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

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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
• 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

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.

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 (e.g., 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 form 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.
- 3.5x black students are three and a half times more likely to be suspended than whites.
- 2x black and Latino students are twice as likely to not graduate high school as whites.

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.
- 68% of all males in state and federal prison do not have a high school diploma.
- 70% of inmates in California state prison are former foster care youth.

The Color of Mass Incarceration

- 61% of incarcerated population are black or Latino.
- 30% of U.S. population are black or Latino.

One out of three African-American males will be incarcerated in his lifetime.
One out of six Latino males will be incarcerated in his lifetime.
Trauma and Brain Functioning

- **POSITIVE**: Brief increases in heart rate, mild elevations in stress hormone levels.
- **TOLERABLE**: Serious, temporary stress responses, buffered by supportive relationships.
- **TOXIC**: Prolonged activation of stress response systems in the absence of protective relationships.

• 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?
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).

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, glycatedhemoglobin levels, allostatic load

• Showing signs of morbidity and rates of mortality typical of Whites at older ages

Source: Geronimus et al., 2006
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: Broffrenbrenner, 1986; Dahlberg & Krug, 2002; McLeroy et al., 1988)
Societal Norms
Policies

Access to Drugs
Poverty
Advertisements
Violence Exposure
Cultural Norms

Parent Factors
Peer Influence

Personality
Expectancies
Impulsivity
Genetics
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 use and detrimental for health outcomes?