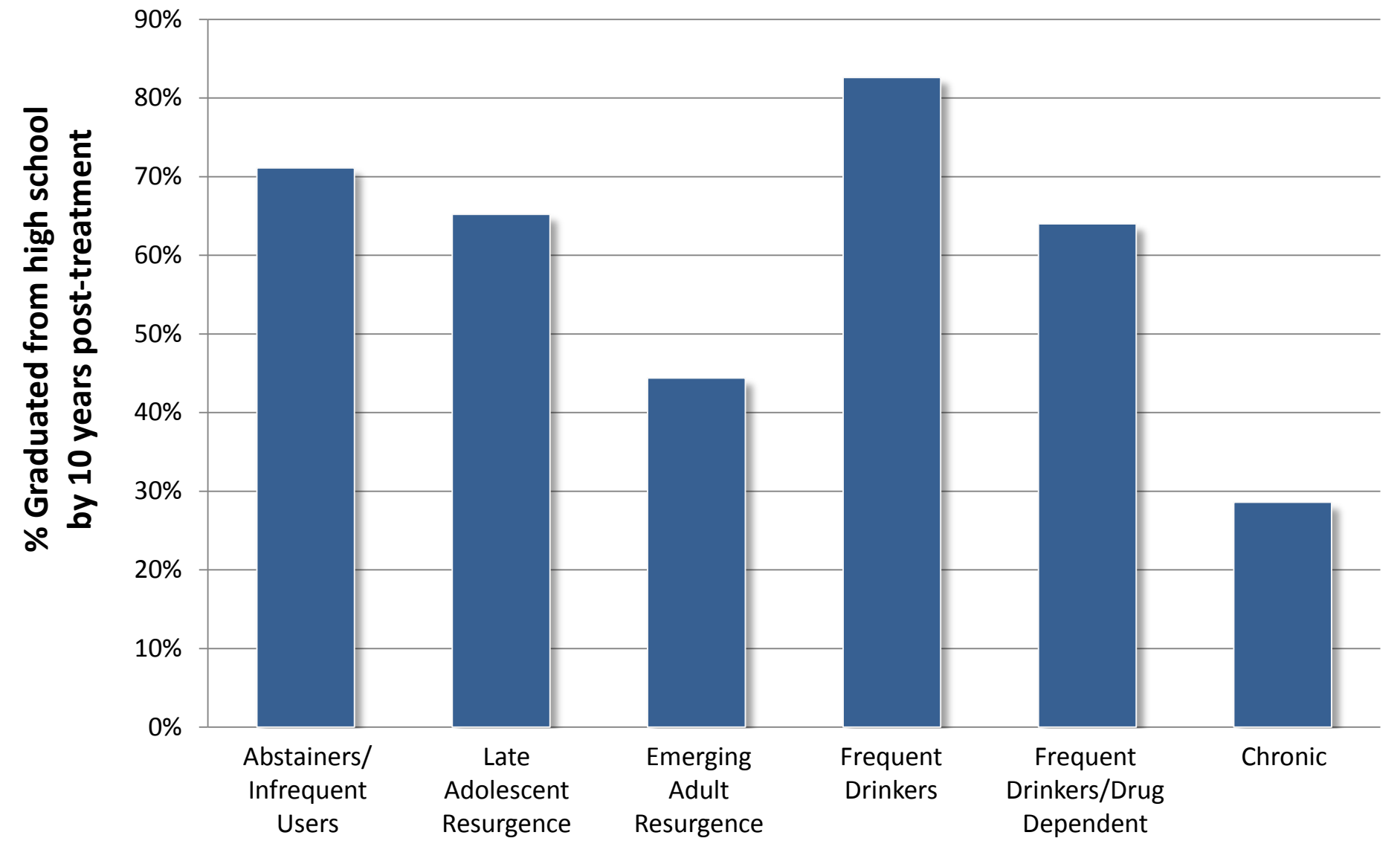
[a] Data retrieved from Anderson, K. G., Ramo, D. E., Cummins, K. M., & Brown, S. A. (2010). Alcohol and drug involvement after adolescent treatment and functioning during emerging adulthood. *Drug and Alcohol Dependence, 107*(2-3), 171-181.

College Life Study

| Summer Orientation | First Year | Sophomore Year | Junior Year | Senior Year | Post College Year 1 | Post College Year 2 | Post College Year 3 | Post College Year 4 |

Screening (*n*=3,401)

Baseline Interview (n=1,253)

12 Months: Interview (*n*=1,142) 91%

24 Months: Interview (*n*=1,101) 88%

36 Months: Interview (*n*=1,097) 88%

48 Months: Interview (*n*=1,019) 81%

60 Months: Interview (*n*=1,001) 80%

72 Months: Interview (*n*=982) 78%

84 Months: Interview (*n*=951) 76%

Major Domains Measured in the College Life Study

Demographics
Family Composition
Gender
Race/Ethnicity
Socioeconomic Status
Parental Education

Individual Characteristics
Personality/Temperament
Religiosity
Sensation-seeking
Physical Health

Stress & Social Support

Peer Relations

Peer Drug Use

Parent Influences
Parental Monitoring
Relationship Quality
Communication
Parental Authority Style
Family History

Alcohol and Other Drugs
DSM-IV Disorders
Quantity/Frequency
Consequences
Nonmedical Prescription Drug Use
Sharing & Selling Prescription Drugs
Perceived Harmfulness

Academic Achievement
Personal Goals
Employment
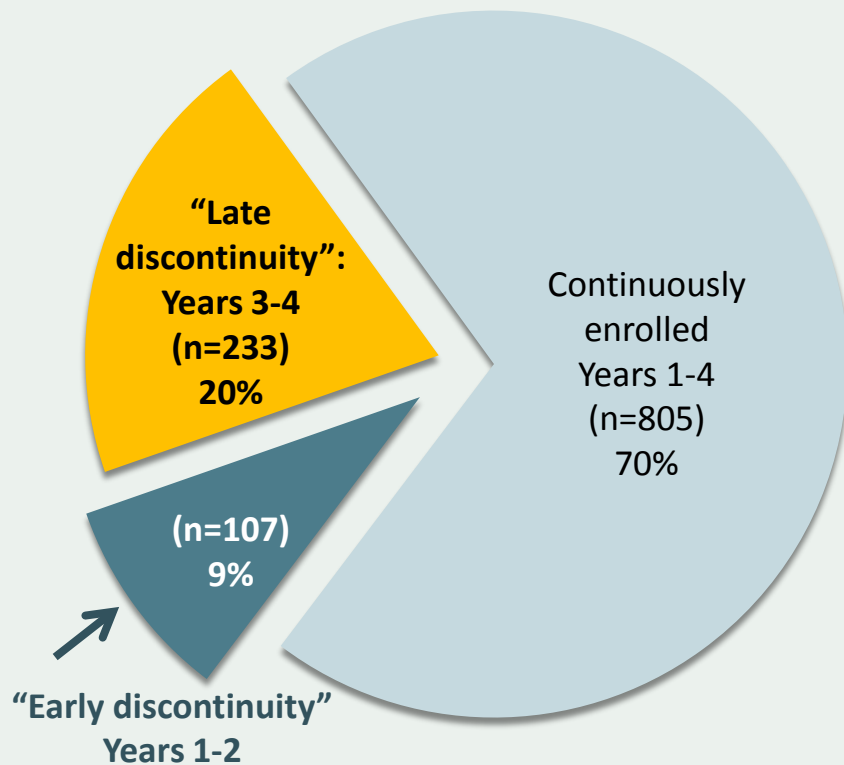## Quality of Life

Mental Health
Major Depression
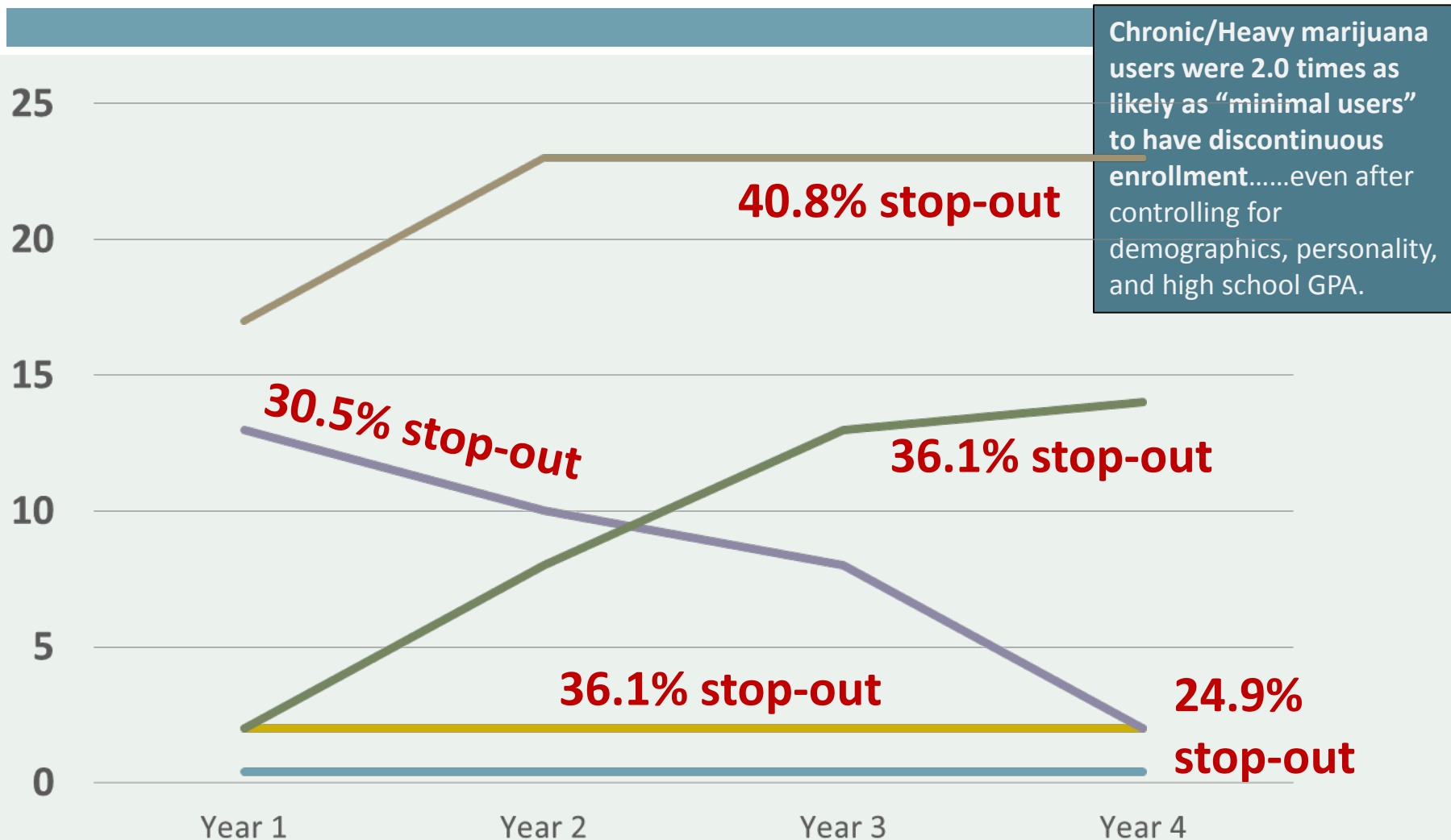Bipolar Disorder
Anxiety Disorder
ADHD
Suicidal Behaviors

Health Services

"Stopping out" –
Gaps in College Enrollment

Alcohol and marijuana use: relationships to discontinuous enrollment

"Late discontinuity": Years 3-4 (n=233) 20%

Continuously enrolled Years 1-4 (n=805) 70%

(n=107) 9%
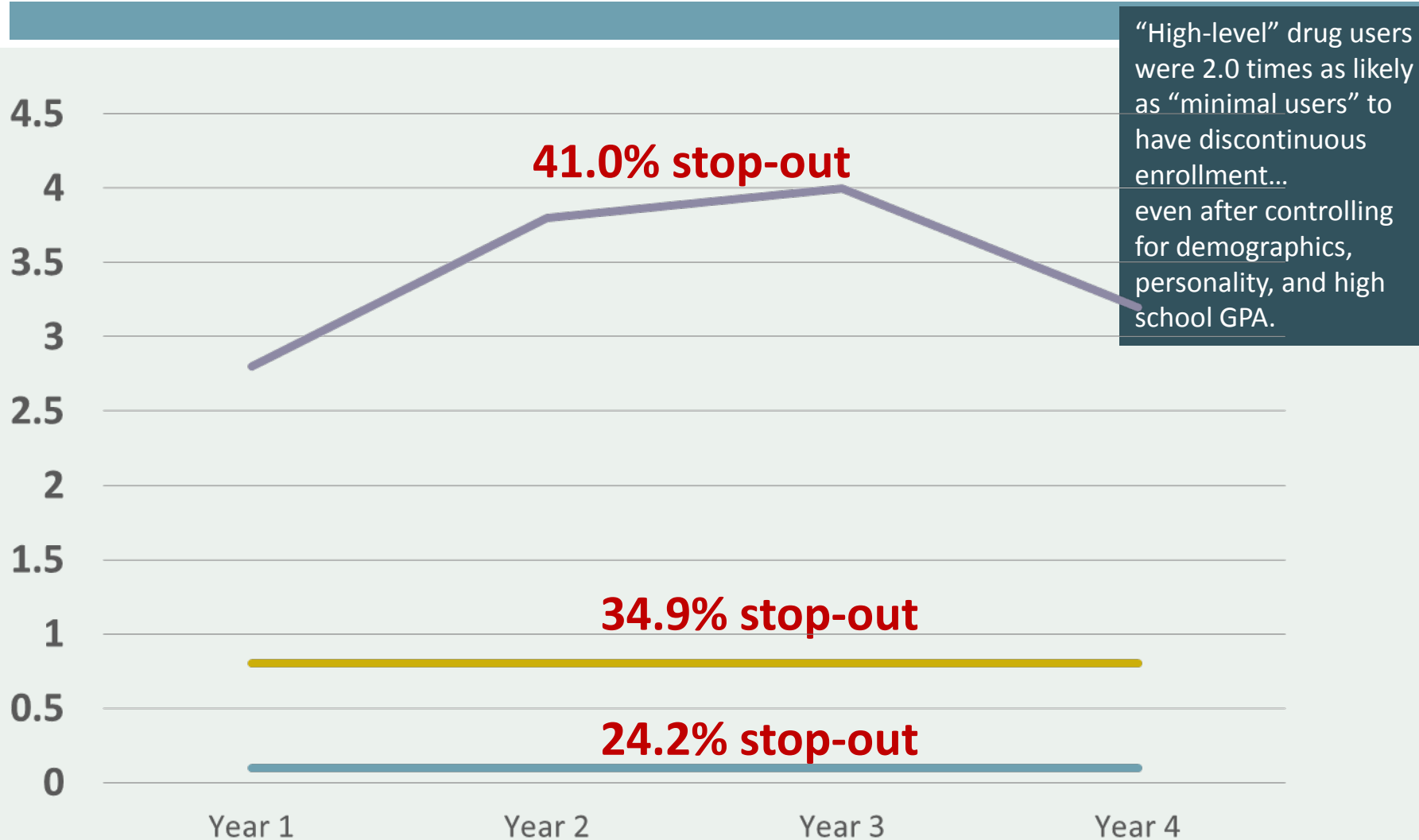
"Early discontinuity" Years 1-2

First year alcohol use (typical number of drinks/day) and frequency of marijuana use was related to late discontinuity, even after controlling for demographics, psychiatric symptoms and diagnosis, and high school GPA.

Arria, A.M., Caldeira, K.M., Vincent, K.B., Winick, E.R., Baron, R.A., O'Grady, K.E. (2013). Discontinuous college enrollment: Associations with substance use and mental health. *Psychiatric Services.* 64(2), 165-172.

Marijuana use trajectories: relationship to "discontinuous" enrollment

Chronic/Heavy marijuana users were 2.0 times as likely as "minimal users" to have discontinuous enrollment……even after controlling for demographics, personality, and high school GPA.

40.8% stop-out

30.5% stop-out

36.1% stop-out

36.1% stop-out

24.9% stop-out

Arria, A.M., Garnier-Dykstra, L.M., Caldeira, K.M., Vincent, K.B., Winick, E.R., O'Grady, K.E. (2013). Drug use patterns and continuous enrollment in college: Results from a longitudinal study. *Journal of Studies on Alcohol and Drugs.* 74(1), 71-83.

Drugs other than marijuana: relationship to "discontinuous" enrollment

41.0% stop-out

34.9% stop-out

24.2% stop-out

"High-level" drug users were 2.0 times as likely as "minimal users" to have discontinuous enrollment...
even after controlling for demographics, personality, and high school GPA.

4.5				
4				
3.5				
3				
2.5				
2				
1.5				
1				
0.5				
0	Year 1	Year 2	Year 3	Year 4

Arria, A.M., Garnier-Dykstra, L.M., Caldeira, K.M., Vincent, K.B., Winick, E.R., O'Grady, K.E. (2013). Drug use patterns and continuous enrollment in college: Results from a longitudinal study. *Journal of Studies on Alcohol and Drugs.* 74(1), 71-83.

Time to Graduation?
College Life Study

- First-year marijuana use associated with skipping more classes and lower first-semester GPA, which then was related to longer time to graduation.

- Baseline measures of other drug use and alcohol quantity exhibited similar indirect effects on GPA and graduation time.

- Even accounting for demographics and other factors, marijuana use directly affected college academic outcomes in a negative way.
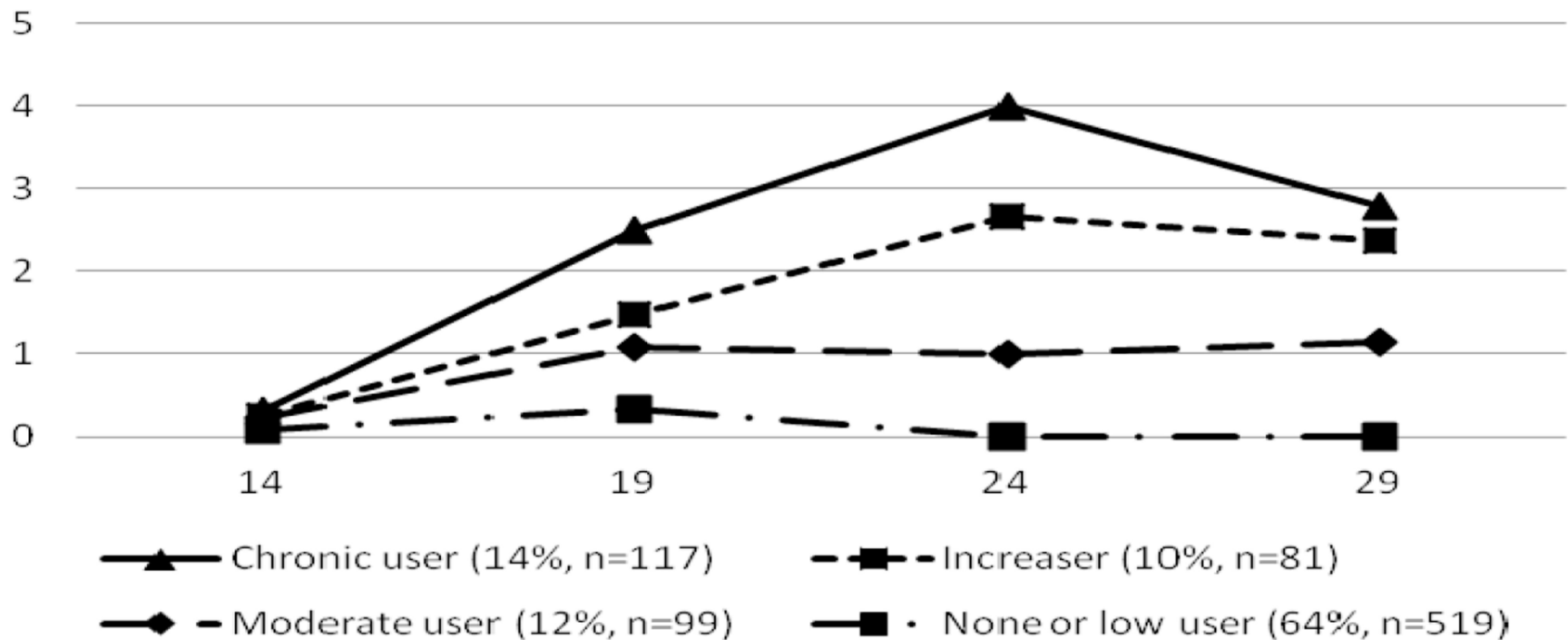
Adult Work Commitment, Financial Stability, and Social Environment as Related to Trajectories of Marijuana Use Beginning in Adolescence
Judith S. Brook, Jung Yeon Lee, Stephen J. Finch, Nathan Seltzer, and David W. Brook
Substance Abuse 2013; 34(3): 298-305.

Marijuana Use Trajectory Group and Financial Stability

(Brook et al., 2013)
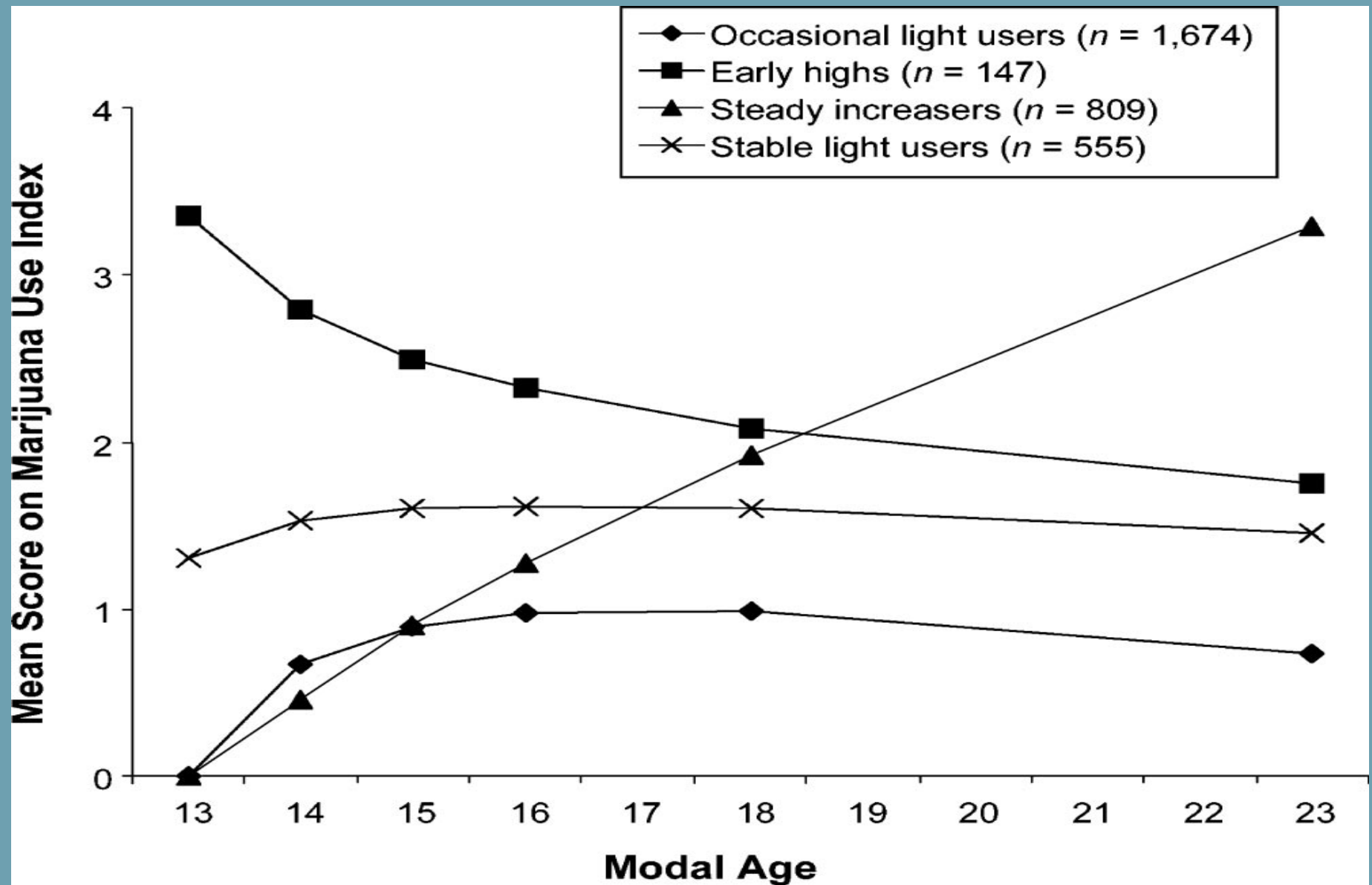
Ellickson PL; Martino SC; Collins RL (2004). Marijuana Use From Adolescence to Young Adulthood: Multiple Developmental Trajectories and Their Associated Outcomes, *Health Psychology* 23:299-307.

Marijuana Trajectory Class and Earnings at Age 29

(Ellickson et al., 2004)
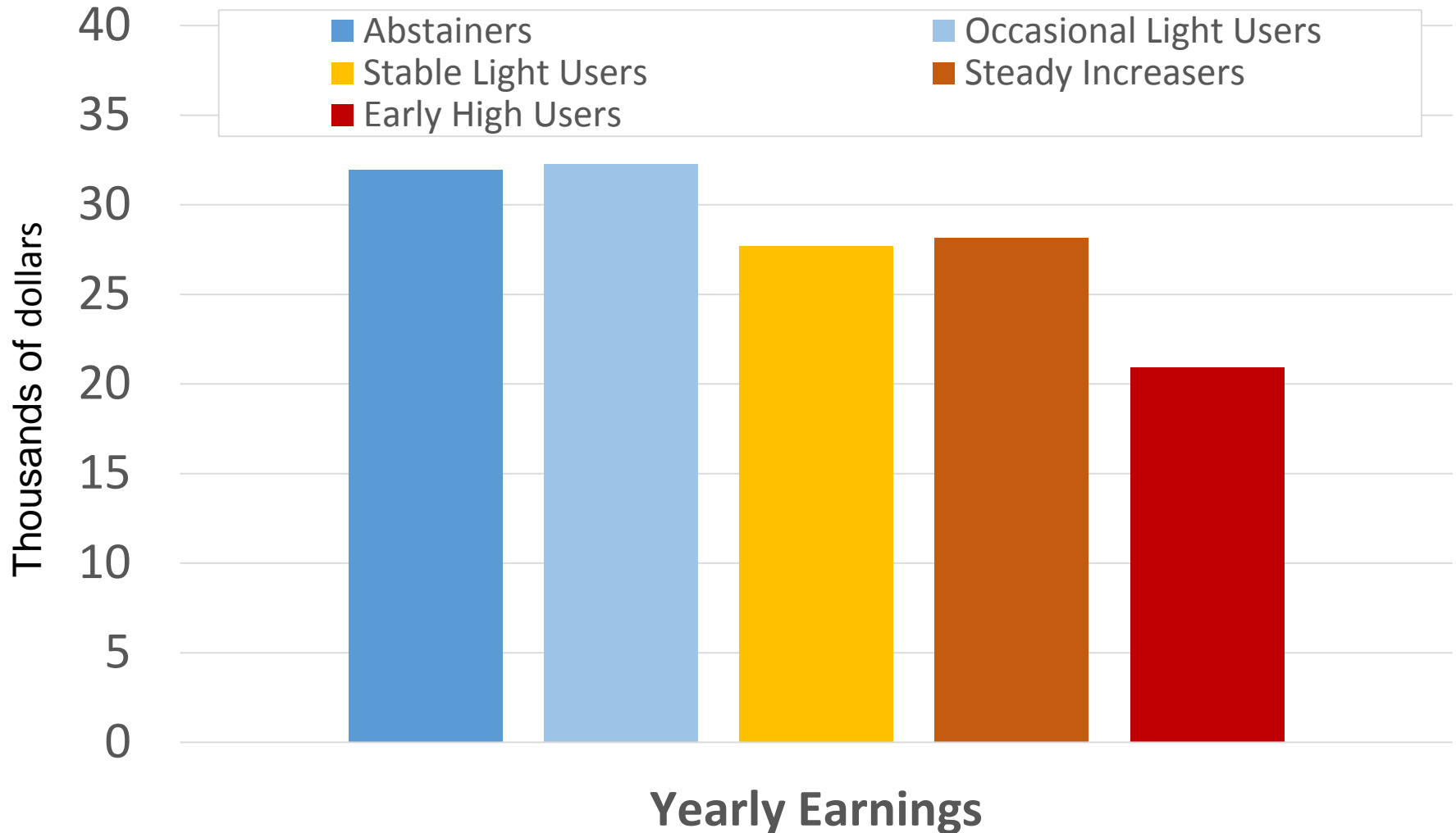
Legend:
- Abstainers
- Occasional Light Users
- Stable Light Users
- Steady Increasers
- Early High Users

Y-axis: Thousands of dollars

X-axis: Yearly Earnings

Ellickson PL; Martino SC; Collins RL (2004). Marijuana Use From Adolescence to Young Adulthood: Multiple Developmental Trajectories and Their Associated Outcomes, *Health Psychology* 23:299-307.

Nearly half of students say that their mental health affected their academic performance in the past month.

One in five missed academic obligations during the past week due to mental health problems.

Eisenberg D, Gollust SE, Golberstein E, Hefner JL. Prevalence and correlates of depression, anxiety, and suicidality among university students. Am J Orthopsychiatry. 2007;77(4):534-542.

- The presence of a psychiatric disorder makes a student significant less likely to complete a college degree, **especially when the disorder is diagnosed during college**.

- Students with **anxiety and mood disorders** are less likely to graduate than other students.

- Having **more than one** psychiatric disorder increases the risk of not graduating.

Breslau J, Lane M, Sampson N, Kessler RC. Mental disorders and subsequent educational attainment in a US national sample. J Psychiatr Res. 2008;42(9):708-716.

Hunt J, Eisenberg D, Kilbourne AM. Consequences of receipt of a psychiatric diagnosis for completion of college. Psychiatr Serv. 2010;61(4):399-404.

Kessler RC, Foster CL. Social consequences of psychiatric disorders, I: Educational attainment. Am J Psychiatry. 1995;152(7):1026-1032.
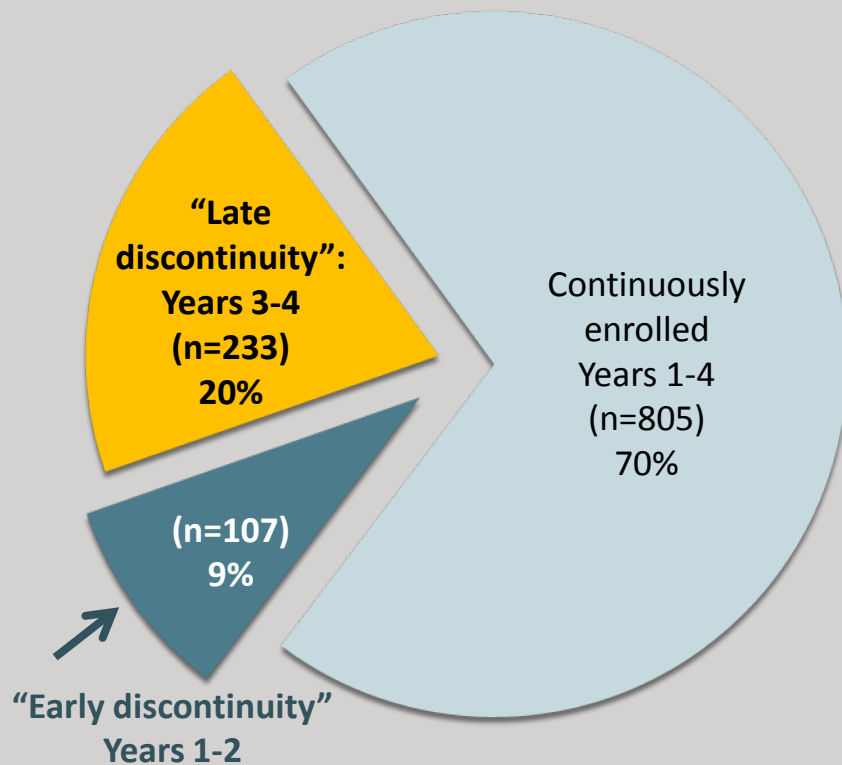
THE ACADEMIC OPPORTUNITY
COSTS OF SUBSTANCE USE
DURING COLLEGE

A Brief Report from the
Center on Young Adult Health and Development

Amelia M. Arria, Ph.D.
Kimberly M. Caldeira, M.S.
Brittany A. Bugbee, B.A./B.S.
Kathryn B. Vincent, M.A.
Kevin E. O'Grady, Ph.D.

May 2013

Center on Young Adult Health and Development (CYAHD)
University of Maryland School of Public Health
College Park, MD 20742
www.cyahd.umd.edu

[op·por·tu·ni·ty cost:
what a person sacrifices when they choose one option over another]

PART 2:
Mechanisms – the Whys

PART 2: Mechanisms – the "Whys"

AOD USE → ???? → Academic Problems

PART 2: Mechanisms – the "Whys"

- **Developmental Context**

- **Toxic Effects of Substance Use**

- **Rewarding Effects of Substance Use**

- **Balance between Risk and Reward**

- **Motivation, Goal-setting and Academic Behaviors**

- **Sleep**

*Risk-taking is developmentally normal during adolescence, or even earlier...*

1. Direct "Toxic" Effect

Substance use is associated with attention problems, sleep disturbances, and other cognitive deficits, making classroom learning, studying and homework more difficult.

2. "Hijacking" of Brain Pathways that Involve Appraisal of Reward

Substance use "hijacks" reward pathways in the brain. Academic pursuits become less meaningful as drugs become more valued.

Carlos F. Ríos-Bedoya, Holly C. Wilcox, Marina Piazza, and James C. Anthony. Children taking risks: The association with cocaine and other drug use by young adulthood. Addict Behav. 2008 September ; 33(9):1154–1161.
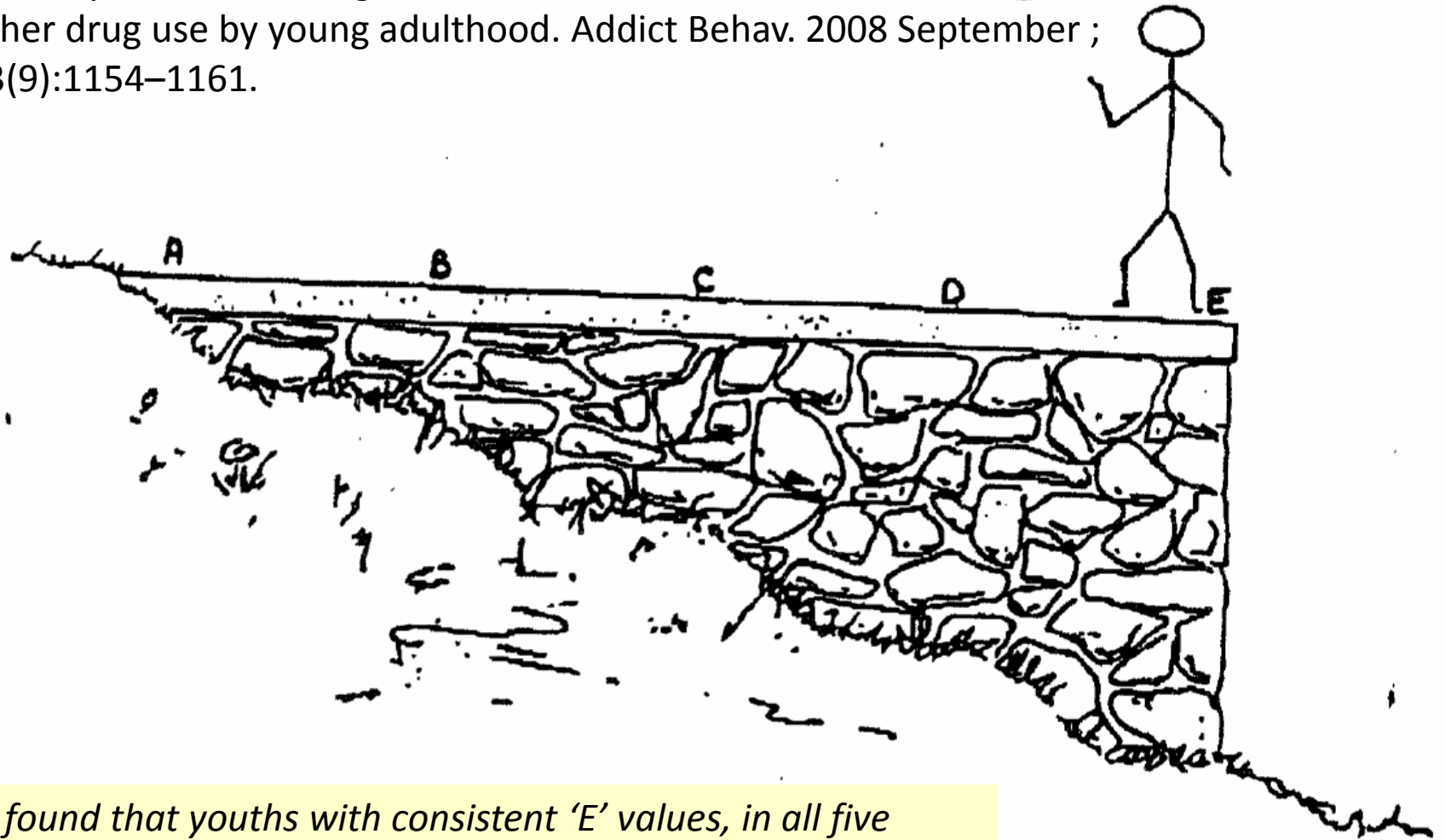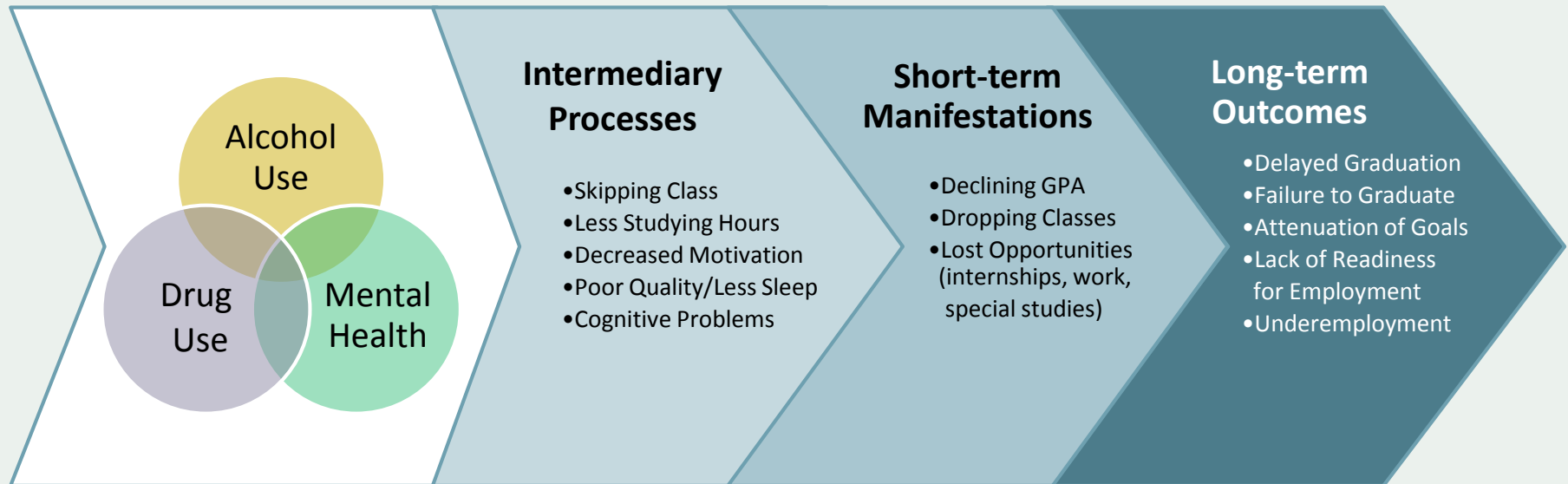
"We found that youths with consistent 'E' values, in all five assessments, were an estimated nine times more likely to try cocaine by young adulthood as compared to youths who consistently placed themselves at the lower end ('A' position) of the wall values.

What peers think, say and do compounds risk-taking – Experiments show that adolescents can behave "adult-like" in the absence of peers.

Deviant peer affiliation compounds substance use problems – having peers that also do not care about academic pursuits makes learning problems worse and encourages more substance use.
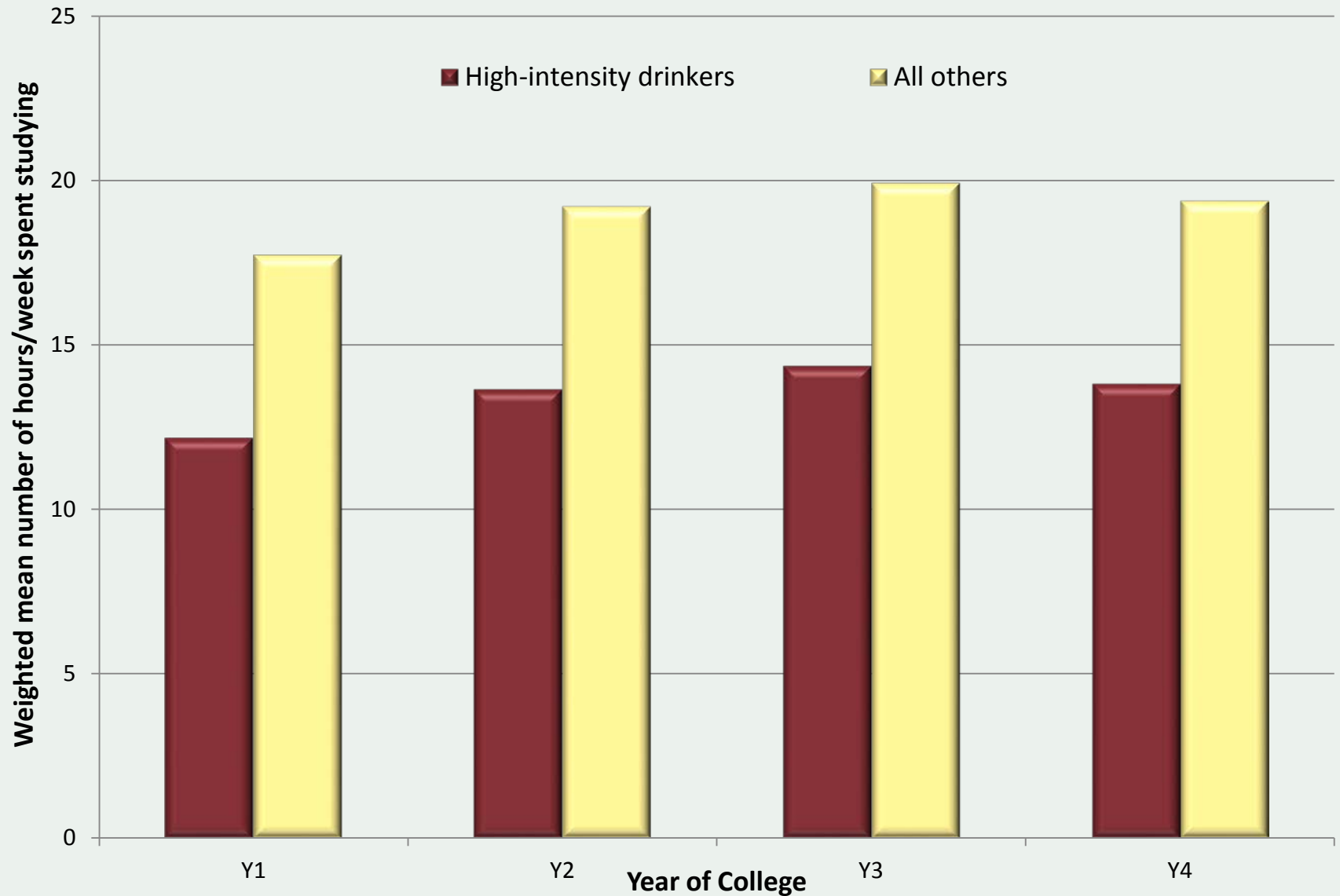
Parents matter too… parents who disapprove of early drinking and set zero tolerance limits on alcohol use during adolescence reduce their child's chances of alcohol problems later in life.
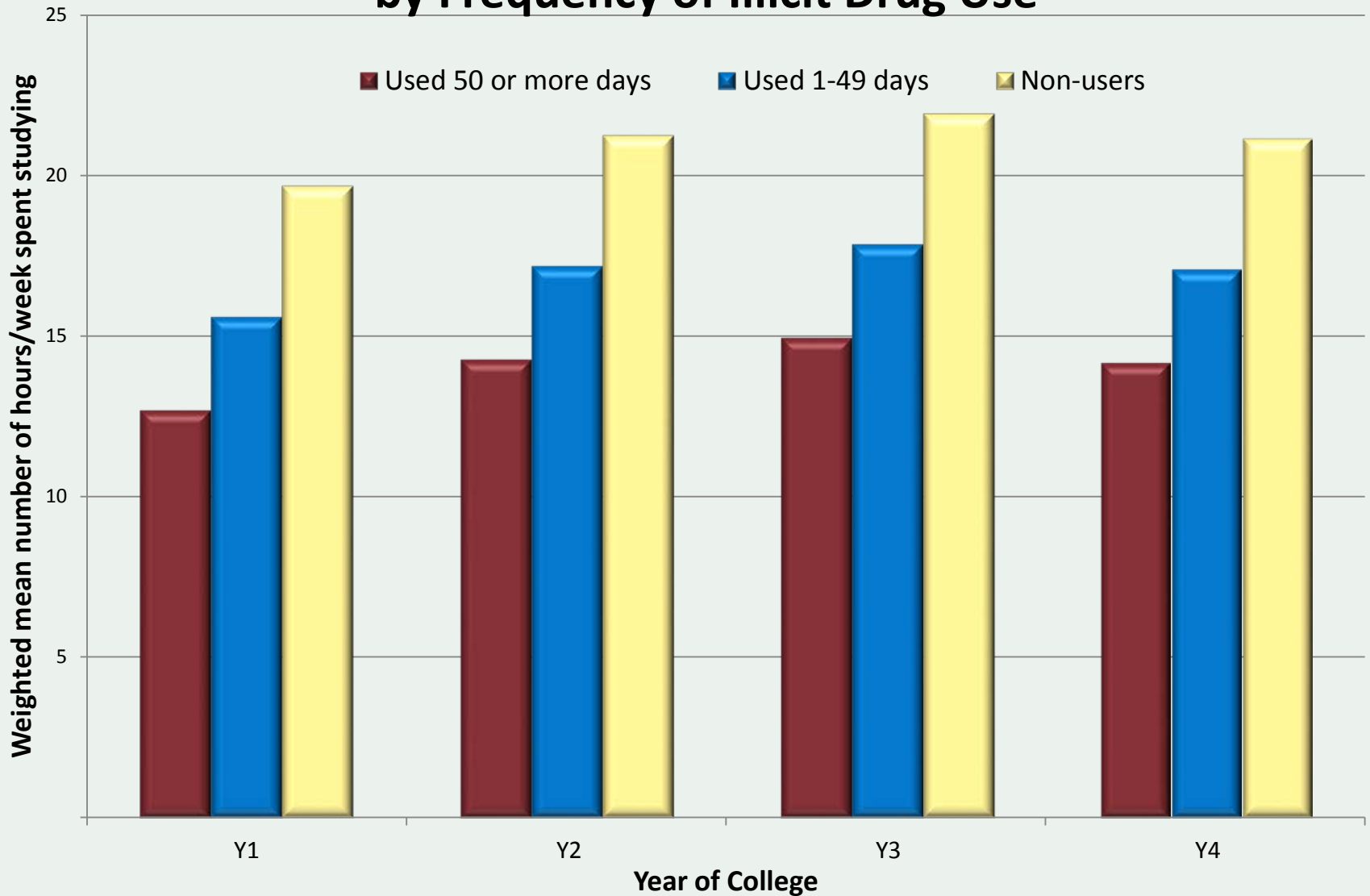
Substance Use, Mental Health, and Student Outcomes

Alcohol Use

Drug Use

Mental Health

Intermediary Processes

- Skipping Class
- Less Studying Hours
- Decreased Motivation
- Poor Quality/Less Sleep
- Cognitive Problems

Short-term Manifestations

- Declining GPA
- Dropping Classes
- Lost Opportunities (internships, work, special studies)

Long-term Outcomes

- Delayed Graduation
- Failure to Graduate
- Attenuation of Goals
- Lack of Readiness for Employment
- Underemployment

Academic Behaviors

Time Spent Studying, by High-Intensity Drinking

Source: College Life Study, unpublished data. Do not use without written permission from Amelia M. Arria

Time Spent Studying, by Frequency of Illicit Drug Use

Weighted mean number of hours/week spent studying

■ Used 50 or more days ■ Used 1-49 days ■ Non-users

Year of College

Source: College Life Study, unpublished data. Do not use without written permission from Amelia M. Arria

Nonmedical Use of Prescription Stimulants

Research shows that nonmedical stimulant users spend less time studying, skip classes more often, and earn lower grades.

# Nonmedical prescription drug use is strongly associated with alcohol and other drug use
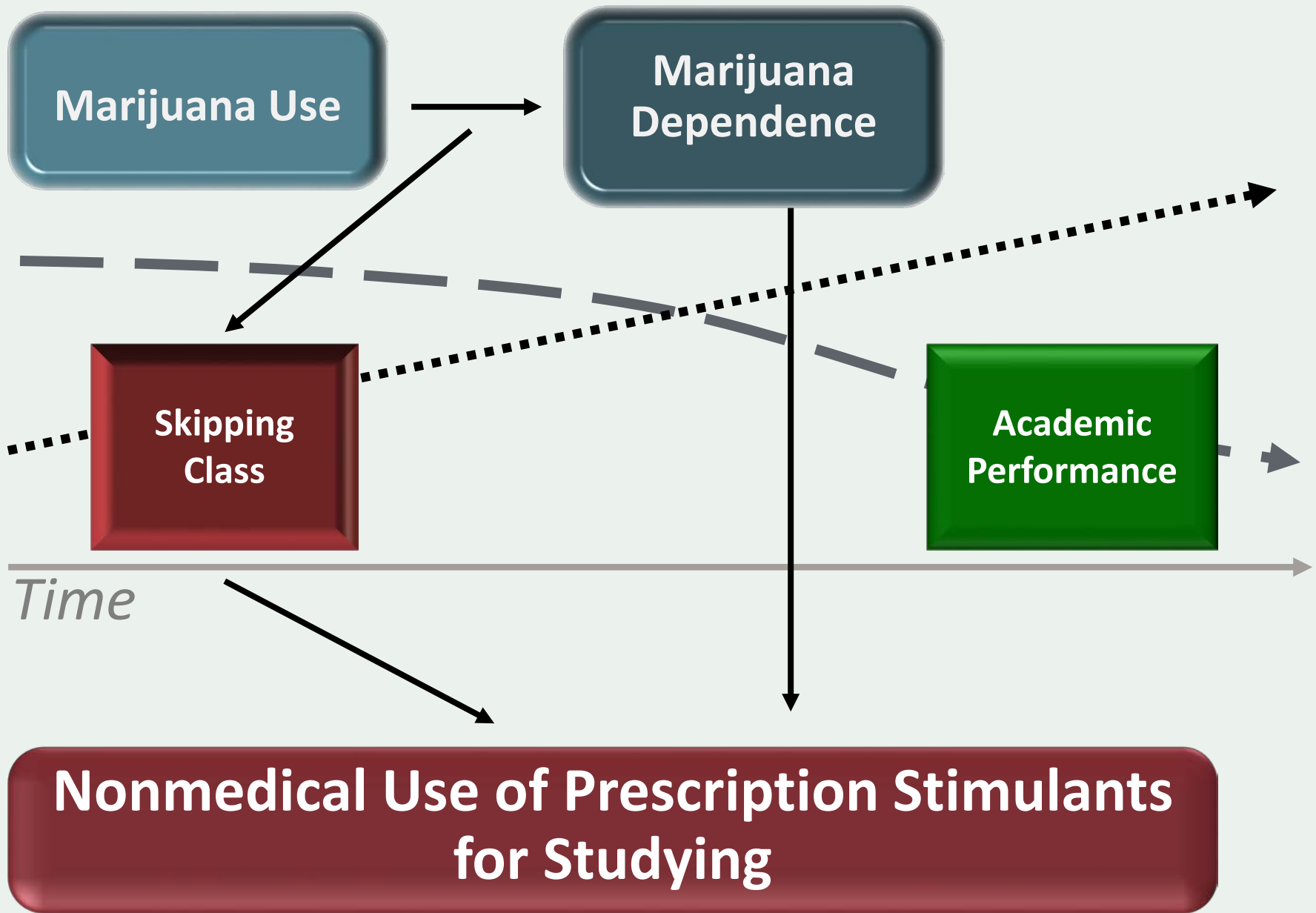
SLEEP!

Poor sleep

- Poorer negative moods
- Higher levels of stress
- More physical illness
- Use of prescription, OTC, and other drugs
- Drinking more alcohol

Source: Lund HG, Reider BD, Whiting, AB, Prichard, JR. Sleep patterns and predictors of disturbed sleep in a large population of college students. Journal of Adolescent Health. 2010; 46:124-132.
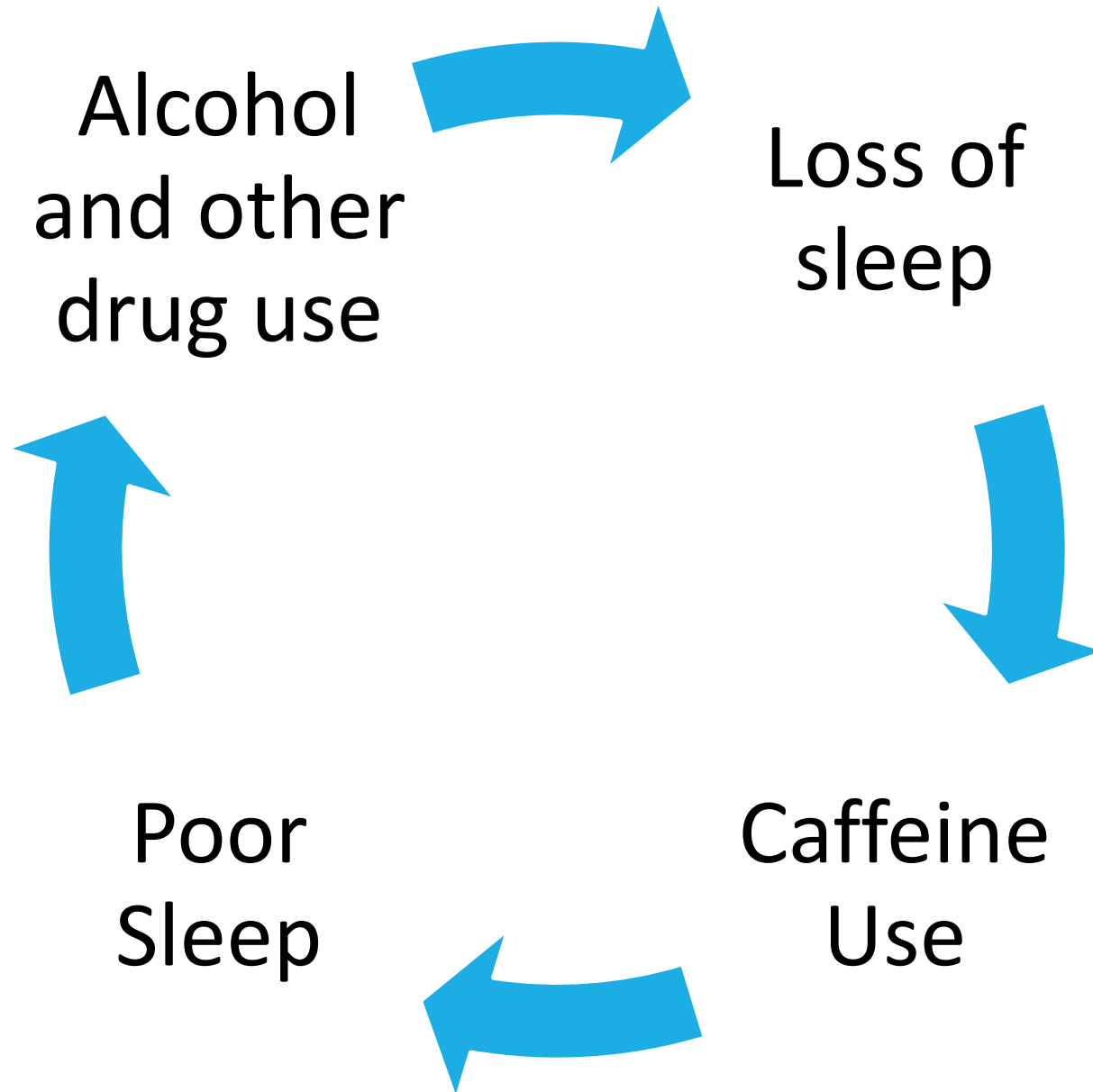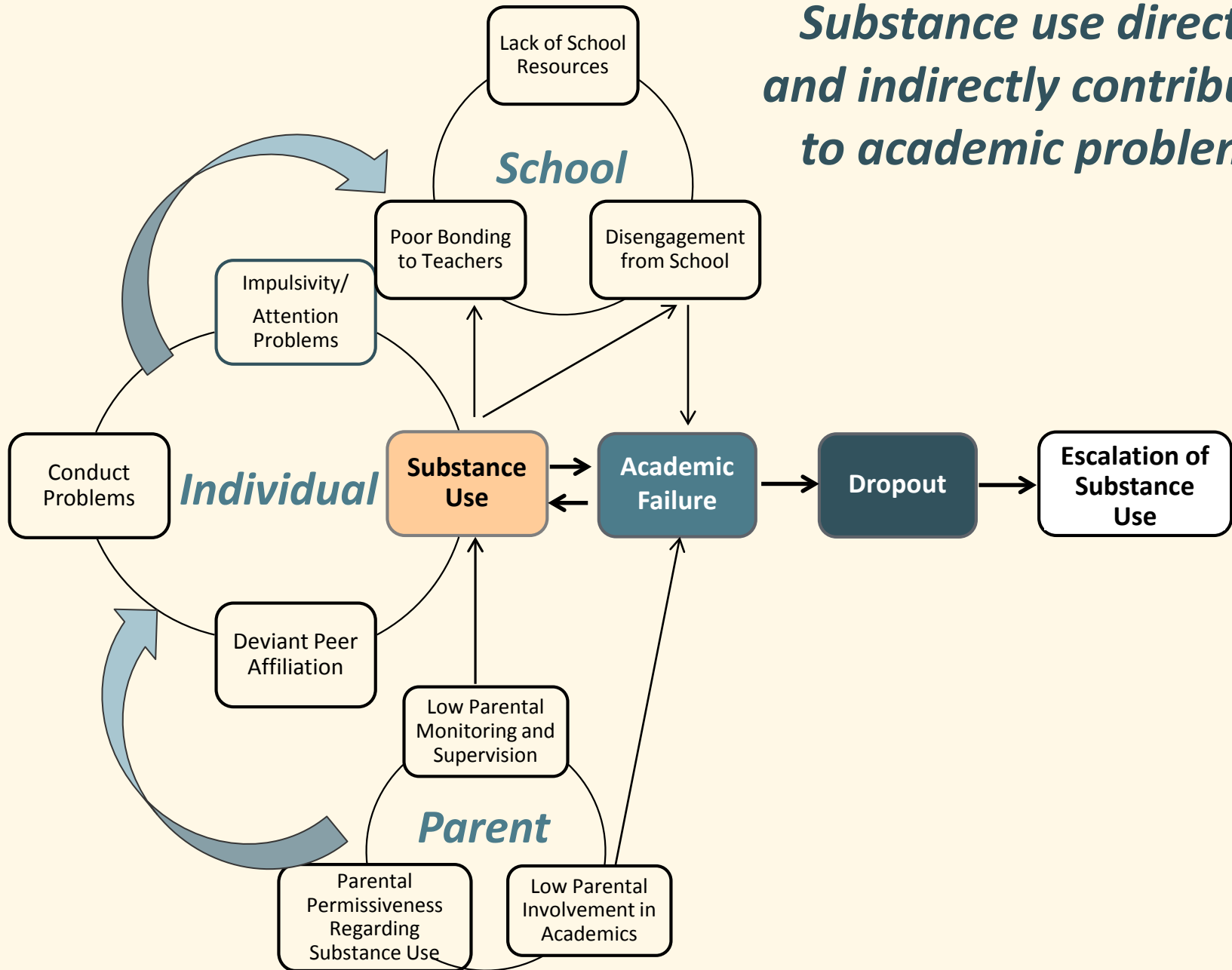
Poor sleep

"Well-rested students perform better academically and are healthier physically and psychologically."

"Losing sleep can have the same effects on your grades as binge drinking and chronic marijuana use."

In summary, the relationship between substance use and academic outcomes is strong and compelling, but it's complex!

Substance use directly and indirectly contributes to academic problems

School

Lack of School Resources

Poor Bonding to Teachers

Disengagement from School

Impulsivity/ Attention Problems

Conduct Problems

Individual

Substance Use

Academic Failure

Dropout

Escalation of Substance Use

Deviant Peer Affiliation

Low Parental Monitoring and Supervision

Parent

Parental Permissiveness Regarding Substance Use

Low Parental Involvement in Academics

PART 3:
Moving Upstream: Strategies and Solutions

PART 3: Moving Upstream – Strategies and Solutions

- **General Principles**

- **Addressing "Hardware Issues"**

- **Addressing "Software Issues"**

- **Addressing Connectivity**

General Principles

- Think big... solutions need to be matched to the challenge.

- Start with a big idea and a small demonstration of successes.

General Principles

- Identify successful models... practice-based evidence.

AMERICA'S TOP HIGH SCHOOLS
★ 2014 ★

This year, Newsweek sought to recognize schools that beat the odds, performing better than statistically expected for their level of poverty. For this list, we ranked schools on how well they prepare their students for college, taking students' socio-economic background into account. A ⭐ next to a school's name means that low-income students are scoring at or above average on state assessments. This is our way of recognizing schools that narrow the achievement gap.

"Beating the Odds" model

Common denominators of BTO schools:

- connecting with and engaging students;

- engaging parents and community members to support school efforts

- providing interventions and supports to students at risk of dropping out

- creating a culture of accountability and high expectations.

General Principles

- Measure and test models, use evaluation data to think critically about the strategy.

PART 3: Innovative Strategies and Solutions

a. General Principles

b. Addressing "Hardware" Issues

c. Addressing "Software" Issues

d. Addressing Connectivity Issues

Leadership!

Tune in this Tuesday, June 10, to the Office of National Drug Control Policy (ONDCP)'s live video stream of the Academic Achievement Summit. ONDCP and the Department of Education are teaming up to explore how substance abuse affects academic achievement, with the goal of catalyzing action, especially at the local level.

Universities need to set a culture of high expectations. We need to get students to see the value in not only learning something new, but knowing how to ask a good question.

We don't want students to just survive, but we want them to become the very best.

In the classroom, can students explain concepts with clarity?

Can we build engagement in the classroom as well as in the campus community? Can we build communities among students, and provide more opportunities for experiential learning?

Dr. Freeman Hrabowski, Ph.D.
President, University of Maryland Baltimore County

Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism
National Institutes of Health
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
www.collegedrinkingprevention.gov

A 2010 study of 351 colleges and universities found that:

- 58% of college administrators had reviewed the recommendations, but 1 in 5 were not aware that recommendations had been made.

- 98% of colleges and universities offered alcohol education programs, but less than half required students to complete it.

- Only half of schools offered intervention programs that were empirically supported.

Nelson, T.F., Toomey, T.L., Lenk, K.M., Erickson, D.J., Winters, K.C. (2010). Implementation of NIAAA College Drinking Task Force recommendations: How are colleges doing 6 years later? Alcoholism: Clinical and Experimental Research. 34(10), 1687-1693.

THE MARYLAND COLLABORATIVE
TO REDUCE COLLEGE DRINKING AND RELATED PROBLEMS

www.marylandcollaborative.org

REDUCING ALCOHOL USE AND RELATED PROBLEMS
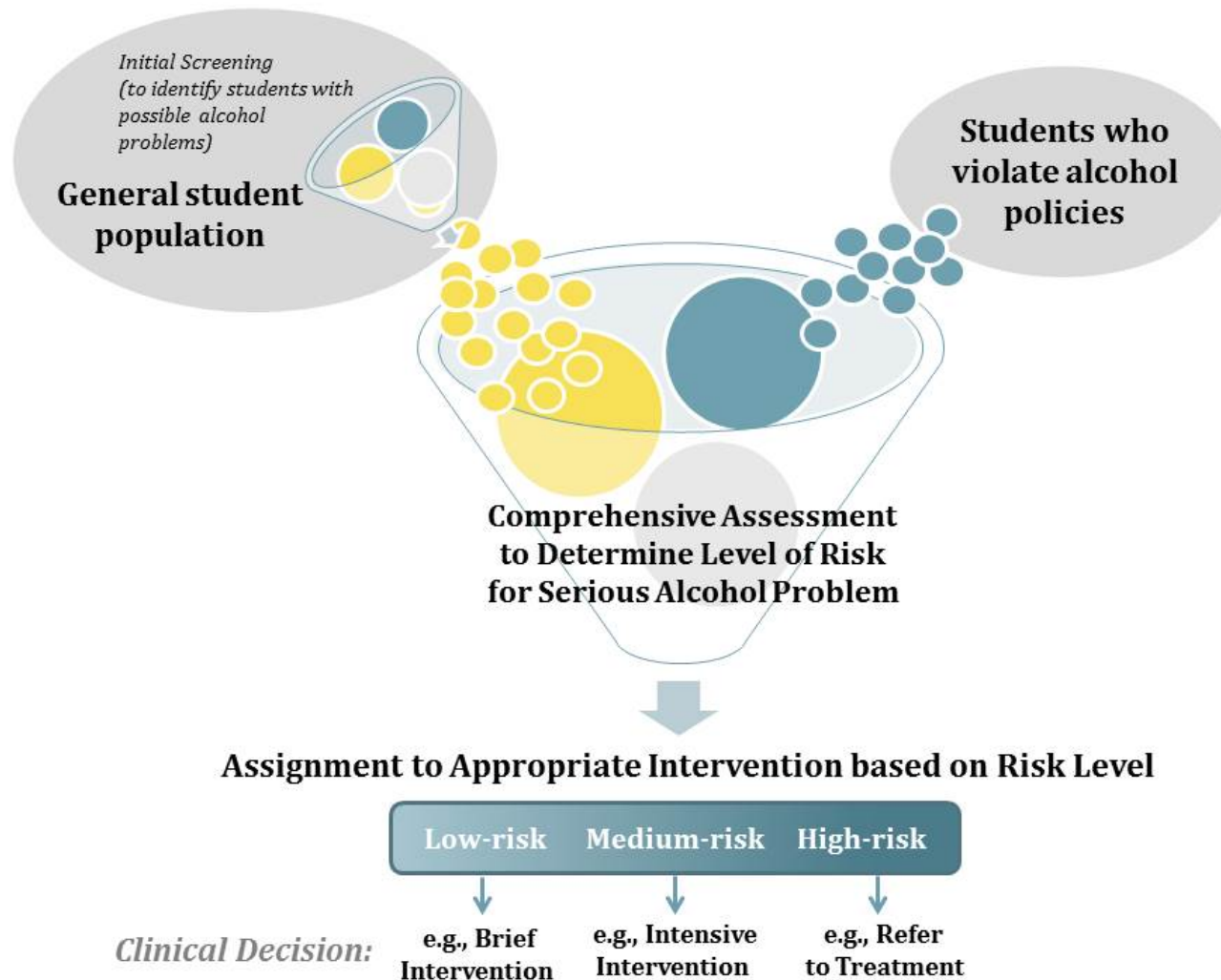AMONG COLLEGE STUDENTS:

A GUIDE TO BEST PRACTICES

THE MARYLAND COLLABORATIVE
TO REDUCE COLLEGE DRINKING AND RELATED PROBLEMS

Create a system for screening , identifying and intervening with college students with different levels of alcohol involvement

Initial Screening (to identify students with possible alcohol problems)

General student population

Students who violate alcohol policies

Comprehensive Assessment to Determine Level of Risk for Serious Alcohol Problem

Assignment to Appropriate Intervention based on Risk Level

Low-risk	Medium-risk	High-risk

Clinical Decision:

e.g., Brief Intervention

e.g., Intensive Intervention

e.g., Refer to Treatment

Break disciplinary boundaries

- Bring educational professionals together with substance use experts to facilitate a dialogue regarding strategies to promote student success.

- Build "a coalition of the willing" with top-level support and to implement and evaluate innovative strategies to reduce substance use as a way to promote student success.

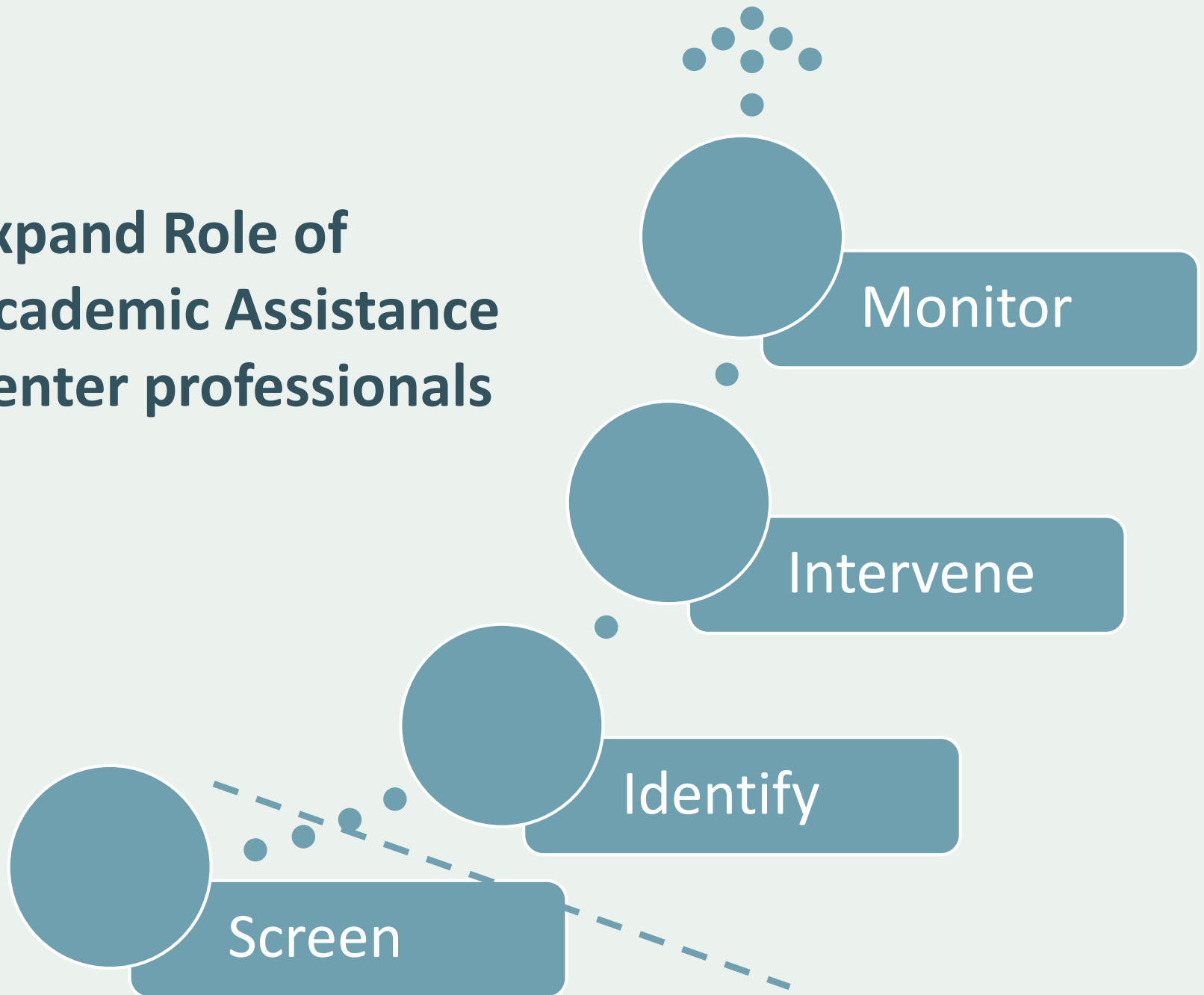- Engage employers and members of the larger community to communicate the message to students that substance use is inconsistent with successful careers.

PART 3: INNOVATIVE STRATEGIES AND SOLUTIONS

a. Addressing "Hardware" Issues

b. Addressing "Software" Issues

c. Addressing Connectivity Issues

Implementation of Specific Strategies

- Screen at multiple touchpoints, expanding role of academic assistance centers.

- Include careful assessment of alcohol and drug use and associated risk factors for "disengagement" (e.g., academic behaviors like skipping class, conduct problems, impulsivity).

- Design new individualized approaches to intervening with high-risk students

- Involve parents

Expand Role of Academic Assistance Center professionals

Monitor

Intervene

Identify

Screen

Top <u>self-identified</u> reasons for poor academic performance (ACHA, 2012)

Stress	27.5%
Sleep	19.4%
Anxiety	19.1%
Cold, Flu, Sore Throat	16.4%
Work	13.3%
Internet Use/Games	12.4%
Depression	11.9%
Concern for friends, family	11.0%
Relationship Issues	10.5%

Where's alcohol, drug use?

"Connect the dots" between substance use and academic behaviors (e.g., skipping class, GPA)

Use technology creatively to track academic progress and facilitate outreach to at-risk students

Facilitate self-reflection
of changing aspirations and diffusion of goals

- Develop confidential methods for "electronic student records" which facilitate self-reflection of student progress and changing goals and aspirations.

- This might help track student progress toward goals and draw connections between individual behaviors and achievements (or becoming de-railed).

Baseline Goal Appraisal

Developmental processes during college

Possible Outcomes

Baseline Goals:
Plans for accomplishments during and after college

Goal Attributes:

• Present or Absent

• Tentative or Firm

• Nonspecific or Specific

• Ambitious or Modest

Persistence →

Empowerment →

Inspiration →

Disempowerment →

Lack of Focus →

Disillusionment →

Goal Follow-through

Existing goals maintained

Refinement might have occurred

Goal Development

New goals developed where none previously existed

Includes substantial increases in scope or confidence in attaining earlier goals

Goal Attenuation

Baseline aspirations reduced in scope and/or confidence

Goal Diffusion

Significant spread in the focus of baseline goals with little noted accomplishment

Goal Abandonment

Baseline aspirations completely abandoned

In the fourth year of our study, we asked our participants...

"What were the negative influences or barriers to accomplishing what you wanted to achieve?"

The most common barrier to achieving their goals was a category we named "internal barriers", with 28% citing themselves as a reason.

These items centered around laziness or motivation problems.

"The freedom I have in college makes me lazy."
"Despite all of my planning, I am still kind of lazy."
"Lack of motivation"
"Wanting to goof off instead of work"
"Not wanting to do my work"
"I don't push myself hard sometimes."
"The fact that I don't know a specific goal I want to go towards."

Laziness was mentioned directly in 7.0% of the responses.

"What were the negative influences or barriers to accomplishing what you wanted to achieve?"

The second most common category was "Friends" (23.3%).

"I think my friends engage in too much marijuana smoking to be beneficial to me or them. I have to decide now to stop hanging out with them or tell them to stop smoking."
"With friends, there is always an activity going on to distract you."
"Drama with friends takes away from my focus…. My friends are my biggest obstacle to staying focused."
"I live in a party suite. I have lots of friends that party a lot."

"I joined a fraternity and lived with friends from high school for too long."
"People who use drugs haven't helped me. When I hang out with them it gets me off track and I do stupid stuff."
"The people I went to school with…all they wanted to do was drink, so I got caught up in chaos. My friends on the outside who didn't go to college were a negative influence because it was "normal" to not go to school."
"Friends want you to hang out with them and go to parties and forget about school."
"Friends from different majors have been a bad influence. Business majors party a lot.

8.2% mentioned their own alcohol and other drugs as a barrier.

About the same number mentioned the college social scene (8.0%) but not AOD specifically.

Combining those 2 categories, assuming that AOD was implied in most of the social scene comments, 14.7% cited AOD directly or indirectly as a barrier.

"The temptation to go out and party."
"Wanting to just party and have fun all the time."
"Drinking—in my own apartment, I find it easier to just forget it all, and not study when I need to sometimes."
"Anxiety, depression, family problems, boyfriend problems, too much drugs and alcohol."
"My siblings like to make me party a lot. They are really not kind to my liver."
"I work at a bar, and most of the people I work with keep me from doing work. The managers have finished college and party nightly."
"Drugs, alcohol, partying—but I can have them in moderation. Smoking after my work is done is OK."

Move from a "threshold model" to a "personal best model" to intervene with students at academic risk

1. Choose a particular student population of interest

2. Calculate the standard deviation of changes in GPA from one semester to the next.

3. Flag students whose change in GPA moves more than two standard deviations.

4. Proactively reach out to students who meet this criteria.
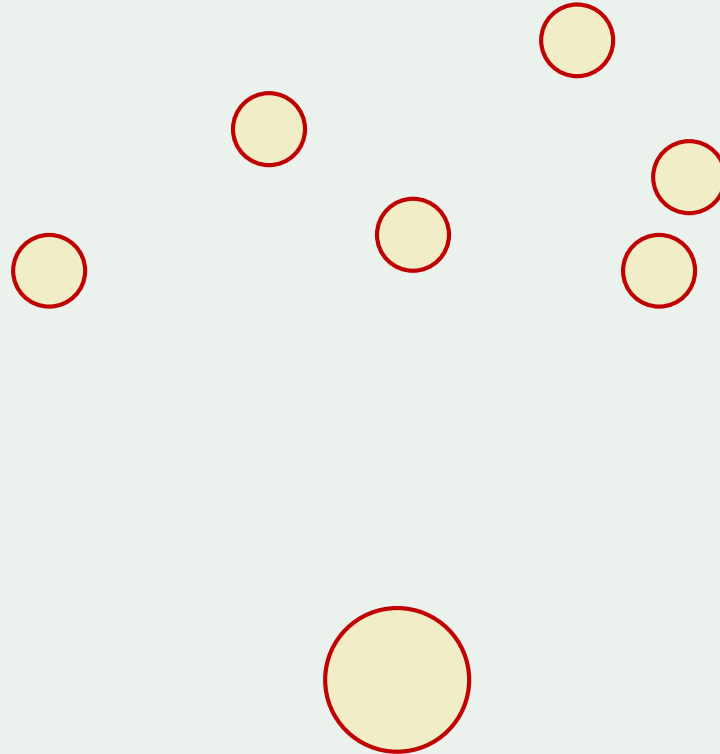
Design new individualized approaches to intervening with high risk students

Example Program

Screening

Brief Intervention

Referral for Treatment

Screening (AUDIT/CUDIT) at a computer kiosk before tutoring appointment

Email follow-up based on screener scores with links to appropriate interventions

Respondents who score 20+ on AUDIT or 12+ on CUDIT—referral to Counseling Center

Screening

Score <8 on AUDIT/CUDIT-R → No Intervention

Score 8-19 on AUDIT
<8 on CUDIT-R → eCHECKUP TO GO ALCOHOL

Score 8-11 on CUDIT-R
<8 on AUDIT → eCHECKUP TO GO MARIJUANA

Score 8-19 on AUDIT
8-11 on CUDIT-R → eCHUG and eTOKE

Score 20+ on the AUDIT
12+ on CUDIT-R → UNIVERSITY of MARYLAND EASTERN SHORE *Counseling Center*

Proactively Engage Parents on an Ongoing Basis

- Develop new ways for parents to become appropriately involved as their student makes the transition to college.

- During college, establish learning opportunities for parents to detect problems and intervene appropriately.

- Employees of institutions of higher education ARE parents. Disseminate information on substance use/mental health among youth through human resource employee listservs.

COLLEGE PARENTS MATTER

have the conversation

Tools and scripts to improve communication with your college student

home   who we are   **topics**   communication tips   faqs   contact us

High Risk Drinking Situations To Talk About

Click on the image

21st Birthday

Holidays

Housing & Roommates

Spring Break

Off-Campus Housing

Impaired Driving

What situations would you like to see?

What topics are you concerned about?

Click here to let us know and subscribe to get updates!

Why is This Important?

Birthdays are a joyous time for everyone involved in the celebration. Because the 21st birthday marks a change in legal drinking status, more than 80% of college students report drinking alcohol while celebrating their 21st birthday.[1] A popular trend among college students to commemorate this day is to drink 21 alcoholic drinks.[1]

Another trend is to make "shot books" that encourage taking a shot with 21 friends who are each commemorated with pages in the book. One study reported that 35% of female and 49% of male 21st birthday drinkers had a BAC of .26 or higher.[1] Almost half of 21st birthday drinkers drank more than they ever had before. Drinking that much alcohol is extremely dangerous and can lead to serious health consequences, like alcohol poisoning and death. It's important to talk to your child about celebrating their 21st birthday safely.

21st Birthday

"Happy Birthday, Me" by Matt Clark is licensed under CC by 2.0

Say this

"Are you excited for your birthday? Do you have anything fun planned?"	Talk with your child BEFORE they turn 21 since most people make birthday plans in advance. One simple way to start a conversation is just to inquire about their plans.
"I was very upset to read that some celebrate this birthday by drinking 21 drinks. That is a way to seriously injure yourself or overdose on alcohol."	When talking to your child there are a few things you can say to highlight your child's safety.
"Why don't you celebrate with your friends over dinner?" "If you're going to drink alcohol, make sure you're eating	Food is a great way to fill up your stomach on something other than alcohol, and it slows alcohol absorption. Suggest that your child go out to dinner.

Not this

✗ Don't tell "war stories."	Do not tell "war stories" about your own experiences with drinking or wild times where there was drinking to excess. This destigmatizes, glorifies, and encourages excessive drinking behavior.
✗ "I know you're going to drink 21 shots. Don't do this!"	Don't assume your child is going to drink excessively or even take 21 shots. "I know you're going to drink 21 shots. Don't do this!" might be perceived as a challenge for him/her to prove you wrong. Your child might also be upset if they feel you assume they make unsafe choices.
✗ "You only turn 21 once, go crazy!"	Don't encourage reckless celebration or imply that being intoxicated on a 21st (or any) birthday is a rite of passage. This gives the message that high-risk drinking is OK. Make sure you encourage good decision-making and discourage risky drinking. If you say "You only turn 21 once, go crazy!" they will listen and not be cautious when celebrating.
✗ "I know you're not going to remember your 21st birthday, but try to be safe anyway."	Don't send mixed messages. Saying "I know you're not going to remember your 21st birthday, but try to be safe anyway," encourages drinking and can be seen as an expectation for their 21st birthday. Encouraging your child to be safe while assuming that they will make irresponsible choices can be confusing and doesn't support safe drinking behaviors.

Scientific References

Rutledge PC, Park A, Sher KJ. 21st birthday drinking: Extremely extreme. J Consult Clin Psych. 2008;76(3):511-516.

Disclaimer: Unfortunately, even with the "best" parenting practices, there is no guarantee that students will refrain from starting to use drugs or alcohol, developing a drug problem, or even worse, experiencing serious drug-related consequences. Conversely, the worst of circumstances does not necessarily predispose one to a life of addiction.

7 Tips for Good Communication

1. Don't be afraid to start the conversation.

Talking about drinking need not be taboo. "Detoxify" the topic. You can assume that your child has experience with high-risk drinking situations. Even if your child doesn't drink, they most likely know people who do and/or they have been offered alcohol. This website provides you with ideas on "starting points" for conversations, but it is OK to be more direct and ask about opportunities they might have had to drink or situations where drinking occurred. By asking open-ended questions, your child will be prompted to give more information in his/her answer rather than a simple "yes" or "no". This is a great way to keep the conversation flowing. They'll be more likely to disclose what happened if you don't interrupt them or react with shocked facial expressions. By paraphrasing what they say, you show that you are really listening and want to hear and understand what they have to say. Be willing to accept without argument when they correct your paraphrased version or "justify" or "minimize." That's your opportunity to ask for clarification. You're just trying to get a conversation going and learn more.

2. As a parent, you are allowed to disapprove of drinking. Give yourself permission to disapprove.

Research has shown that parents who communicate zero-tolerance expectations around alcohol are much less likely to have children who drink excessively during college than parents who have permissive attitudes. Therefore, it's OK to be a parent and take a stand—and not be "chummy" around this issue. It's important that your child clearly understands where you stand, even if they might not agree with you. It's your voice—and your words—that will replay in their head when they are faced with a tough situation around high-risk drinking. And they can use your message when they refuse to drink. In other words, it's OK for you to be the "bad guy" if it helps your kid save face when he refuses a drink. Your message should be clear: no alcohol is best, and certainly not excessive amounts even when they are of legal age to drink.

3. Banish any fear that your disapproval is naïve.

There is nothing naïve about disapproving of your child's drinking—although it might be naïve to expect that your son/daughter won't ever drink (or ever drink too much) just because you've stated your disapproval of them drinking. Many college students do experiment with drinking, but your stance on the matter can still have a powerful impact on when, where, and how it happens. And if they do have negative experiences along the way, your warnings make you look like a genius without ever having to say "I told you so..." Furthermore, you can have it both ways—that is, you can both say they shouldn't drink and keep the door open for future discussion about drinking experiences, because you know that, most likely, they will have opportunities to drink anyway (at least eventually). Follow-up debriefing conversations are very powerful, as you can show that even if they don't always follow all of your advice all the time, you still want to hear honestly how things are going.

4. Focus on one message during the conversation.

This is also known as the "pick your battles" principle. When you are having a conversation about something related to alcohol, it's not a good idea to let the conversation wander to a different topic. Now is not the time to remind them to call their grandmother, or to check their schedule for their sister's birthday celebration. Don't allow your message to get lost in the blur of "laundry list" demands. Stick to your message. Choose a time and place that lets you minimize potential distractions from other family members or work. Silence your mobile devices—better yet, leave them in another room. Focus on talking to your child only. Otherwise, they won't be getting the full impact of the conversation, and you might skip important things you want to say.
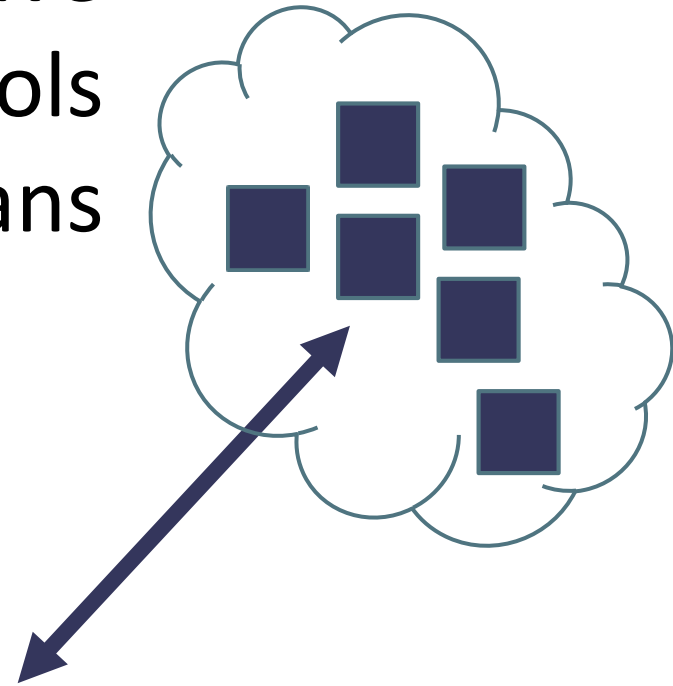
PART 3: INNOVATIVE STRATEGIES AND SOLUTIONS

a. Addressing "Hardware" Issues
b. Addressing "Software" Issues
c. Addressing Connectivity Issues

Strengthening within-campus connectivity
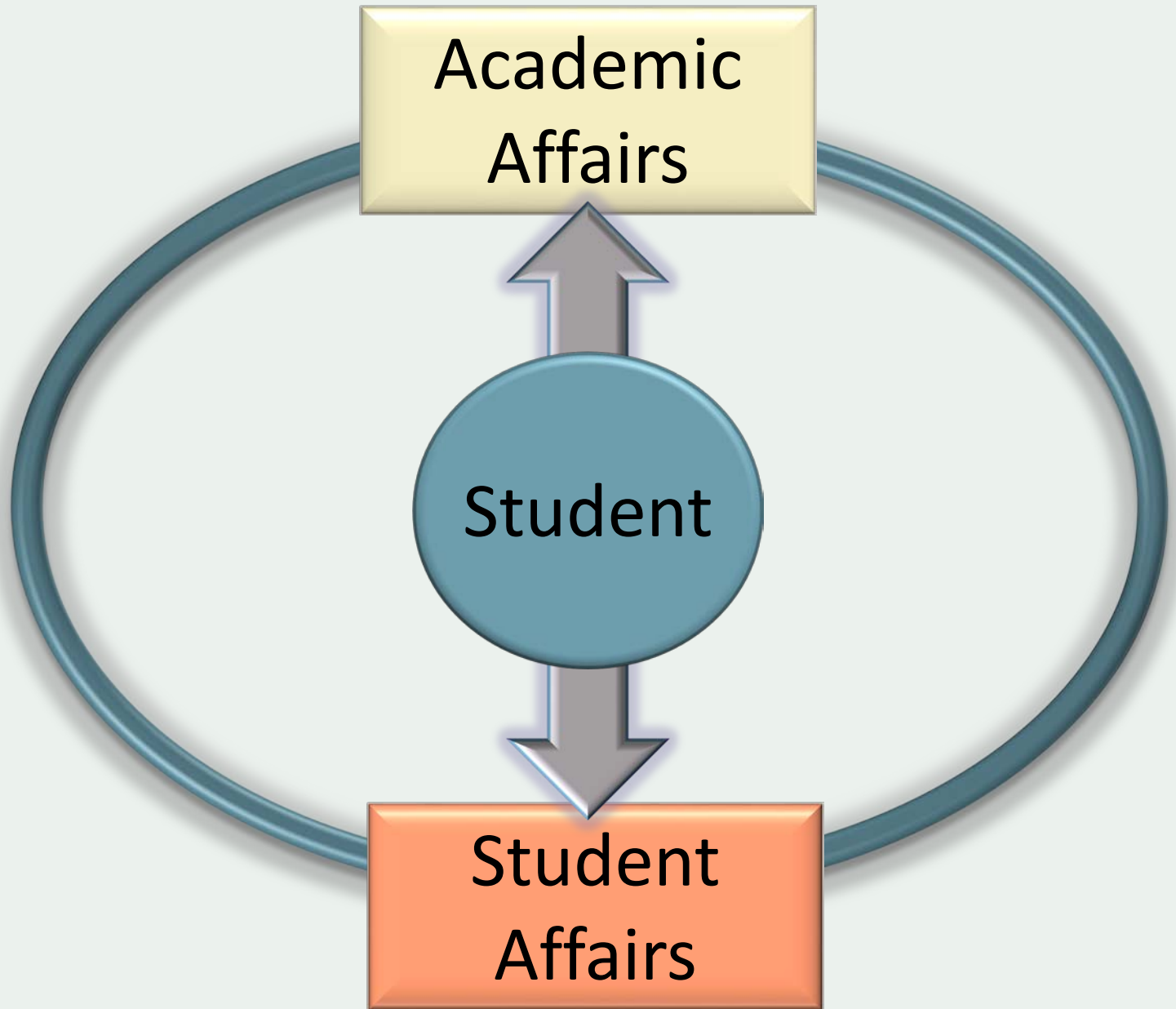
Strengthening external connections

Strengthen collaborative relationships between schools and community-based clinicians

Empower teachers: *Build their knowledge base*

Schools of Education rarely require coursework related to child development, neurodevelopment, assessment methods for high-risk behaviors, or ways of managing parental involvement.

- Develop coursework modules for schools of education to improve the knowledge base for future teachers.

- Offer professional continuing education courses for existing teachers (e.g., new research on child development, neuroscience).

- Advocate for enhancements to the required curriculum.

Involve alumni

- Leverage opportunities with alumni to discuss the possible impact of AOD/mental health on student success to rally support from them to enhance/expand capacity to implement innovative solutions.

- Facilitate similar interactions with alumni networks.

Involve potential employers

Proactively engage local and national businesses in the discussion – during job fairs, sponsor talks by CEOs to get the message to young people about what they are looking for in potential employees...

Are you motivated... cognitively strong?

Do you know how to ask the right question?

Do you know how to seek help when needed?

And that alcohol and drug use will not be part of the road to a successful career at their company.

Expand and promote collegiate recovery communities

Interlocking Dimensions of Student Success
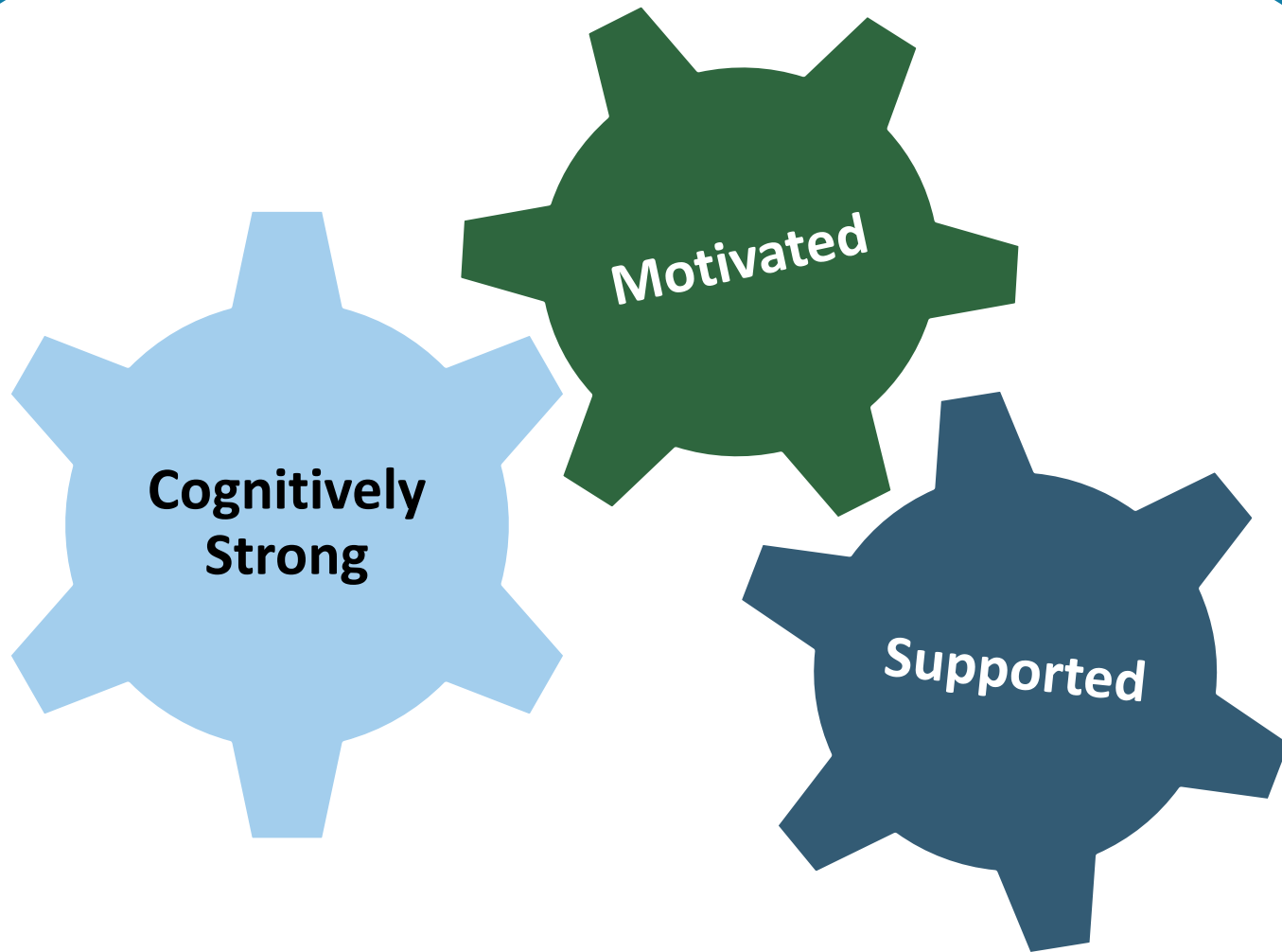
Acknowledgments

For more information,

please see our website
www.cyahd.umd.edu
or send an email:
aarria@umd.edu

Amelia M. Arria, Ph.D.
University of Maryland School of Public Health
Department of Behavioral and Community Health
Center on Young Adult Health and Development