

Conceptualizing Substance Use among African Americans: Implications for Research and Future Directions

CTAPS Fall Meeting (October, 14, 2016)

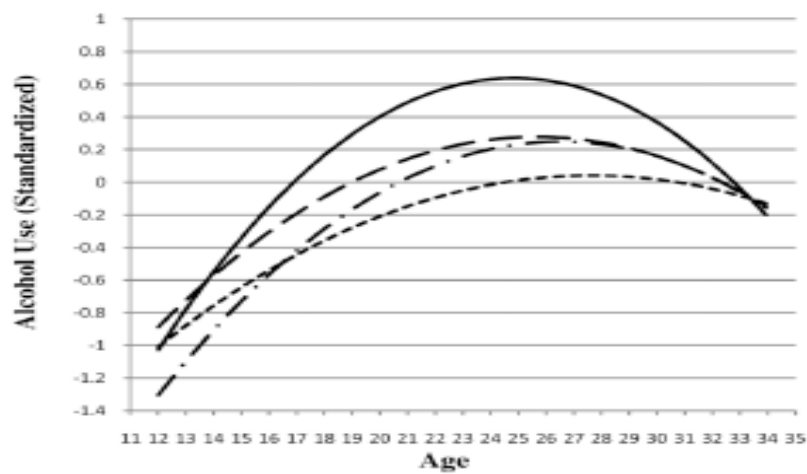
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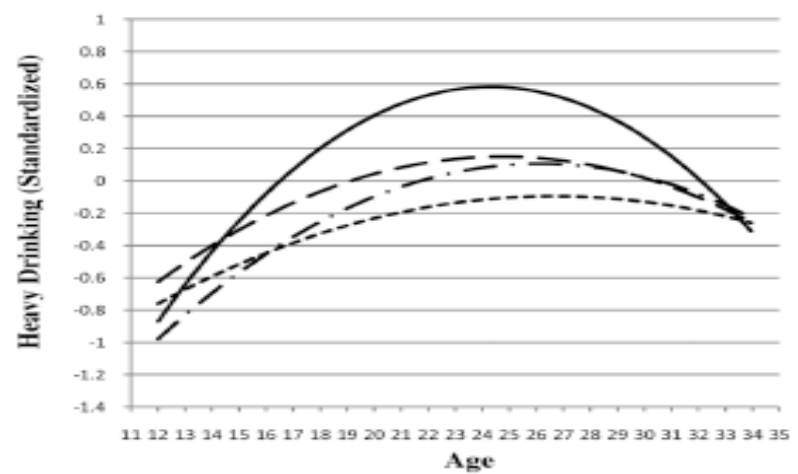
African Americans and Substance Use

- Compared to White youth, African Americans report
 - Lower rates of alcohol use
 - Lower rates of tobacco use
 - Comparable or higher rates of marijuana use

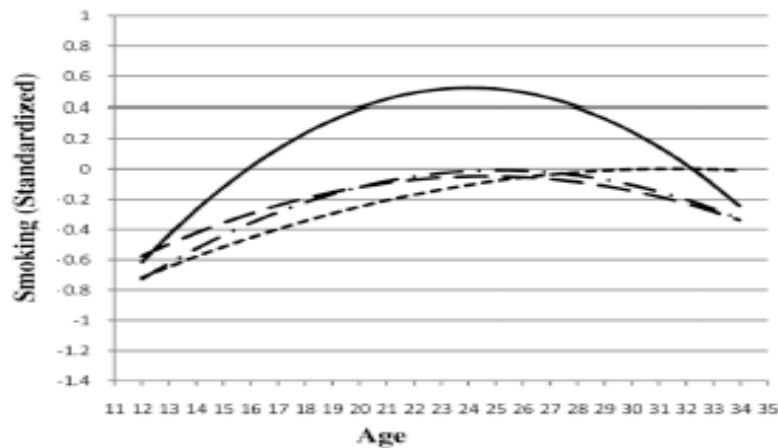
Sources: Chen & Jacobson, 2012; Wallace et al., 2002; Zapolski et al., 2014



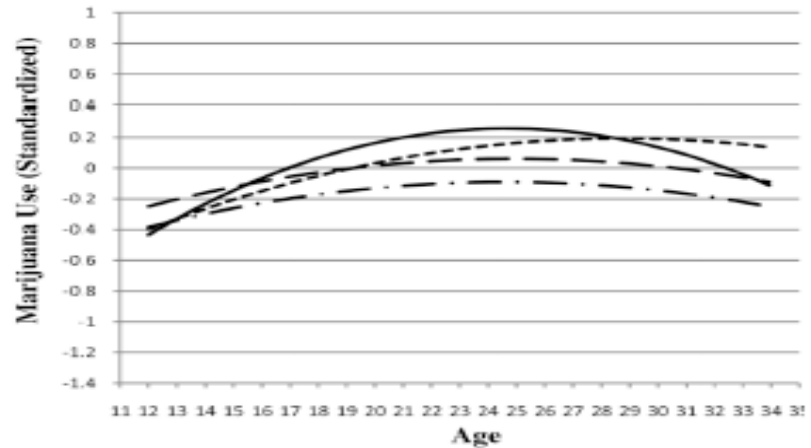
A. Alcohol Use



B. Heavy Drinking



C. Smoking

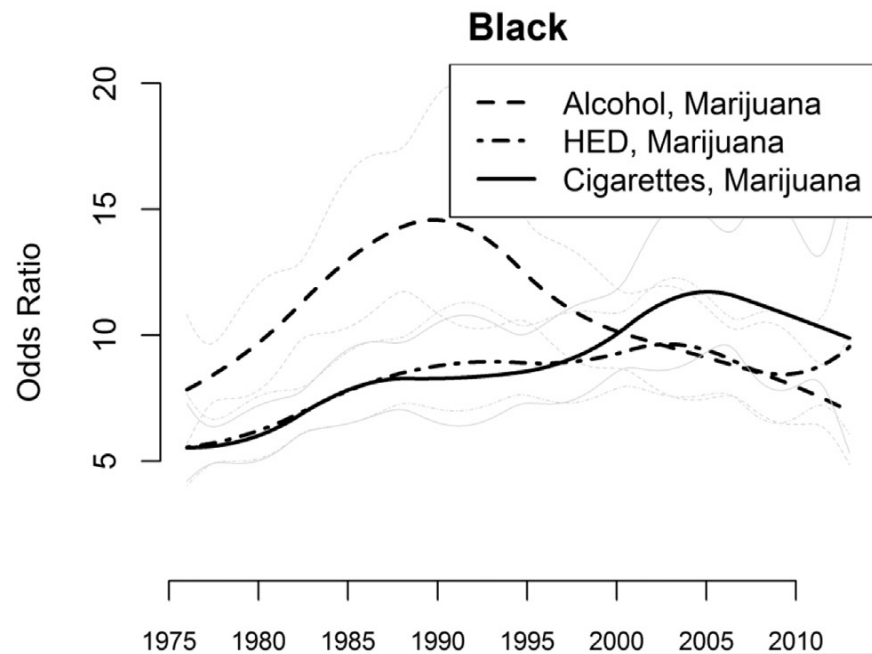
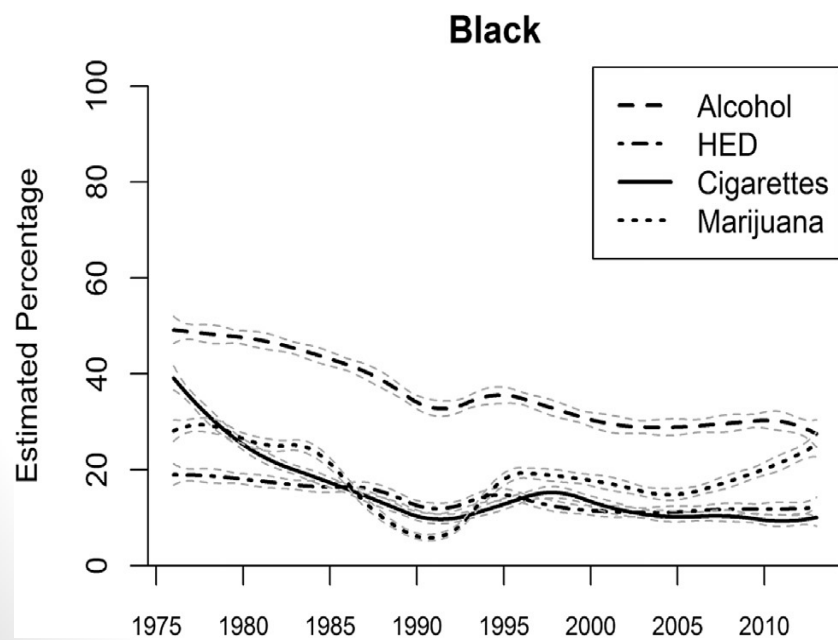
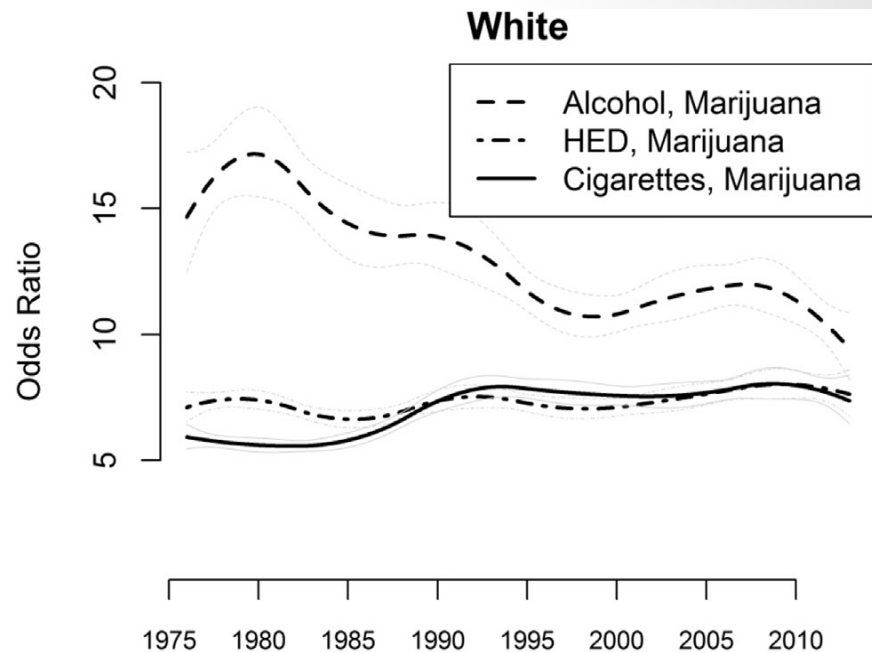
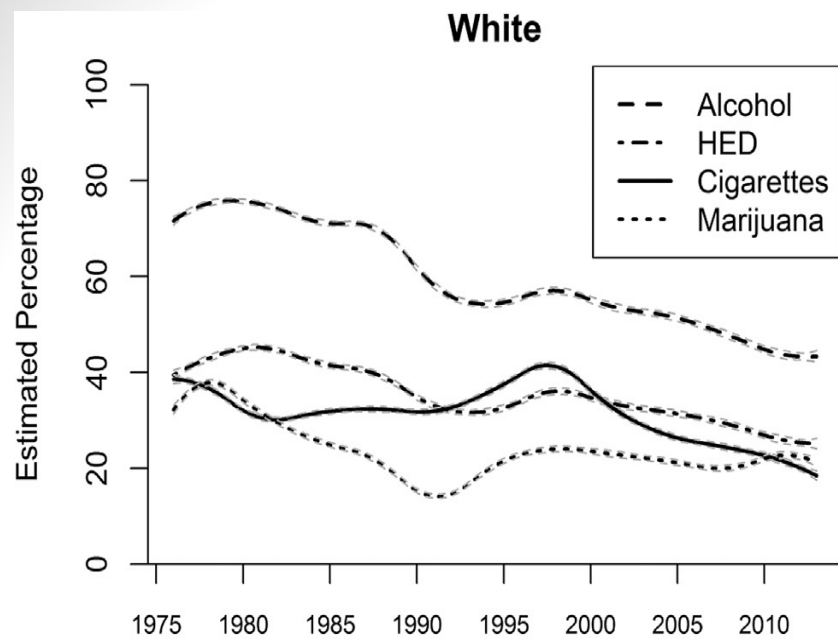


D. Marijuana Use

— Caucasian — Hispanic - - - - AA - . - Asian

- higher initial status of heavy drinking
- lowest rate of change for alcohol, heavy use, and smoking
- lowest level of alcohol and heavy use in adolescence and early adulthood
- Smoking low, but because highest after 30 – marijuana highest after late 20s

Sources: Chen & Jacobson, 2012



Source: Lanza et al., 2015

African Americans and Substance Use

- Compared to White youth, African Americans report
 - Comparable or higher rates of marijuana use
 - Higher rates among White youth in late 1970s-early 1990s
 - Black-white gap narrowed substantially during late 1990s/early 2000s
 - 2013 first time prevalence higher among Black youth (29% compared to 20%) than White youth (Johnson et al., 2015)

Sources: Chen & Jacobson, 2012; Wallace et al., 2002; Zapolski et al., 2014

African Americans and AOD Use

- Shift in risk into adulthood
 - The crossover effect
 - Higher rates of alcohol use, particularly heavy or binge drinking after the age of 35 for African Americans compared to Whites
- Problems from use
 - Among those who use, African Americans tend to experience more problems than their White peers
 - Higher risk for alcohol abuse and dependence

Sources: Grant et al., 2012; Kandel et al., 2011; Keyes et al., 2015; Watt, 2008; Yuan, 2011

Research Questions

- Why don't African Americans engage in some substances while higher rates of other substances?
- What are the reasons for engaging in substance use, if the normative behavior is not to use?
- Are there different patterns among those African Americans that do use that place them at higher risk for consequences?
- What do we know about concurrent use of substances and the potential elevated risk it may have for AA youth?
- Among adults, what changes such that risk for substance use increases?

Models for Understanding Racial Health Inequity

- Minority Status Stress
 - Racial discrimination
 - Intersectionality of Multiple Identities
- Cumulative Disadvantage Theory
- Weathering Hypothesis
- John Henryism
- Social-Ecological Model

Minority Status Stress

- Psychosocial difficulties related to racial and ethnic background
 - Racial discrimination
 - Belonging
 - Intragroup conflict
- Research focused primarily on the college experience and its impact on mental health and academic outcomes

Sources: Greer, 2008; Greer & Chwalisz, 2007

Racism

- A system of structuring opportunity and assigning value based on the social interpretation of how one looks (which is what we call “race”), that
 - Unfairly disadvantages some individuals and communities
 - Unfairly advantages other individuals and communities

Source: Jones CP. (2003). Confronting Institutionalized Racism. *Phylon*, 50(1-2), 7-22.

Levels of Racism

- Institutionalized
 - Differential access to the goods, services, and opportunities of society, by “race”
 - Example: differential access to substance use services or other mental health services, lack of transportation, grocery stores, higher pollutants, etc.

Source: Jones, CP. (2000). Levels of Racism: A Theoretic Framework and a Gardener's Tale. *American Journal of Public Health*, 90(8), 1212-1215.

SES and Race

- Poverty rates are twice as high as national average (25.8% versus 14.3%, U.S. Census Bureau, 2013, 2014)
- More likely to live in deep poverty (14% versus 3.5% of Whites)
 - 76% of AA children live under worst conditions than the worst of White American youth (Acevedo-Garcia et al., 2008)
 - “The worst urban context by which Whites reside is considerably better than the average context of Black communities.” (Sampson & Wilson, 1995)
- African Americans more likely to sustain in poverty across lifetime

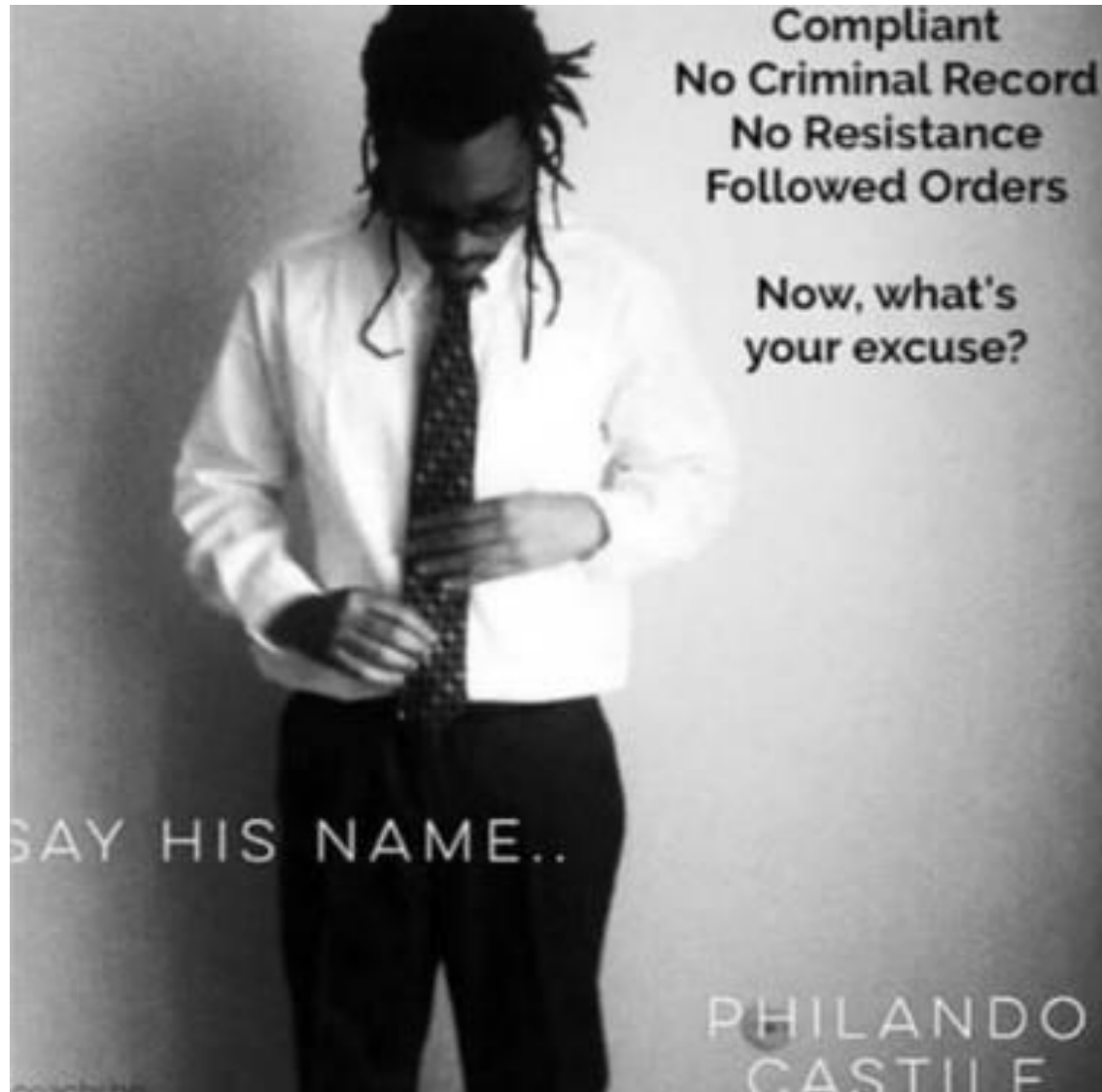
SES, Race, and Substance Use

- NSDUH data, found a crossover effect for binge drinking for African American males and females compared to their White counterparts after the age of 35.
 - Only found for the < \$20,000 income bracket
- Economic disruptions have a stronger impact on alcohol use (drunkenness) and problem drinking for African Americans than Whites. Distress also impacted drunkenness for African Americans (Jones-Webb et al., 2016)

Levels of Racism

- Personally-mediated
 - Differential assumptions about the ability, motives, and intents of others, by “race”
 - Differential actions based on those assumptions
 - Microaggression: brief, everyday exchanges that send demeaning messages to a target group
 - <https://www.youtube.com/watch?v=8RfwnibEd3A>
- Internalized
 - Acceptance by the stigmatized “race” of negative messages about their own abilities and intrinsic worth

Collective Self-Esteem



Discrimination and Psychological Health

- Cumulative effects of these events leaves one with feelings of self-doubt, frustration, powerlessness, invisibility, isolation, and loss of integrity (Solorzano et al., 2000; Sue, Capodilupo et al., 2008; Sue, Capodilupo & Holder, 2008)
- Greater anxiety, depression, and substance use (Blume et al., 2012; Gibbons et al., 2014; Williams & Mohammed, 2009)
- Effects functioning of inflammatory, neuroendocrine, and neurocognitive systems (Brody et al., 2015; Geronimus et al., 2006; McEwen, 2012; Nusslock & Miller, 2015)

Research Questions/Directions

- Disentangle how racism/discrimination is operationalized
- Determine how best to measure the cumulative impact of discrimination on health
- Have a better understanding on the interactive effect racism has on opportunities and other social determinants of health
- Mechanisms through which racism/discrimination impacts substance use or behavioral health outcomes

Minority Stress Model

- Intersectionality of multiple identities
 - Minority Stress Model (Meyer, 2003): sexual orientation related health disparities due to stigma related to status. Along a continuum from distal factors (eg., discrimination and victimization) to proximal personal processes (e.g., internalization of stigma)

Trauma

- Violence exposure: African American males die from gun violence at a rate 2.5 times higher than Latino males and 8x higher than White males
 - Higher level of minority involvement in violent crimes partly due to a larger proportion of African Americans residing in environments of extreme poverty within metropolitan areas
 - Difference in structural environments, as Whites who reside in similar areas have similar violence exposure (Outsey, 1999)
- Intimate partner homicide is the second leading cause of death from African American women ages 15-35
 - IPV associated with substance use outcomes

Trauma and SU in Youth

- General Strain Theory
- Racial discrimination, witnessing violence, and being the victim of verbal bullying indirectly affected marijuana and alcohol use through fear. Physical victimization was the only social strain that had a direct positive effect on marijuana and alcohol use but only for Hispanics and African Americans (Steele, 2016)

ARE OUR CHILDREN BEING PUSHED INTO PRISON?

THE PIPELINE TO PRISON: THE U.S. HAS THE HIGHEST INCARCERATION RATE IN THE WORLD, AND ITS PRISONS AND JAILS ARE OVERWHELMINGLY FILLED WITH AFRICAN AMERICANS AND LATINOS. THE PATHS TO PRISON FOR YOUNG AFRICAN-AMERICAN AND LATINO MEN ARE MANY, BUT THE STARTING POINTS ARE OFTEN THE SCHOOL AND FOSTER CARE SYSTEMS.

FROM SCHOOL TO PRISON

STUDENTS OF COLOR FACE HARSHER DISCIPLINE AND ARE MORE LIKELY TO BE PUSHED OUT OF SCHOOL THAN WHITES.

40%  OF STUDENTS **EXPELLED** FROM U.S. SCHOOLS EACH YEAR ARE BLACK.

70%  OF STUDENTS INVOLVED IN "IN-SCHOOL" **ARRESTS** OR REFERRED TO LAW ENFORCEMENT ARE BLACK OR LATINO.

3.5 X  BLACK STUDENTS ARE THREE AND A HALF TIMES MORE LIKELY TO BE **SUSPENDED** THAN WHITES.

2 X  BLACK AND LATINO STUDENTS ARE TWICE AS LIKELY TO **NOT GRADUATE** HIGH SCHOOL AS WHITES.

68% OF ALL MALES IN STATE AND FEDERAL **PRISON** DO NOT HAVE A HIGH SCHOOL **DIPLOMA**.

FROM FOSTER CARE TO PRISON

YOUTH OF COLOR ARE MORE LIKELY THAN WHITES TO BE PLACED IN THE FOSTER CARE SYSTEM, A BREEDING GROUND FOR THE CRIMINAL JUSTICE SYSTEM.

50%  OF CHILDREN IN THE **FOSTER CARE SYSTEM** ARE BLACK OR LATINO.

30%  OF FOSTER CARE YOUTH ENTERING THE **JUVENILE JUSTICE SYSTEM** ARE PLACEMENT-RELATED BEHAVIORAL CASES
(e.g., RUNNING AWAY FROM A GROUP HOME).

25%  OF YOUNG PEOPLE LEAVING FOSTER CARE WILL BE **INCARCERATED** WITHIN A FEW YEARS AFTER TURNING 18.

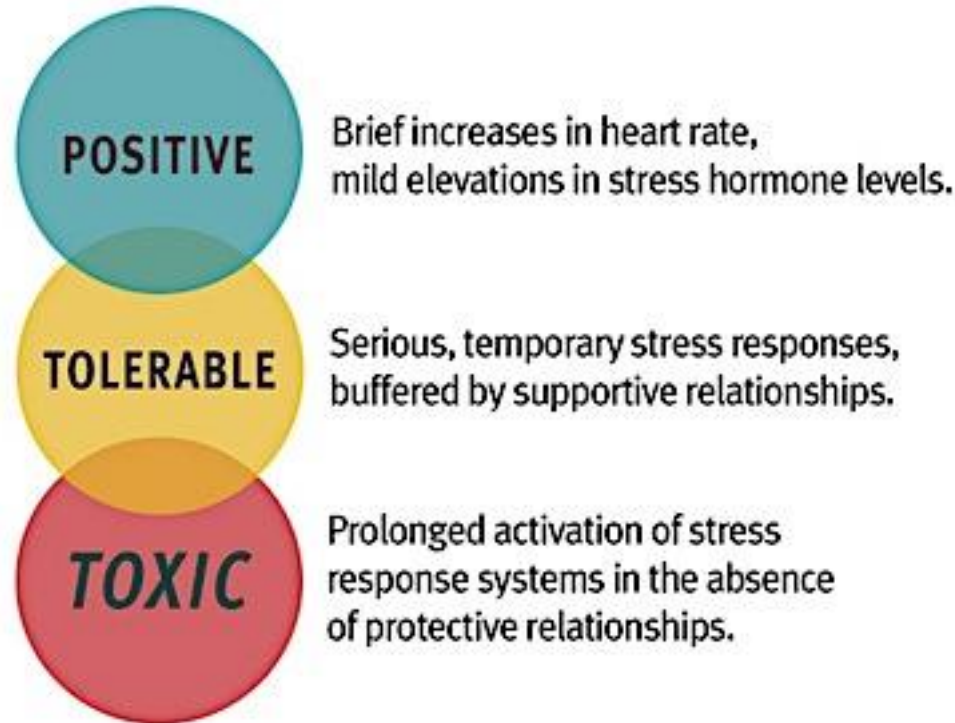
50%  OF YOUNG PEOPLE LEAVING FOSTER CARE WILL BE **UNEMPLOYED** WITHIN A FEW YEARS AFTER TURNING 18.

70% OF INMATES IN CALIFORNIA **STATE PRISON** ARE FORMER **FOSTER CARE** YOUTH.

THE COLOR OF MASS INCARCERATION

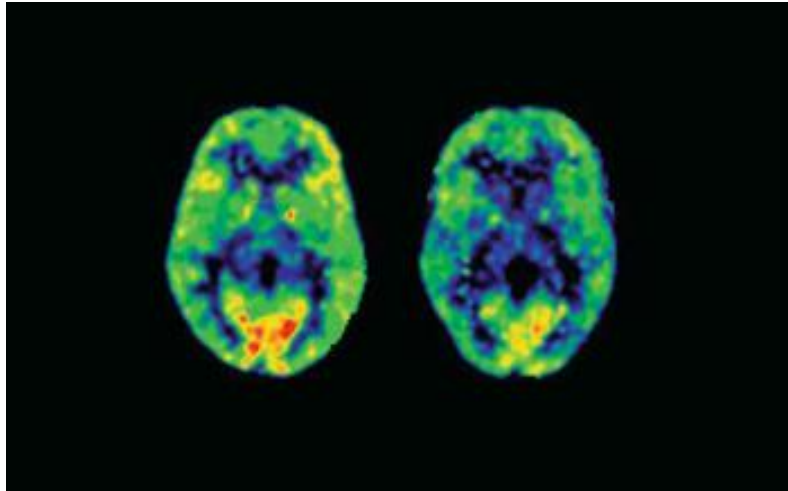


Trauma and Brain Functioning

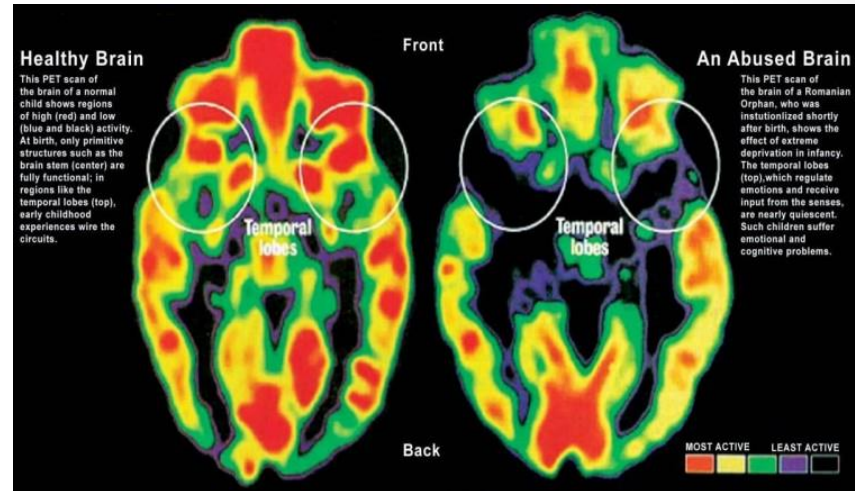


Source: Center on the Developing Child, Harvard University: retrieved from <http://developingchild.harvard.edu/science/key-concepts/toxic-stress/>

Trauma and Brain Functioning



Bullying

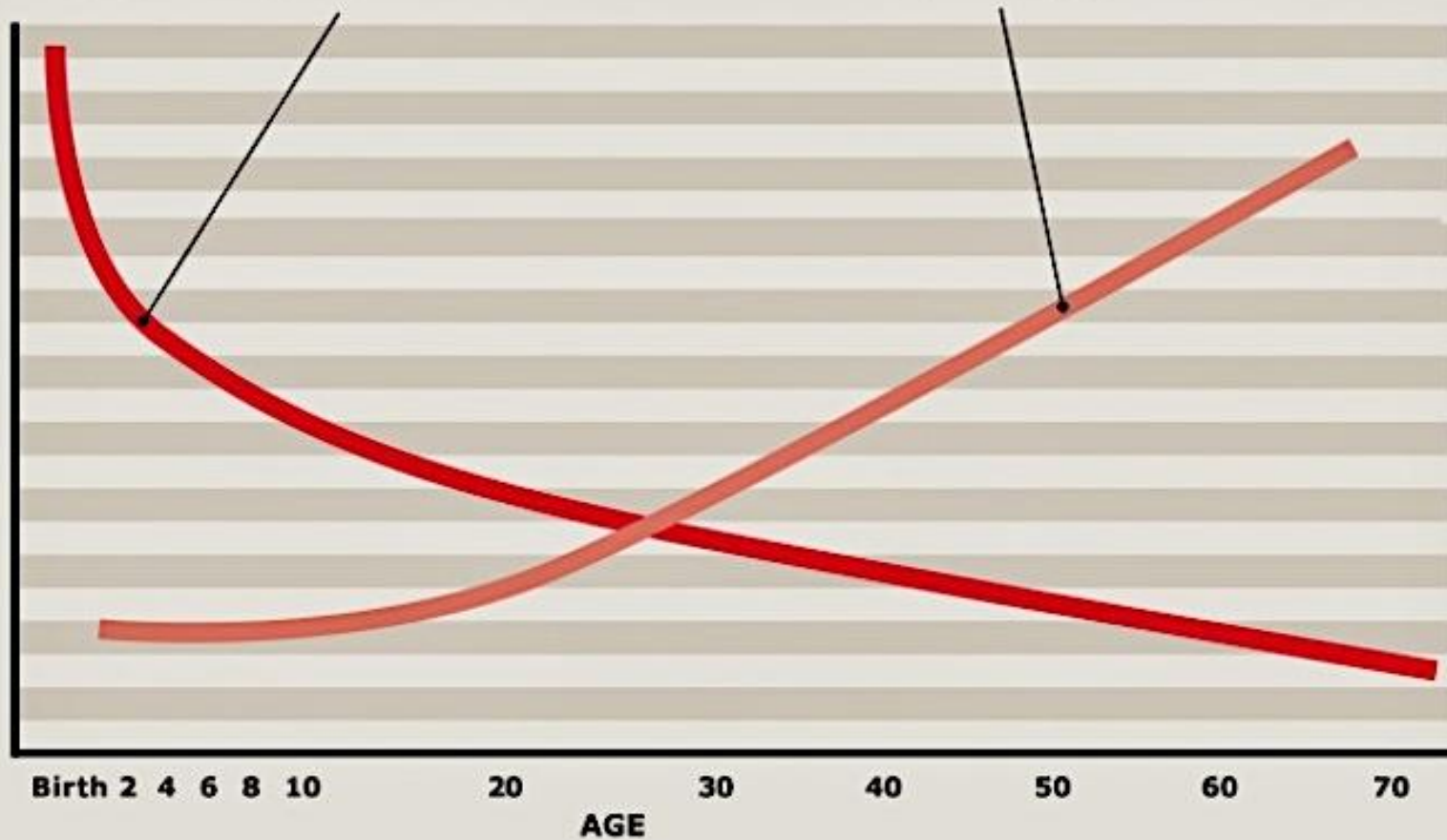


Child Abuse

- What about these other forms of trauma already discussed – discrimination, violence exposure, incarceration, foster care, SES – how do these affect brain functioning?
- What is the differential impact type of trauma or cumulative trauma on neurological, psychological, behavioral, physical health?

**The Brain's Ability to Change
In Response to Experiences**

**Amount of Effort
Such Change Requires**



It is easier and less costly to form strong brain circuits during the early years than it is to intervene or "fix" them later.

Graph Source: Pat Levitt (2009).

Source: Center on the Developing Child, Harvard University: retrieved from <http://developingchild.harvard.edu/science/key-concepts/toxic-stress/>

Research Questions

- Is there a critical time when the impact of trauma (or specific types of trauma) adversely impact health outcomes?
- Is there a critical time point when it is best to intervene?
- Does intervening reverse the damage or lack of development? If so, what types of interventions are most critical?

Weathering Hypothesis

- African Americans have repeated experiences of social and economic adversity, as well as political marginalization.
- Stress related to living in a race-conscious society that stigmatizes and disadvantages African Americans may cause disproportionate physiological deterioration
 - Cortisol levels, sympathetic nerve activity, blood-pressure reactivity, cytokine production, glycated hemoglobin levels, allostatic load
- Showing signs of morbidity and rates of mortality typical of Whites at older ages

Research Questions

- Why would some individuals use substances in face of such trauma, while others would not?
 - Is substance use a natural default or is there a specific learning process through which it becomes a more viable option?

John Henryism

- John Henryism
 1. Efficacious mental and physical vigor
 2. Strong commitment to hard work
 3. Single-minded determination to succeed
- Positive correlates with JH
 - Life satisfaction
 - Perceptions of good health
 - Being married
 - Having children
 - Being employed
 - Better paying jobs
 - Church attendance
 - Lower perception of stress

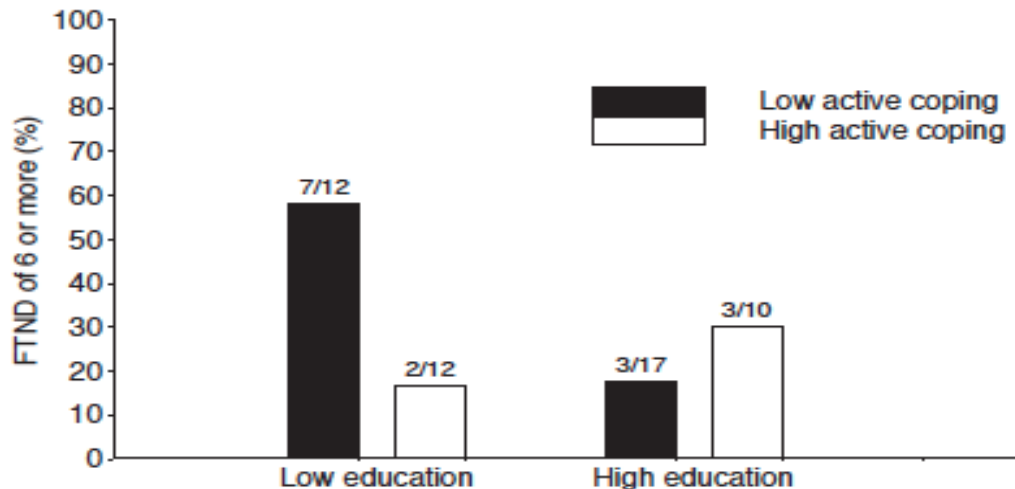
Sources: Bennet et al., 2004; Brenner et al., 2003

John Henryism

- Prolonged high-effort coping with chronic psychosocial stressors (i.e., job insecurity, discrimination, occupational demands, violence exposure, limited access to quality health care) is associated with elevated risk for negative health outcomes
 - Hypertension, CVD
- Found among those without sufficient socioeconomic resources
 - Inverse relationship between SES and health is moderated by JH
- Interesting gender difference have been found with the inverse relationship found for AA males, with a protective effect found for AA females (Dessler et al., 1998)

John Henryism

- Few studies have examined JH and Substance Use
- JH significant negative association with participating in SU treatment (Stevens-Watkins et al., 2016)
- Low education and low JH associated with greater severity of nicotine dependence among treatment seeking smokers (Fernander et al., 2005)



Research Questions

- JH would posit that success or resources would decrease risk for health outcomes, is this true in relation to SU?
- What is the impact of social stressors other than education, such as un(der)employment on JH and substance use?
 - Recent study by Jones-Webb (2016) recession related job loss had a stronger impact on SUD and drunkenness for African Americans than Whites
- How does JH relate to neurobiological functioning?

Social-Ecological Model

- No single factor can explain risk
- Interaction of risk at multiple levels

Source: Broffenbrenner, 1986; Dahlberg & Krug, 2002; McLeroy et al., 1988)

Societal Norms
Policies

SOCIETAL

Access to Drugs
Poverty
Advertisements
Violence Exposure
Cultural Norms

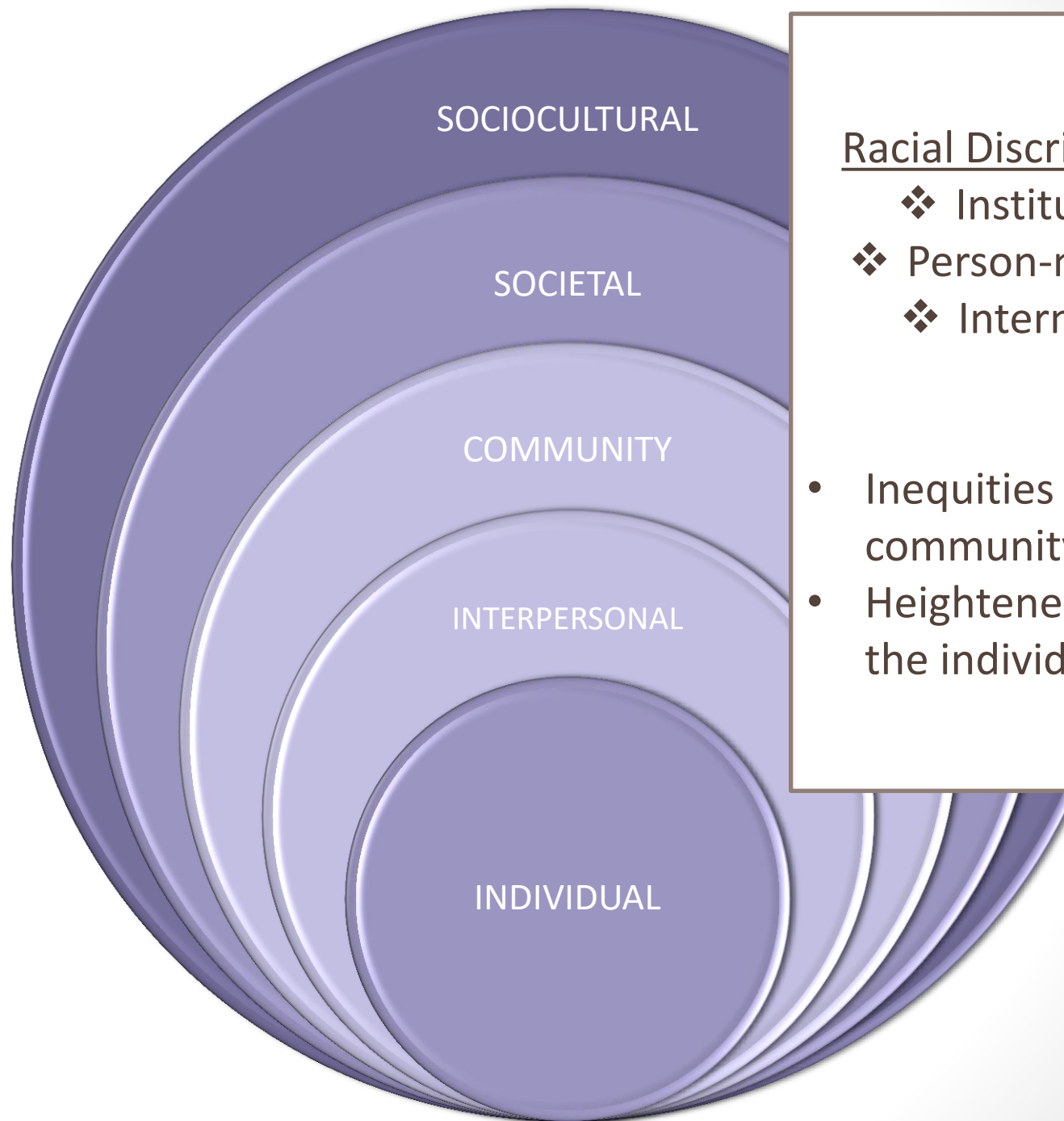
COMMUNITY

Parent Factors
Peer Influence

INTERPERSONAL

Personality
Expectancies
Impulsivity
Genetics

INDIVIDUAL



Racial Discrimination

- ❖ Institutional
- ❖ Person-mediated
- ❖ Internalized

- Inequities at community level
- Heightened risk at the individual level

Resilience

- Religiosity
 - Protective factor against substance use - directly influence use or indirectly by influences expectancies or beliefs regarding substance use
- Ethnic Identity
 - Critical aspect of self-worth
 - Protective factor against alcohol and other drug use
 - Associated with conservative attitudes about substance use

Resilience

- Ethnic Socialization
 - Racial pride, preparation for bias, and self-worth (Hughes et al., 2006)
 - Neblett et al. (2010)
 1. Directly reducing stress
 2. Enhancing self concept
 3. Focus on coping strategies
- Parental/Peer Support
 - Shown to reduce drug risk among African American youth, particularly as a consequence of discrimination (Zapolski et al., 2016)

Research Questions

- Is there a critical time when protective factors are most impactful?
 - Are some protective factors a better buffer than others?
- What about gender, are there some protective factors that operate differently for males versus females?

How do we move forward to advance the field?

- Why don't African Americans engage in some substances while higher rates of other substances?
 - Highlighting the resilience of the community and the impact that stressors have on the system in the absence of substance use
- What are the reasons for engaging in substance use, particularly in adolescence, if the normative behavior is not to use?

How do we move forward to advance the field?

- Are there different patterns among those African Americans that do use?
 - Do these patterns differ in risk for consequences during adolescence and later in adulthood?
- Among adults, what changes such that risk for substance use increases?
 - Are there certain substances that are most often used and detrimental for health outcomes?