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# Exaggerating Harmful Drug Effects on the Brain Is Killing Black People

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**Exaggerations of the detrimental impact of recreational drug use on the human brain have bolstered support for draconian drug policies and have been used to justify police brutality against Black people. This situation has led to disproportionately high Black incarceration rates and countless Black deaths. Here, I offer solutions to remedy this multi-century maltreatment of Black people.**

"This is why you don't do drugs kids." That admonishment—directed at bystanders who watched in horror as police manhandled George Floyd's 46-year-old, defeated black body—spoke volumes about what kind of people we are and our warped values. Drug researchers with neuroscience leanings, me included, have helped shape and perpetuate this sick ethos in which police, as well as others, believe that it's okay to brutalize a Black person, so long as they are suspected of having used or sold a "recreational" drug.

## Americans Have Betrayed the Trust of Black People

My body, from head to toe, reverberated with rage and disgust as I watched the video of former police officer Derek Chauvin—who is white—pinning Floyd to the ground by kneeling on his neck for 8 minutes and 46 seconds. Other former officers, Tou Thao, Thomas Lane, and J. Alexander Kueng, stood guard and held down Floyd. "Please, please, please, I can't breathe," the dying man begged. I thought of Eric Garner—who was also Black—muttering virtually the same words while being choked to death by former police officer Daniel Pantaleo—who is also white. "Not again," I thought.

"I can't breathe." Floyd can be heard pleading some version of this cry for help at least 16 times, but to no avail. He would be unconscious for several minutes before an emergency medical technician (EMT) persuaded Chauvin to relent. Floyd would be pronounced dead minutes later.

It was Memorial Day, the national holiday commemorating the military men and women who died while serving this country, protecting our "unalienable Rights," including "Life, Liberty and the pursuit of Happiness." Chauvin's chilling disregard for Black life was particularly painful for me on *this* day. In addition to being a Black man, not much older than Floyd, I completed a 4-year stint in the military, serving some of my time as a police officer. The public entrusts police with the virtuous task of serving the people, including George Floyd, and protecting our rights, including yours and mine. Chauvin betrayed this sacred public trust. So did Thao, Lane, and Kueng. Their actions, in fact, were criminal, and—because there is a videotaped account—everyone knew it. All were fired immediately. Yet, it took intense nationwide protest, over the course of 4 days and 4 nights, to goad prosecutors in Hennepin County, Minnesota, to act. Finally, on May 29, authorities arrested and charged Chauvin with third-degree murder and second-degree manslaughter. But another 5 days would pass before Thao, Lane, and Kueng were arrested and charged with aiding and abetting second-degree murder and second-degree manslaughter. On the same day, Chauvin's murder charge was upgraded to the second degree.

## Using Drugs to Legitimize a Massacre

County prosecutors' criminal complaint charging Chauvin for the murder of Floyd stated, "the combined effects of Mr. Floyd being restrained by the police, his underlying health conditions and any potential intoxicants in his system likely contributed to his death." Criminal complaints provide crucial clues about the approach prosecutors plan to pursue during the trial. Here, prosecutors signaled that Chauvin alone didn't cause the death of Floyd. Maybe Floyd was aggressive and paranoid from smoking marijuana or using methamphetamine, and that lead him to attack police? Maybe if he hadn't taken one or multiple drugs, he'd be alive today?

Without a doubt, this preposterous defense, abetted by the prosecution, will be presented by Chauvin's lawyers. Never mind that the phrase "potential intoxicants" is so vague that even I don't know what it means. The prosecutors could have simply included in the complaint whether Floyd had drugs in his system or not. No matter though, because the video is clear: Chauvin pressed his knee into Mr. Floyd's neck until he became unresponsive. Two autopsy reports—one from the Hennepin County medical examiner office's and the other from a medical examiner hired by Mr. Floyd's family—classified the cause of Floyd's death as homicide.

So, when I read the criminal complaint, exasperated, the 53-year-old Black voice in my head warned: "Here we go again." I have seen authorities turn a blind eye to evidence of police brutality too many times before. I have seen juries, largely white, readily accept dehumanizing portrayals of Black victims, especially drug users, in order to rationalize their

decisions to acquit white officers accused of misconduct.

I know what to expect during the trial of the former officers charged with killing Floyd. Their attorneys will put Floyd's life on trial and not allow him to rest in peace. They will malign his drug use, blaming it for his death. This tired gimmick was used when police (or a proxy) killed Trayvon Martin, Michael Brown, Laquan McDonald, Philando Castile, Terence Crutcher, among a host of others. In each of these cases, the deceased's toxicology findings, combined with his behavior, revealed drug levels that I believe were too low to have contributed to his death. In other words, drugs didn't make them act so violently that lethal force was reasonable or necessary; nor did they cause some fatal medical condition. But it didn't matter. By introducing drug use as a potential contributing factor, it creates a smokescreen for juries to find, almost always, white-identifying police and wannabes not guilty in the killing of Black people.

Even the mere accusation that an acquaintance might be a drug seller is enough to justify police slaughtering a Black woman in her own home. Perhaps none of these travesties of justice was more appalling than the killing of 26-year-old EMT Breonna Taylor. Just after midnight on March 13, 2020, plainclothes officers broke down the door of her apartment and fired multiple shots, hitting her eight times. They were seeking two men suspected of selling drugs out of a house that was nowhere near Ms. Taylor's home. The judge, who signed the "no-knock" warrant, allowed a search of Ms. Taylor's home because one of the two suspects had supposedly received packages there previously. As of June 19, none of the three cops—Jon Mattingly, Myles Cosgrove, and Brett Hankison—involved in fatally shooting Ms. Taylor have been charged or even fired.

This wasn't the first time police killed a Black woman during a botched drug raid. Back in 2006, acting on false information from an informant, Atlanta police executed a no-knock warrant at the home of 92-year-old Kathryn Johnson in search of drug dealing. They broke down her door, entered her home, and shot her dead. I know it shouldn't matter, but, for the record, no drugs were found.

Ramarley Graham, Rumain Brisbon, and Sandra Bland also had their lives cut short as a result of an interaction with police initiated under the pretense of drug-use or drug-sales suspicion. The list of the dead is too long to detail here, but you can bet that many Black Americans know each of their names and fear being added to this death list every time the police engage us. I have learned from my laboratory research that drug effects are predictable. I have learned from my life experience that police interactions with Black people are not; too often the Black person ends up dead. That is why when Black parents ask my advice regarding drugs, I tell them that I would much rather my own children interact with drugs than with the police.

Even when a Black drug suspect survives the encounter with law enforcement, that person is much more likely than their white counterpart to be arrested (e.g., Hart, 2013). This despite the fact that both groups use and sell drugs at similar rates (Hart and Hart, 2019). This is called racial discrimination or racism. It is not "implicit bias" or some other euphemistic, pointless distraction that the field of psychology has come up with so that the status quo (i.e., white supremacy) can stay intact by failing to address racism directly (Hart and Hart, 2019). When I use the terms racial discrimination or racism, I mean precisely this: an action that results in disproportionately unjust or unfair treatment of persons from a specific racial group. Malicious intent is not required—I don't care to know what's in your heart or head. What is required is that the treatment be unjust or unfair and that such injustice is disproportionately experienced by at least one racial group (Hart and Hart, 2019).

## Remaining Silent Is Not an Option

Observing the carnage and racism that take place under the guise of protecting the public from so-called dangerous drugs (i.e., the war on drugs) made me rethink my views about drugs and their regulation. I'm embarrassed to admit it now, but I once wholeheartedly believed that drugs like crack cocaine and heroin destroyed certain Black communities. In fact, I began studying neuroscience because I thought it was uniquely suited to solve the "drug problem."

In 1999, I landed my dream job, conducting research that involved giving thousands of doses of drugs, including crack cocaine, marijuana, ketamine, and methamphetamine, to a range of people in order to study the effects. I believed my work contributed to our understanding of drug addiction. Twenty years later—20 years I've spent studying the interactions among the brain, drugs, and behavior and observing how moralizing about drug use is expressed in social policy—my initial excitement has given way to skepticism, cynicism, and disillusionment.

It took me a long time to see the damage my field was doing to communities like the one from which I came. I was too busy for too long being a soldier in the regime, caught up in the cause of "proving" how damaging drug use is to the brain. And because my intense actions aligned with the dominant perspective held at the National Institute on Drug Abuse (NIDA)—my primary funder—I personally benefited. I was awarded multimillion-dollar grants to conduct my research, and I served on some of the most prestigious committees in the area of neuropsychopharmacology. I also was awarded tenure at my university, which, importantly, allows me to speak so freely here and elsewhere.

## Using "Science" to Legitimize a Massacre

The fact is, we, as researchers, consistently exaggerate the harmful effects of drug use. This is not to say that drug use can't or doesn't cause some people to experience significant distress and problems that impair their ability to function. This, by the way, is the most common definition of addiction, what we call substance use disorder in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (DSM-5). I am merely pointing out that most people—70% to 90%—who use even the most stigmatized drugs, such as heroin and methamphetamine, do not meet criteria for a substance use disorder (Hart, 2013). This fact highlights two important points. The first is society's flagrant disproportionate focus on addiction when discussing drugs. Addiction represents a minority of drug effects, but it receives almost all the attention. Another related point is this: if most users of a particular drug do

not become addicted, then we cannot blame the drug for causing drug addiction. It would be like blaming food for food addiction.

Even more pernicious is the fact that NIDA unabashedly touts the baseless notion that drug addiction is a brain disease. To date, there has been no identified neurobiological substrate to differentiate non-addicted persons from addicted individuals (Hart et al., 2012). Simply put, there is no solid evidence that human recreational drug use causes brain damage; nor is there credible evidence showing that addiction is caused by a brain abnormality. Unfortunately, this fact has not tempered dire warnings in the neuroscientific literature regarding the harmful impact of drug use on the human brain. Consider the following claim by Volkow et al. (2016): "If early voluntary drug use goes undetected and unchecked, the resulting changes in the brain can ultimately erode a person's ability to control the impulse to take addictive drugs." The first clause of this sentence encourages people, including cops, to be paranoid about any drug use, even the nonproblematic recreational use that characterizes the experience of the overwhelming majority who use these drugs. The paranoia this statement provokes was on full display when police admonished witnesses to stay off drugs while their brother in blue used his knee to cut off the dying Floyd's last breath. The second clause is perhaps even more disturbing because it argues that there are inevitable brain changes in response to drug use that cripple the user's self-control. There is absolutely no scientific evidence in humans to justify this statement. As I have noted previously, the pretty pictures produced by brain imaging without data are not evidence, but they are misleading (Hart et al., 2012).

Also, it's fair to ask: if recreational drug use is neurotoxic, why are researchers, me included, allowed to give these drugs to people regularly with NIDA's blessings? The truth is, recreational drug effects are overwhelmingly positive (e.g., Hart et al., 2008). This is not an endorsement for the use of drugs. It's just a fact. Everyone who studies the direct effects of recreational drugs in people knows this to be true. I don't know how the folks at NIDA or other scientists reconcile the apparent inconsistencies between this reality and their overemphasis on harmful outcome. I suspect that some researchers overemphasize the negative in order to enhance the "significance" section of their NIH grant applications and articles. The greater the perceived problem, the more impactful the research. Other scientists might characterize their behavior as erring on the side of caution. In other words, it is better to highlight any potential dangers—even those that are remote—while downplaying and ignoring potential benefits, including obvious ones. The problem with these rationalizations is that they wrongly assume that the current lopsided and negative presentation of drug effects on the brain is without serious pitfalls. It's not. Journalists write articles consistent with these half-truths. If you do a quick search of newspaper articles written about any recreational drug, you'll find that almost all focus on negative outcomes. Films and public service announcements also employ these distortions in their depictions of drug users.

Misrepresentation of drug-related brain evidence has contributed to dehumanizing stereotypes. They shape callous political rhetoric and harmful policies and practices. Take, for example, the words and actions of Philippine President Rodrigo Duterte: "a year or more of shabu [methamphetamine] use would shrink the brain of a person, and therefore he is no longer viable for rehabilitation." Thousands of people have been killed extrajudicially as a result of Duterte's inhumane treatment of drug users and sellers (Bueza, 2017). What's more, the current occupant of the White House has repeatedly praised Duterte and other barbaric leaders for a "great job" on their handling of drug users and dealers, knowing full well that their tactics include extrajudicial executions. In the United States, where tacit racism is pervasive, it is unsurprising—and infuriating—that the fear of drugs, abetted by arguments poorly grounded in scientific evidence, is used to legitimize the massacre of Black people.

## Empty Statements Equate to Silence

In the days following George Floyd's death, many of our important academic and scientific institutions and organizations released obligatory statements. Most constitute empty, pretty-sounding words devoid of any committed plan of action. For example, the Society for Neuroscience (SFN) took the opportunity to remind us of "its commitment to promoting diversity and fostering excellence" (Society for Neuroscience, 2020). Yeah, we know. But what are you going to *do* to help dismantle the systemic racism that brought us to *this* moment? Nora Volkow, NIDA director, stated that she looks "forward to working with the addiction science community—researchers, the medical community, *law enforcement* (italicization is my own), advocates, policymakers, other stakeholders and the public—to eradicate discrimination and promote equality" (Volkow, 2020). Again, there is no specific commitment to action; nor is there any self-examination seeking to understand NIDA's role in bringing us to this awful juncture in our history. Such statements merely corroborate many Black people's sneaking suspicion that the white leadership at these organizations just don't get it. In 2017, I published an editorial in *Nature Human Behavior* entitled, "Viewing addiction as a brain disease promotes social injustices." Truth be told, the piece was an open letter to NIDA imploring them and others to stop overstating the negative impact of human drug use on the brain, because Black lives were literally at stake. It fell on deaf ears. So, here we are.

## Practical Steps: Inaction Is Betrayal

I recognize that there are many well-intentioned scientific community members seeking guidance on specific steps that they can take to eradicate American racism and mitigate the harms it has caused to Black people. First, I would suggest that you view the videotaped killing of George Floyd in its entirety, if you haven't already done so. If you find it less than revolting, then imagine an officer cramming his knee into the neck of a dying loved one as she begs for her life. It is my hope that any psychologically sound individual who watched Mr. Floyd's brutal death came away feeling appalled or some related emotion. If not, then the help that you need is beyond the scope of my writing powers. Second, we all must dispense with the misguided

mindset that equates talking about a problem—e.g., vacuous statements professing solidary with Black Americans—with actually doing something about it. One can't merely have a conversation with Black colleagues, students, or constituents about racism and then act as if they've done something about it. Verbal behavior is not actual behavior.

Third, institutions should use their resources and platforms to implement and champion meaningful changes in the service of dismantling structures that sustain racism. A few questions you should ask are: how many senior or tenured Black faculty members are in your institution, are they respected, active colleagues, and be honest, how many are incentivized to be tokens, instruments protecting the status quo? Truthful answers to these questions can provide valuable insight about your institution's anti-racism commitment. Relatedly, anti-Black racism is a major public health problem and is well within the scope of top scientific and medical journals. Yet, articles on the topic rarely, if ever, are published within the pages of such of journals. This has got to change. Calls for papers investigating police killings of Black people and the disparate impact of COVID-19 on Black communities would be a helpful start. Journal editorial staff should also be required to read Dorothy Robert's *Fatal Invention* and Harriet Washington's *Medical Apartheid*, which will help journal personnel in their critical evaluation of submitted papers that affect society's perceptions of race, science, and medicine.

Fourth, there is a disturbing tendency among many neuroimaging drug researchers to interpret any brain differences between drug users and non-drug users as deficits representing substantial loss of function (i.e., brain damage). In reality, such differences reflect the normal range of variability found in the human brain (Hart et al., 2012). Stated differently, brain differences do not necessarily equate to brain damage. Unfortunately, Duterte and other racists have used careless overinterpretations of "neuro" data as ammunition for eliminating poor and Black drug users and dealers condemned as irredeemable due to brain damage. We have done the same (Hart, 2013). If NIDA is serious about its commitment to ridding society of racism, I would suggest developing and promoting Public Service Announcement (PSA) campaigns cautioning against neuroimaging-data overinterpretations and denouncing the abhorrent practice of extrajudicial killings of suspected drug users and dealers. Additional PSAs should present a more realistic view of drug use, not just an overemphasis on potential harms. One based on evidence from human laboratory studies—and not anecdote; one that dispels myths such as those claiming some drugs prevent rational thinking and bestow its users with superhuman strength or trigger excessive violence.

Finally, researchers should carefully examine statements made about drugs in their papers and grant applications to avoid an unjustified and exclusive focus on negative drug effects. It is also imperative that scientists use their skills and platforms to speak out against racism and to advocate for reallocating substantial portions of police budgets to services that strengthen the health of Black communities, including health care, education, and employment, among others. Opinion pieces placed in newspapers, scientific journals, and reputable websites are excellent vehicles for public engagement and for doing your part. In light of this suggestion, there are several productive laboratories in the United States and abroad that study the direct effects of recreational drugs on the human brain and behavior. I am friends with many of the scientists in these labs. Yet, they have remained practically silent (excepting people like Professor David Nutt), year after year, as law enforcement brazenly justify their latest acts of brutality by recounting the latest iteration of the "drug-crazed negro" myth. "In the end," Martin Luther King Jr. aptly noted, "we will remember not the words of our enemies, but the silence of our friends."

If we are serious, this time, about remedying the sickness of American racism, I expect you to earnestly consider the above proposals and act accordingly—it would go a long way in protecting Black people against police brutality. Too many centuries have passed, too many Black Americans robbed of justice, of their very lives, while the scientific community has remained mostly silent.

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