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Drug Availability and Disparities in Arrests

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DRUG AVAILABILITY AND RACIAL DISPARITIES IN ARRESTS

by

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B.S. University of Central Florida, 2014

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ABSTRACT

Racial disparities in arrests in the United States are well-documented. Particularly, young black males are arrested at inordinately higher rates than other demographics. In this research, we investigated whether an unresearched variable—drug availability—could explain these discrepancies found in the US criminal justice system. Research suggests race is an extralegal (unrelated to the law) factor associated with arrest rates. Until this study, no research has investigated whether an individuals' access to illegal drugs might be related to likelihood of being arrested. If illicit substances might be more easily obtained by individuals of a specific race, could this explain inequalities in arrest rates? We hypothesized in alignment with contemporary literature, that drug availability could not explain these discrepancies, and are more so associated with racial biased policing and reporting of crimes. To answer our research question, we analyzed nationally representative data from the 2016 National Survey on Drug Use and Health. Results show drug availability cannot explain racial discrepancies in arrests. While our research found that presence of outdoor, illegal-drug markets were strongly associated with higher arrest rates, race was independently associated with higher arrest rates among the black population. This research contributes to scientific literature that suggests the US criminal justice system acts with racial bias, in that black people are arrested at inordinately higher rates than white people because their skin color.

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INTRODUCTION

The rate at which individuals are arrested in the United States (US) is nearly fivefold that of the global incarceration average of 144 per 100,000—and it rests at 716 per 100,000—nearly more than Russia and Iran’s per-capita totals combined (Wamsley, 2013). In addition, the racially discriminatory nature of these arrests is well-documented; while whites are arrested at a rate comparable to Iran’s arrest rates, at approximately 272 per 100,000, black individuals are arrested nearly tenfold the global incarceration mean, at a rate of 1,408 per 100,000 (Nellis, 2016). Prominent race scholars and lawyers alike—such as Joe Feagin (2006) and Michelle Alexander (2010)—have suggested this racially disproportionate policing is a form of systemic racial social control that parallels Jim Crow segregation.

Since Richard Nixon coined the War on Drugs, many subsequent presidents have followed suit, aggressively exacerbating the prison boom that came along with it. Research also suggests the prison boom is the result of arresting nonviolent drug offenders (Nellis, 2016; Taxy, Samuel, & Adams, 2015). According to statistics reported by the Federal Bureau of Prisons, in October of 2017, half of all incarcerated individuals were charged with drug crimes. One study even found that 88% of individuals arrested for drug crimes are charged with possession, and one-third of those charged with a possession violation had no prior criminal history (Taxy, Samuel, & Adams, 2015). Even though data obtained from the National Survey on Drug Use and Health (NSDUH) indicates varying races ingest drugs at statistically similar rates—with white, young adults ingesting the most of any racial cohort (Center for Behavioral Health Statistics and Quality, 2015).

While academic literature largely suggests this discrepancy is associated with racial bias in the US Criminal Justice System (CJS; Gase et al., 2016; Koch, Lee, & Lee, 2016, Kahn & Martin, 2016; Fielding-Miller, Davidson, & Raj, 2016; Mitchell & Caudy, 2015; and Mitchell & Caudy, 2017)—little research has examined whether this racial disparity can be explained by availability of drugs, which is the focus of this research. Because varying races ingest illicit substances at comparable rates, racial discrepancies in arrests might be explained by greater availability of drugs in black communities—however, given the state of contemporary literature on the subject, we hypothesize these disparities are not associated with greater availability of drugs.

Gase et al. (2016) found that racial disparities in youth arrests were unable to be explained by a variety of delinquent behaviors, including drug use. Mitchell and Caudy (2015) similarly found these discrepancies could not be explained by criminal behavior, nor by living in areas often policed for drug crimes. Koch, Lee, and Lee (2016) built off this by discerning drug ingestion from sales, yet results remained consistent. Research by Fielding-Miller et al. (2016) found that black individuals are at a heightened risk for drug arrest in white neighborhoods.

Mitchell and Caudy (2017) also built off their 2015 research, yet still were unable to find variables associated with disparities in arrests besides race. While these studies (and more) have not found variables associated with these racial inordinacies, they also do not investigate the availability of drugs, which is the unique contribution we aim to make with this research. Even if the consequences of arrests are similar for black and white individuals, the agglomerate ramifications experienced by black communities still garner considerable exigence due to the inordinacy of the predicament.

The soon-to-be-discussed health and social risks associated with arrests are vast and well-understood—and will be viewed from the lens of incarceration. To begin, evidence suggests prisons have become iatrogenic to an individual’s health rather than rehabilitative (APA, 2014; Petersilia, 2013). Individuals who are incarcerated experience infectious disease at a factor ranging from 4-10 times the population—depending on regional factors (Massoglia & Pridemore, 2015). In addition, Massoglia and Pridemore (2015) found inmates are at a heightened risk of mortality in prison by a factor of 12. Furthermore, incarceration shows potential to cause significant problems at the individual level to the societal (Alexander, 2010; APA, 2014; Bannon, Nagrecha, & Diller, 2010; Dolan et al., 2016; Drucker, 2013; Kahn, 2009; Massoglia & Pridemore, 2015; Schnittker, 2007).

However, few studies on racial disparities in arrests have revealed causal factors that are conclusively associated with this disparity. This research aims to add to a growing body of scientific literature on the subject. Specifically, we aim to contribute to this body of literature by discerning whether availability of drugs can explain racial disparities in arrests. We hypothesize in alignment with a majority of contemporary research that racial disparities in arrests cannot be explained via availability of drugs, but are largely associated with race.

LITERATURE REVIEW

Racial Bias in Arrests

According to the US Census Bureau, approximately 13.3% of the US population identifies as black, and 76.9% identify as white (2016). Contrarily, according to the Federal Bureau of Prisons (2017), African Americans are vastly overrepresented in the incarcerated population, composing nearly 40% of the inmate population while whites are largely underrepresented and constitute 58% of the inmate population. Furthermore, black individuals are remarkably more likely to be arrested for any crime from a factor of 2 – 42 (Carson & Anderson, 2015; Hartney & Vuong, 2009; Sampson, 2013). In Sampson’s book *Great American City*, he researched communities in Chicago of approximately the same socioeconomic status, rates of criminality, drug use, et cetera—though the only notable difference was racial composition. Results indicated individuals in the black community were arrested at 42 times the rate of individuals in the white neighborhood, and evidence suggests this disparity is largely associated with selective policing of black neighborhoods. In addition, according to the Federal Bureau of Prisons Uniform Crime Report, half of all individuals arrested in October of 2017 were arrested for drug crimes.

Overall, research indicates that minorities—particularly black citizens—have been inordinately targeted by the racially charged war on drugs (Beckett, Nyorp, & Pfingst, 2007; Caudy & Mitchell, 2015; Caudy & Mitchell, 2017). A multi-level analysis conducted by Gase et al. (2016) discovered that arrest rates of US youth could be better explained by race than by other delinquent behaviors, such as drug use, and arrest rates for black people were significantly higher than for whites (2016). In addition, young black males are arrested more frequently than any

other racial cohort, regardless of whether or not the individual's behavior is in violation of the law (Center for Constitutional Rights, 2009; Fagan & Davies, 2000; Hemmens & Levin, 2000; Hurwitz & Peffley, 2005). Gelman, Fagan, and Kiss (2007) have corroborated findings by investigating hit rates—calculated by determining how often an individual of a certain race is arrested compared to whether or not the individual was legitimately in violation of drug laws—and they discovered that though black people were significantly more likely to be arrested, but they were less likely to have contraband, further indicative of poor hit rates and racial bias in the US CJS.

Research also suggests that black individuals are significantly more likely to be arrested for drug deliveries than white individuals, despite their comparable involvement in drug-delivering (Beckett, Nyorp, & Pfingst, 2007). Research published by Caudy and Mitchell (2015) that utilized data from the 1997 National Longitudinal Survey on Youth (NLSY97) indicates that black individuals were significantly more likely to be arrested for drug crimes when controlling for a host of delinquent behaviors, and race remained the leading predictor of being arrested for violating drug laws. Caudy and Mitchell (2017) then expanded their research using the NLSY97 to control for age, gender, socioeconomic status, and neighborhood context—and determined black individuals are 247% more likely to be arrested for drug distribution by the age of 29. This was further exemplified in nested logistic regressions on all 13 waves of the NLSY that indicate black citizens are significantly more likely to be arrested for drug distribution than whites (Mitchell & Caudy, 2017). They also found discrepancies in arrest rates between white and Hispanic individuals could be explained by crime incidence and/or regional factors, however, those between white and black individuals could not be explained by the same control factors.

Why?

It is commonly and falsely alleged that black people are more frequently arrested for drug crimes because of escalated drug use in black communities. However, evidence obtained from the National Survey on Drug Use and Health (2014), and the 1997 NLSY97 reveals that most races ingest drugs at statistically equatable rates, young white male adults are most likely to use drugs, yet they are significantly less likely to be arrested than African Americans (Center for Behavioral Health Statistics and Quality, 2015; Mitchell & Caudy, 2015; 2017).

Racial disparities in arrests have occurred since slavery was abolished in the 13th amendment of the US Constitution. And while the amendment does indeed forbid slavery, it leaves a convenient loophole which indicates involuntary servitude is illegal, “except as a punishment for crime” (US Constitution). Black individuals after the Civil War were often arrested for trivialities, which pipelined African Americans into chain gangs in exploitation of the loophole ratified (Alexander, 2010). Research suggests comparable pipelines can be seen today among black youth—commonly known as the school-to-prison pipeline which is a self-explanatory concept that illustrates how black youths enter the US CJS at an extraordinarily inordinate rate following grades K-12, or less (Blake, Perez, & Darenbourg, 2010; Wald & Losen, 2003; Welch, 2017).

While racism sustained ubiquitous popularity throughout the US CJS, from 1920 to 1970, the incarcerated population increased at a rate comparable to the general population according to the Bureau of Justice Statistics (BJS). However, after Nixon coined the ‘war on drugs’ and signed the Controlled Substance act in 1970, he set the stage for Reagan to wage cataclysmic war against drug offenders, primarily socioeconomically disadvantaged black offenders who were

thereby vilified by the media, contributing to implicit racial biases (Alexander, 2010). In 1982, a mere 2% of the US identified drug use as a major threat—by the end of Reagan’s presidency, a majority of citizens believed drugs to be one of the greatest threat to the US (Roberts, 1992).

Consequently, the incarcerated population doubled in Reagan’s 8-year incumbency according to the US BJS, and proceeded to burgeon throughout the presidencies of his successors (The Sentencing Project, 2016). One of Reagan’s chief advisors, Lee Atwater, was recorded stating explicit racism violates social norms, so discriminatory practices and policy had to be abstractly framed and hidden (Pearlstein, 2012)—such as under a veil of a drug-crime problem. This euphemistic speech is commonly known as ‘law-and-order’ rhetoric, and it was appropriated by his successors through present day and is commonly used by the 45th president.

However, a new policing strategy emerged during Reagan’s incumbency, which emphasized arresting low-level drug offenders to deter future offenders and large-scale offenses, which research suggests is empirically ineffective (Geller & Fagan, 2010; Harcourt, 2001; Levin, Gettman, & Siegel, 2010). Since 1970, the incarcerated population has grown by more than tenfold and prisons have remained at 99% capacity for the past decade as privatized prisons profiteer off mass incarceration (Calmont, 2013). When the Federal Byrne Grant Program was initiated to incentivize even low-level drug arrests, it also authorized law enforcement to seize assets of individuals suspected of drug crimes, catalyzing the prison boom. Racial disparities can also be observed in sentencing disparities, for example, crack offenders—more commonly portrayed as socioeconomically disadvantaged black people in the media—were sentenced 100 times the duration of cocaine offenders who were more commonly portrayed as affluent whites.

According to race scholars such as Michelle Alexander (2010) and Joe Feagin (2006), subjugation of African Americans is historically engrained into the foundation that the US was built upon—beginning with our participation in the transatlantic slave trade. Their theoretical frameworks also align with Bonilla-Sylva’s theory of colorblind racism (2014)—all of which more-or-less claim it is within the best interest of whites to maintain supremacy, that is the maintenance of white dominance throughout the US sociopolitical spectrum. By doing so, whites are granted unfair societal privileges, that is gratuitous socioeconomic advantages based solely on skin color. This concept is known as white privilege and it was birthed with the social construction of race. This does not suggest all whites are white supremacists, but according to Joe Feagin’s *White Racial Framing* (2010) and Bonilla-Sylva’s theory of *Colorblind Racism*, there are general levels of racism. First there are explicit racists, whose behavior and attitudes are guided by explicit prejudice, like white supremacists. Then there are enablers, who albeit may not display brazenly explicit bigotry, they encourage it implicitly—like the 45th presidential administration of the US that has repeatedly failed to condemn or even acknowledge white supremacy as a threat, thereby emboldening them. Next, there are passive bystanders who may even advocate for egalitarianism but overlook empirical racial disparities and fail to act in a reparative manner— such as whites who openly condemn white supremacy, but have said little about the 45th’s racist transgressions. Or they may misperceive mass incarceration as a result of escalated drug use in black communities—a falsehood that serves to mitigate cognitive dissonance. Such is easier digested than cognizantly acknowledging rampant and vicious discriminatory practices utilized in the US CJS, often for nonviolent drug offenses (Nellis, 2016; Taxy, Samuel, & Adams, 2015).

In research conducted by Caudy and Mitchell (2015), they determined whether the arresting low-level offenders in myriad was an ineffective tactic of deterring future drug offenses. In addition, this research concluded racial discrepancies in drug arrests were neither associated with the severity of offenses, nor the nature of the drug crimes—but still with race. Racial bias in policing can also be framed by investigatory police stops, which occur when individuals are stopped in suspension of 4th amendment rights on the grounds the officer has probable cause, that is an articulatable suspicion that suggests a crime has been committed. This tactic is legal and often applied in law enforcement to ‘fish for drugs’ in hopes that arrests may be made (Alexander, 2010). Research on investigatory police stops in Kansas suggest that police are significantly more likely to stop black drivers for investigatory stops than whites by a factor greater than two (Epp, Maynard-Moody, & Haider-Markel, 2017), despite facts that suggest varying races commit drug crimes at statistically significant rates (Mitchell & Caudy, 2015; 2017).

Beckett, Nyorp, and Pfingst, (2007) attributed these disparities to whites larger availability to indoor drug-delivery arenas, and heavier, selective policing of outdoor arenas for blacks. Caudy and Mitchell (2017) then expanded their research using again the NLSY to control for age, gender, socioeconomic status, and neighborhood context—and determined black individuals are 247% more likely to be arrested for drug distribution by the age of 29. This was further exemplified in nested logistic regressions on all 13 waves of the NLSY that indicate black citizens are significantly more likely to be arrested for drug distribution than whites (Mitchell & Caudy, 2017). Although significant differences in arrests between Hispanics and

whites dissipated when neighborhood context was included in the model, African Americans were still significantly more likely to be arrested than whites (Caudy & Mitchell, 2017).

Research published by Mosher in 2001 found that being black is largely associated with a higher likelihood of being arrested for violating marijuana laws. Research on marijuana arrests consistently show that race is an extra-legal factor that contributes to an individual's odds of being arrested for a drug crime. Extra-legal factors are variables associated with arrests that have nothing to do with the law, and thereby should not be related to arrest rates. Furthermore, those odds are compounded if the individual resides in socioeconomically disadvantaged black community (Nguyen & Reuter, 2012). Overall, empirical evidence reveals significant racial disparities in arrests, often for drug arrests.

Communal Consequences

Because African Americans arrested at considerably higher rates than whites, black communities are considerably more likely to experience the consequences associated with being arrested. Pew Research Center found that policing and racial profiling also abrade black citizens' trust in law enforcement, which in-turn results in more racial bias and it discourages them from contacting authorities because previous negative encounters with legal authorities (Dost, 2014). However, considering all consequences, the largest difficulties associated with arrests likely are associated with incarceration, and research conducted by Schnittker and John (2007) suggests the simple act of being incarcerated bears greater significance than the duration of the sentence.

Prisons purport to be rehabilitative, however, research indicates they are rather iatrogenic as they have become increasingly punitive (APA, 2014; Petersilia, 2013). Schnittker and John's

2007 research also indicates individuals are at significantly escalated risk of chronic illness upon release. In addition, prisons are breeding grounds for both bacterial and viral infectious diseases and occur at a rate up to tenfold that of the general population (Massoglia & Pridemore, 2015). Furthermore, black communities are already at escalated risk of HIV (CDC, 2016), and are exposed to exponentiated risk upon incarceration (Gough et al., 2010), which thereby proposes risk of spreading infection to the communities that which they return to (Johnson & Raphael, 2009; Green et al., 2012). Massoglia and Pridemore discovered that odds of mortality increase by a factor of 12 for inmates, and 3 for ex-inmates (2015). Research published by Dolan et al. indicates a significant, fourfold increase in risk of being infected by hepatitis C as well (2016).

Ex-inmates also face increased risk of major psychological disorders (such as schizophrenia) by 25% (APA, 2014). Additionally, research published by Hatzenbuehler (2016) revealed escalated risks of incarceration that extend beyond the individual level to the communal and discovered high communal rates of incarceration were associated with increased rates of major depressive disorder and general anxiety disorder. This research also indicated high communal rates of incarceration garnered significant potential to erode social capital—which are considered to be necessary social networks humans rely on that are integral to well-being.

In the US, individuals arrested for drug crimes also face myriad forms of discrimination when re-entering society, and for many, their ‘debts’ will never be paid, neither literally nor figuratively (Alexander, 2010). As society has become increasingly indoctrinated by neoliberal, ‘boot-strap’ ideologies, the populace becomes increasingly vulnerable to correspondence bias, also known as the fundamental attribution error, by overemphasizing internal facets that influence outgroup errors and overlooking external factors that contribute to outgroup strife—‘It

was their decision to do drugs; they made their bed, and now they must sleep in it'. It is a far more placating conception than acknowledging omnipresent social inequalities and racially charged oppression that lends to mass incarceration. But when individuals are collectively label criminals, they are thereby dehumanized and branded with a scarlet letter that permits discriminatory practices that would not otherwise be morally justifiable.

It is not uncommon for ex-offenders to leave prison with little more than their clothes and they may no longer have a home to return to, and it can be significantly difficult to find one. Legislation ratified during the Clinton administration in 1996, known as the 'one-strike law', permanently barred (often-black) drug offenders from obtaining public housing. In 2002, the US Supreme Court decided that individuals that are simply suspected of drug crimes may legally be evicted by public housing authorities (*Rucker v. Davis*, 2002). In many states, drug criminals may also be disenfranchised from participating in the political process to challenge the system that marginalized them by having their voting rights revoked. Many colleges ask whether prospective students have committed a crime of any sort and perform background checks that decimate an ex-drug offenders odds of attaining higher education. The same goes for those seeking employment—which ex-offenders are regularly expected to achieve to satisfy constituents of their parole (Alexander, 2010). In 2002, Hozer, Rafel, & Stoll conducted research that revealed a mere 25% of employers would even consider hiring a black male who was arrested for a drug crime, and only 5% would consider hiring an ex-drug felon. Research published by Pager in 2003 suggests that when stereotypically black names were used in job applications, they were no more likely to be hired than individuals with stereotypically white names that confessed to a drug felony with all other variables remaining constant. Ergo, evidence

suggests that gaining employment as a black male arrested for a drug crime can seem like a Sisyphean task because employment is routinely necessitated by parole, and should ex-inmates violate parole, they could be fined into abysmal financial despair. Overall, African American drug offenders can be hurdled into an inescapable vicious cycle of relentless subjugation they may never escape.

The granularity at which discrimination is experienced disproportionately by black individuals in the war on drugs is unparalleled by racial bias in law enforcement of any other developed nation, and of most nations we identify as oppressive or authoritarian. Race is an extra-legal social construct, therefore it should not be predictive of criminal behavior in a nation that professes egalitarian moral paradigms. However, most contemporary social research suggests that the US CJS is oppressively racially biased, and black individuals, especially young black men, are considerably more likely to be arrested for drug crimes when other variables are held constant. However, this research addresses an under-researched aperture in scientific literature on racial disparities in arrests.

Current Study

This research was designed to investigate the relationship between drug availability and arrest rates. When drugs are accessible with ease, one might presume greater odds of crime and arrest rates. However, this had not yet been tested with scientific scrutiny. We specifically investigated whether easier access to drugs might explain racially disparate arrest rates in the US. However, in alignment with research on racial disparities in arrests, we hypothesize accessibility to drugs does not significantly contribute to these discrepancies, and they are racially biased.

METHODS

Data

In this study, data were secondarily sourced from the 2016 National Survey on Drug Use and Health (NSDUH). This 50-state, nationwide survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMSHA) in the US Department of Health and Human Services—they administer the survey, collect data, analyze it, and report their findings. The survey is approved by Section 505 of the Public Health Services Act that requires annual surveys to gauge civic drug consumption, identify patterns, correlates, trends, and to identify vulnerable populations. It is designed to provide educators, drug-prevention agencies, therapists, researchers, etc. with accurate information about drug consumption.

Households are selected by means of random stratified sampling—with states composing the first level of stratification. Each state was then divided into equally populated regions, census tracts are selected within these regions, census blocks within tracks, area segments composed of census blocks, and dwelling units are selected from these segments. Once a household is selected, it cannot be replaced for it is representative of thousands of others. SAMSHA aims to collect data from approximately 70,000 individuals (aged 12 and above). After a household is selected, a professional field interviewer asks questions in-person to validate resident eligibility. If eligibility is verified, the survey is administered—most of which is privately completed on a computer—and the respondent is thereby rewarded \$30.00 for participating. The interview takes approximately an hour on average, and results are stored confidentially. The weighted response rate for 2015 was 69.25%.

Dependent Variable

Past-year Arrests. Whether or not an individual had been arrested in the previous year was determined by a single item in the NSDUH, worded as follows: “Not counting minor traffic violations, how many times during the past 12 months have you been arrested and booked for breaking a law?” (NOBOOKY2). Responses included yes (1, 2, or 3 or more times), don’t know, and no. Only answers that distinctly reveal whether the individual had been arrested were analyzed; all other responses were coded as missing. Responses were then dichotomized to indicate whether the individual had been arrested at least once in the past year, with 1 indicating they had, and 0 indicating they had not. A logistic regression was used to identify racial disparities in arrests.

Independent Variables

Race. The participant’s race/ethnicity was identified by a single, self-reported item on the NSDUH (NEWRACE2). Only data from participants who reported as 1) NonHispanic white, 2) NonHispanic black, and 7) Hispanic were utilized—with 7 recoded as 3. All other responses were coded as missing because there were too few responses for a reliable analysis.

Drug availability. Illegal drug availability was determined by use of 4 items that illustrate participants’ access to marijuana (DIFGETMRJ), LSD (DIFGETLSD), cocaine (DIFGETCOC), crack (DIFGETCRACK), and heroin (DIFGETHER). The responses were solicited as follows: “How easy would it be for you to get some [DRUG NAME] if you wanted some?” Responses for each individual question are indicated on a 5-point Likert-type scale with responses including: 1) probably impossible, 2) very difficult, 3) fairly difficult, 4) fairly easily, and 5) very

easy. Coding remained consistent with the NSDUH and responses for each individual drug were combined to produce a composite score—with higher scores reflecting greater availability. All other values were coded as missing.

Market Presence. The participant’s access to outdoor drug markets was determined using a single item on the NSDUH. The question asks, “In the past 30 days, has anyone approached you to sell you an illegal drug?” Yes responses were coded as 1, and no responses as 0—all other values were coded as missing.

Controls

Past-year Illegal Drug Use. Participant drug use over the past year was identified as follows: “Now think about the past 12 months, from [DATE ONE YEAR PRIOR] through today. We want to know how many days you’ve used [DRUG NAME] in the past twelve months” (MRDAYPYR, CCDAYPYR, CRKYRTOT, HERYRTOT, HALLUCYFQ). The participant decided whether they would like to answer in days per week, month, and year, then the total was calculated based on how they chose to answer with responses ranging from 1-365 days. Only responses for drugs other than alcohol and marijuana (which were treated as independent controls) were utilized. Responses were then dichotomized so that any qualifying drug consumption was coded as 1, indicating the participant had consumed drugs illegally, and with 0 indicating they had not. All other values were coded as missing.

Heavy Drinking. Heavy drinking was determined by an item (HVYDRKMON) that asks whether the participant has had 4-5 more drinks (for females & males, respectively) on the same

occasion at least 5 days in the month. Responses were dichotomized, so that 1 indicates whether an individual is a heavy alcohol user, and with 0 indicating they are not.

Marijuana Only. We used an item that identifies when the only drug a participant had reported consuming in the past year was marijuana (MJONLYYR). Responses were coded consistent with the NSDUH: 1 identifies exclusive marijuana consumption; 0 indicates the respondent either did not consume any drugs or had ingested illicit drugs other than marijuana.

Past-year Drug Sales. This item established whether the participant had sold illegal drugs in the past year (SNYSELL) and was worded as follows: “During the past month how many times have you sold drugs illegally. Responses were coded so that 1) indicates 0 times, 2) one or two times, 3) three to five times, 4) six to nine times, and 5) ten or more times.” These responses were dichotomized with 1 reflecting the participant had sold drugs illegally in the past year, and 0 indicating they had not. All other values were coded as missing.

Past-year Theft. This item was designed to identify whether participants have engaged in a robbery crime in the past year (SNYSTOLE) and was worded as follows: “During the past 12 months, how many times have you stolen or tried to steal anything worth more than \$50?”. Responses were coded and recoded the same as the previous measure.

Past-year Violence. This item was established to ascertain whether a participant had engaged in a violent crime within the past year (SNYATTAK), worded as follows: “During the past 12 months, how many times have you attacked someone with the intent to seriously hurt them?”. Responses were coded and recoded consistent with the previous measure.

Depression. This item discerns whether or not the respondent endured a major depressive episode in the former year (AMDEYR). Participants were considered to have endured one if they reported experienced at least 5 of the 9 clinically defined criteria symptomatic of a major depressive episode.

Sociodemographics. The following sociodemographic variables inquired about that will be controlled for include age (CATAG3), gender (IRSEX), education (EDUHUGHCAT), income (IRFAMIN3), geographic residence (COUTYP4), and marital status (IRMARIT).

Procedure

Data from the NSDUH were downloaded from SAMSHA's webpage and imported into Stata for recoding and statistical analysis. The variables were analyzed in a series of 5 logistic regressions. The initial model contained the past-year-arrests variable and race as an independent variable, in addition to sociodemographic and major-depressive-episode controls. The following model controlled for drug sales, theft, and violence to establish whether race maintained a significant extra-legal predictor of arrests, independent of criminal activity. In the third, the following drug-use variables were controlled for to see if race remained independently significant: marijuana only, heavy drinking, and other illicit drug consumption. In the fourth, our independent variables were added to the general model to determine whether drug availability could explain racial disparities in arrest rates. In the fifth and final model, all variables were then analyzed in a final logistic regression to determine whether race remained a significant extra-legal factor in the presence of both the independent and control variables.

RESULTS

For the purposes of this study, the past-year arrests (PYA) variable was utilized as the dependent variable, rather than past-year drug arrests (PYDA), because there were not enough respondents to the PYDA measure to calculate representative statistics and were thereby omitted from analyses. In this sample, 1.9% of respondents reported they had been arrested (SD: 0.14). All other descriptive statistics can be found in Table 1:

Table 1: Descriptive Statistics

Variable	Obs.	Weight	Mean	Std. Dev.	Min.	Max
Past-year Arrests	56,237	266471989	0.0193	0.1376	0	1
Past-year Drug Arrests	56,324	267161652	0.0029	0.0537	0	1
Drug Availability	53,246	250057699	12.1224	5.5863	5	25
Market Presence	56,779	268941564	0.0563	0.2305	0	1
Marijuana Only	56,897	269430135	0.0911	0.2878	0	1
Other Drugs	56,897	269430135	0.0898	0.2858	0	1
Heavy Drinking	56,897	269430135	0.0606	0.2387	0	1
Depression	42,134	241724957	1.9332	0.2496	0	1
Drug Sales	42,428	241724957	0.0152	0.1223	0	1
Theft	42,449	243522835	0.0089	0.0941	0	1
Violence	42,472	243653473	0.0094	0.0963	0	1

To establish whether drug availability and market presence were associated with racially inordinate arrest rates, a series of 5 logistic regressions were conducted. The baseline model (Table 2) indicates that of sociodemographic controls, including depression, that black individuals have significantly greater odds of being arrested than whites (AOR: 1.57)—

corroborating contemporary literature that suggests race is an extra-legal factor that is strongly associated with being arrested. However, no significant associations were found for Hispanics.

Table 2: Baseline Model Logistic Regression

Past-year Arrests	Odds Ratio	Std. Error	T	p> t	[95% Conf. Int]	
wbh						
2	1.5714	0.1811	3.92	0.000**	1.2466	1.9807
3	0.903	0.1342	-0.69	0.494	0.6696	1.2167
Age	0.6791	0.026	-10.15	0.000**	0.6291	0.7332
Gender	2.9437	0.2574	12.35	0.000**	2.4695	3.509
Education						
2	0.6436	0.0727	-3.90	0.000**	0.5129	0.8076
3	0.5078	0.5320	-6.47	0.000**	0.4115	0.6268
4	0.1722	0.0315	-9.62	0.000**	0.1193	0.2487
Employment	0.8082	0.8112	-2.12	0.039**	0.6605	0.9889
Income	0.9060	0.0227	-3.93	0.000**	0.6605	0.9529
Marital Status	0.5237	0.0760	-4.46	0.000**	0.3914	0.7009
Geographic Residence						
2	1.205	0.1252	1.79	0.079	0.9778	1.4844
3	1.0125	0.133	0.09	0.925	0.7773	1.3189
Depression	1.8452	0.2231	5.07	0.000**	1.4474	2.3523
Cons.	0.1048	0.0188	-12.57	0.000**Z	0.0731	0.15033

Next, we introduced three variables to control for criminality associated with drug sales, theft, and violence. As hypothesized, black people faced greater odds of being arrested than whites, irrespective of criminality (AOR: 1.56). Of the criminal-activity variables, drug sales was

found to be strongly associated with PYA (AOR: 1.59), as were theft crimes (AOR: 1.72), however, violent activity failed to achieve a significant association with PYA.

In the third model, three drug-consumption variables were added to discern whether intake could explain variance in arrest disparities. Each drug-use variable was significantly associated with greater odds of PYA, however, so was race. Results show black individuals were again significantly more likely to be arrested than whites (AOR: 1.82). Other illicit drug use had the strongest association with PYA of the consumption variables (AOR: 5.05), followed by marijuana consumption (AOR: 1.97), then heavy alcohol use (AOR: 1.52).

In the next model, we added our independent variables: drug availability and market presence. As hypothesized, neither explained racial disparities in PYA between black and white individuals, the former of whom had significantly greater odds of being arrested (AOR: 1.41). However, these variables were indeed associated with higher likelihood of PYA as anticipated. Drug availability was slightly but significantly associated with arrest rates (AOR: 1.02), however, drug-market presence was more strongly associated with PYA than any other variable in the model (AOR: 3.77).

All variables were included in the final logistic regression (Table 3). As hypothesized, race was strongly associated with PYA. Black people had significantly greater odds of being arrested than whites (AOR: 1.68). Overall, both drug sales (AOR: 1.23) and theft (AOR: 1.56) maintained significant associations with PYA—as did marijuana consumption (AOR: 1.75) and heavy drinking (AOR: 1.46). The strongest associations with PYA were market presence (AOR: 2.43) and other illicit substance use (AOR: 3.65). Drug availability was determined to be insignificant in the final model.

Table 3: Research Model Logistic Regression

Past-year Arrests	Odds Ratio	Std. Error	T	p> t	[95% Conf. Int]	
wbh						
2	1.676	0.2090	4.14	0.000**	1.305	2.153
3	1.1157	0.1686	0.73	0.472	0.8238	1.5111
Age	0.810	0.3543	-4.82	0.000**	0.7416	0.8841
Gender	2.3399	0.2229	8.92	0.000**	1.9324	2.8334
Education						
2	0.6619	0.0848	-3.22	0.002**	0.5117	0.8561
3	0.4968	0.0577	-6.03	0.000**	0.3934	0.62723
4	0.1841	0.0367	-8.50	0.000**	0.1234	0.2747
Employment	0.7678	0.8596	0.022	0.6131	0.9614	0.9889
Income	0.9197	0.0236	-2.36	0.002**	0.8735	0.9683
Marital Status	0.6674	0.1091	-2.47	0.017	0.4806	0.9267
Geographic Residence						
2	1.2540	0.1452	1.95	0.056	0.9937	1.5882
3	1.1890	0.1744	1.18	0.243	0.8856	1.5963
Depression	1.262	0.1713	1.71	0.093	0.9608	1.6575
Drug Sales	1.2331	0.5637	4.59	0.00**	1.1250	1.3518
Theft	1.5638	0.1904	3.67	0.001**	1.2246	1.9970
Violence	0.9486	0.1904	3.67	0.001**	1.2246	1.9969
Marijuana Only	1.7494	0.2428	4.03	0.000**	1.329	2.3119
Heavy Drinking	1.4558	0.2147	0.21	0.032**	1.0345	2.0486
Other Drugs	3.6467	0.4447	10.61	0.000**	2.8546	4.6587
Drug Availability	1.0038	0.0079	0.48	0.632	0.9881	1.0198
Market Presence	2.426	0.2246	9.57	0.000**	2.0144	2.9218

DISCUSSION

As hypothesized, evidence indicates racial disparities in arrest rates cannot be explained accessibility to illicit drugs. Our findings too suggest racial bias in US law enforcement can much better explain the discrepancies in arrest rates between black and white individuals in the US—as suggested by Gase *et al.*, 2016; Koch, Lee, & Lee, 2016, Kahn & Martin, 2016; Fielding-Miller, Davidson, & Raj, 2016; Mitchell & Caudy, 2015; and Mitchell & Caudy, 2017. Although availability was significantly associated with arrests—it was weak.

This is hypothesized to be associated with variances in settings which drugs are sold. While some may have the privilege of dealing behind closed doors, socioeconomically disadvantaged black individuals who are commonly targeted in the war on drugs may not (Beckett, Nyorp, & Pfingst, 2007; Caudy & Mitchell, 2015; Caudy & Mitchell, 2017). In this study, outdoor market presence was strongly associated with PYA, corroborating findings of Beckett, Nyorp, and Pfingst (2007) that suggest vendors in socioeconomically disadvantaged public space are more likely to be black, and more likely to be arrested—it is much easier for police to patrol open markets than it is for them to obtain search warrants.

Overall, the results of this study contribute to a growing body of literature that indicates race is very likely an extra-legal factor associated with higher risks of being arrested, which as delineated, can have detrimental consequences on an individual's life. The fact that black people are arrested more often than white people—even when controlling for criminal activity, drug use, drug availability, psychological, and demographic factors—is largely indicative of racial bias in the US CJS. Our study is unique in that it is the first to consider whether an individual's access to drugs may explain racial disparities in arrests, however, evidence indicates they do not.

Limitations

One primary limitation to this study is that there were not enough respondents who indicated they were arrested for drug crimes to indicate whether drug availability is associated with drug related criminal charges. Furthermore, there were not enough respondents of other varying ethnicities to see whether other racial inequalities might exist between other diverse groups of people. In addition, because drug- and crime-related measures were dichotomized, there is no way to distinguish someone who may have, for example, only done drugs once in the past month, from someone who is a persistent consumer, or a repeat criminal offender—all of whom likely have widely varying likelihoods of being arrested.

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