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Assessing the Potential for Racial Bias in the Security Clearance Process

In the United States, there are more than 4 million people in the national security workforce—federal employees and private contractors performing work for the government—who either have a security clearance or are eligible for one (U.S. National Counterintelligence and Security Center, 2020). To obtain access to classified information, employees and contractors must be evaluated as trustworthy and eligible under the U.S. national security guidelines.

The federal government conducts detailed background investigations of applicants for national security positions to determine whether they should hold these sensitive positions and whether they are eligible to access classified national security information that could cause serious or exceptionally grave damage to the United States if divulged. This process assumes that each person carries some type of risk; thus, the purpose of these investigations is to determine whether that risk is great enough to warrant refusing such access and preventing that individual from holding a national security position.

In this exploratory report, we consider the security clearance process through the lens of racial justice. Specifically, we scrutinize the security clearance process to identify areas where bias might create a barrier for Black Americans seeking positions or career advancement in U.S. departments and agencies with a national security mission. While prior studies related to personnel vetting have focused on improving the efficiency of the clearance process, there has been less attention given to the roles of race, systemic racism, and human judgment factors in the security clearance process—more specifically, the extent to which racial biases and historical disparities

KEY FINDINGS

- Nowhere in the security clearance process are data on race gathered, although data on race is collected during the hiring process—a separate and distinct process from the security clearance process. To assess the potential for racial disparities using existing information would require the integration of data from these two processes, which was outside the scope of this study.

- There are societal factors (financial, drug-related, and criminal) and human judgment factors (affinity bias, confirmation bias, and statistical discrimination) that might contribute to racial bias in the security clearance process.

- As technology and automation evolve, racial bias could surface within the algorithms used in the clearance process, potentially as the result of programmer biases or historical racial differences.

- Individuals might not have a clear understanding of the data collected about them during the investigation process that inform adjudicative decisions.

affect clearance decisions and may be contributing to underrepresentation of cleared personnel from racially minoritized backgrounds.[1]

During this study, we learned that racial data are not collected from applicants during the security clearance process, which is typically conducted by an organization's security office. However, such data are collected by an organization's human resources (HR) department during the hiring process. Therefore, a disparity study to determine the outcomes of the investigation and adjudication process could only be achieved by integrating data collected in these two separate processes. To do so was beyond the scope of this exploratory study. Although it is not possible to measure racial disparities strictly from information collected during the security clearance process—without correlating it with information collected during the hiring process—a 2021 White House memorandum suggests that racial disparities likely exist: "We have fallen short in ensuring that our national workforce reflects and draws on the richness and diversity of the country it represents" (Biden, 2021). Additionally, Castleberry and Stewart, 2021, cites statistics that reflect racial disparities in representation across national security agencies.

Looking at academic literature related to racial bias and analyzing the types of information collected during the security clearance process revealed areas where racial bias may arise. However, additional research is required to determine whether and to what extent racial biases exist. The purpose of this analysis, therefore, is to identify areas where racial bias may manifest itself within the security clearance process and suggest potential mitigating actions as needed.

Need for Process Review

When organizations interview job candidates for positions, federal and state legislation place strict limits on the types of questions that interviewers can ask, the criteria employers can consider, and other aspects of the selection process. An employee who suspects that laws were violated in that process can file a charge of discrimination with the U.S. Equal Employment Opportunity Commission (EEOC) and also has the option of filing a lawsuit. When employees apply for security clearances, however, interviewers have considerable latitude in the questions that they can ask applicants in order to assess trustworthiness for national security positions; consequently, background investigations may entail lengthy interviews that delve into an applicant's citizenship, degree of communication with foreign nationals, financial obligations, marital status, and other topics that are legally off-limits in nonsensitive hiring and promotion interviews. Applicants can appeal the decision if denied a clearance—although some samples of appeals records show that the majority of appeals still result in clearance denial (Henderson, 2021). Also, just as interviewers have latitude in their questions, adjudicators have latitude in the bases for their decisions (EEOC, 1989):

> Agencies may evaluate an individual's request for a security clearance on the basis of past or present conduct or on concerns unrelated to conduct such as having relatives residing in a foreign country controlled by a government whose interests or policies are hostile to or inconsistent with those of the United States.

Because clearances are required for designated national security positions, results of the clearance interview and adjudication process can affect an individual's recruitment, hiring, retention, promotion, and ability to pursue a career in the U.S. Department of Defense (DoD) and in the broader national secu-

Abbreviations	
CE	continuous evaluation
DCSA	Defense Counterintelligence and Security Agency
DoD	U.S. Department of Defense
DOHA	Defense Office of Hearings and Appeals
EEOC	U.S. Equal Employment Opportunity Commission
HR	human resources
IC	intelligence community
ISP	investigation service provider
ODNI	Office of the Director of National Intelligence
SEAD	Security Executive Agent Directive
SF	standard form

rity community—including government contractors. Thus, even if EEOC regulations succeed in preventing individuals from minoritized racial communities from encountering questions about their national origin, marital status, or financial status when hired into an organization, security clearance applicants do face such questions during the background investigation process—with potential effects on their clearance approval, job security, and career advancement.

Although there have been calls for security clearance reforms in recent years, legislators have largely focused on the need for modernization and greater efficiency in the process. For example, the Trusted Workforce 2.0 initiative, launched by the U.S. Office of the Director of National Intelligence (ODNI) and the Office of Personnel Management in March 2018, focuses on using automation and big data to make the background investigation process more efficient, to reduce the backlog of investigations, and to move to a process of continuous vetting rather than periodic investigations. In line with this emphasis, a RAND Corporation study assessed the efficiency and effectiveness of continuous evaluation (CE) approaches to vetting and adjudication. Two key findings of that study were that (1) CE approaches are likely to be lower cost and less invasive because interviews will not be conducted every five to seven years with friends, co-workers, families, and others and (2) adjudicators will likely continue to be as interested in applicants' national origin, financial status, marital status changes, and other concerns as they were during the traditional security clearance process (Luckey et al., 2019).

There is a well-recognized need to reduce the time and resources consumed by clearance investigations; however, it is not clear what level of attention has been given to the types and appropriateness of data collected during background interviews and subsequent inquiries—and the ethical and demographic implications of that data collection. Some sources have suggested that the topics covered and questions asked in the background investigation may exclude qualified applicants from minoritized racial and ethnic backgrounds. In 2004, the authors of *The 9/11 Commission Report* found that the clearance process was obstructing the ability of the intelligence community to hire people with necessary exper-

tise, because applicants who were foreign-born or had many relatives in other countries had difficulty obtaining clearances and were even discouraged from applying to some sensitive positions (National Commission on Terrorist Attacks upon the United States, 2004).

Such exclusion is problematic not only because it is inconsistent with equal opportunity legislation and ethical principles but also because the practice may result in a national security workforce that lacks the breadth of capabilities and experiences needed for the mission. Given these concerns, there is a need for research into aspects of the security clearance background investigation process where racial bias may manifest itself.

This report presents findings from our initial exploration into the security clearance process. First, we briefly summarize the security clearance process, including the guidelines and present standards for adjudication. Second, we describe available data to determine areas for greater exploration. Third, we highlight some of the relevant literature on racial injustice in the United States related to criteria (e.g., finances and criminal background) that are evaluated during the security clearance process. Fourth, we present observations of perceived racial bias or discrimination derived largely from an online security clearance discussion board. We conclude with our observations and recommendations for individuals and government employers to take in order to reduce or prevent racial bias that may exist in this process.

The Security Clearance Process

The security clearance process investigates individuals who are applying for sensitive positions or positions that will require them to access classified information. To fill these national security positions, candidates must be evaluated as trustworthy and eligible under the U.S. national security guidelines for access to classified information. The process begins with an applicant filling out a Standard Form 86 (SF-86), a required questionnaire for national security positions. The information gathered from the SF-86 is intended to aid in the investigative process. An investigation is then initiated with an interview

by the assigned investigator of the applicant and with individuals who know the applicant. The investigation also includes record checks to confirm information provided by the applicant and to gather additional information. The information provided on the SF-86 and gathered by an investigator is then submitted to an adjudicator to determine whether the applicant is eligible for a security clearance based on the U.S. national security guidelines for access to classified information, documented in Security Executive Agent Directive 4 (SEAD-4), which we discuss in more detail in a later section. Adjudicators use these guidelines to take into account a person's mental stability, trustworthiness, reliability, discretion, character, honesty, judgment, and unquestionable loyalty to the United States and to assess whether the applicant ultimately presents an acceptably low risk of harming U.S. national security that would merit granting security clearance eligibility (ODNI, 2017). If an applicant is denied eligibility for a security clearance, they may request an appeal. See Figure 1 for a simplified diagram of the security clearance process. We describe each step of the security clearance process in more detail.

Standard Form 86

The SF-86 is the questionnaire that applicants—and employees undergoing reinvestigation—complete as the required first step in the security clearance process (U.S. Office of Personnel Management, 2016).

The form requests a broad swath of personal information about the individual, including where the applicant has lived, schools attended, employment activities, marital or relationship status, and personal and citizenship information about immediate relatives. It also asks for information about foreign contacts and activities, foreign travel, psychological and emotional health, police records, illegal drug use or activity, alcohol use, personal finances, and any association with terrorist groups or those seeking to overthrow the U.S. government by force. Once submitted, the SF-86 is provided to the investigation service provider (ISP) who will initiate the required background investigation.

Background Investigation

Background investigations for national security positions involve a combination of record checks and interviews. Once the SF-86 is provided to an ISP for action, it is generally reviewed for completeness and accuracy. Fingerprints of the applicant are collected and national agency record checks are run, which can include a request for information from a Federal Bureau of Investigation criminal repository, outreach to local law enforcement agencies where the individual has lived and worked, and credit checks. A case manager or investigator is generally assigned to verify information, collect additional information, and ensure that the fieldwork required is complete. These tasks can involve talking to references pro-

FIGURE 1
Security Clearance Process
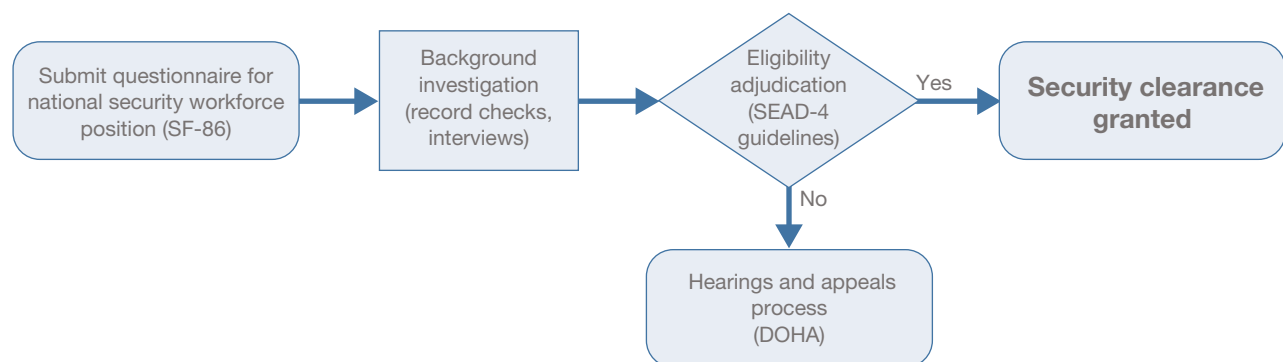
NOTE: DOHA = Defense Office of Hearings and Appeals

vided by the applicant, as well as neighbors of the various residences listed, co-workers and managers of current and prior employers, classmates, and other individuals who may emerge in the course of the investigation with relevant information pertaining to the applicant. Investigators document the information that they acquire from these interviews and fieldwork engagements. Once all required information is collected by the ISP, the entire investigation package is forwarded to the organization designated to conduct the adjudication of whether the individual is eligible for a security clearance.

Adjudication and Adjudicative Guidelines

In 2017, ODNI issued the most recent update to the *National Security Adjudicative Guidelines* in a directive referred to as SEAD-4. SEAD-4 "establishes the single, common adjudicative criteria for all covered individuals who require initial or continued eligibility for access to classified information or eligibility to hold a sensitive position" (ODNI, 2017). The personal data requested in the SF-86 questionnaire and collected in the background investigation are directly intended to inform adjudicators who judge clearance eligibility using the following 13 SEAD-4 guidelines (A–M):

A. allegiance to the United States
B. foreign influence
C. foreign preference
D. sexual behavior
E. personal conduct
F. financial considerations
G. alcohol consumption
H. drug involvement and substance misuse
I. psychological conditions
J. criminal conduct
K. handling protected information
L. outside activities
M. use of information technology.

Additionally, the document lists conditions (i.e., patterns of minor offenses) that could raise security

concerns and conditions that could help mitigate those security concerns (i.e., evidence of successful rehabilitation). SEAD-4 also emphasizes that the determination of security clearance eligibility "must be an overall common sense judgment based upon careful consideration of the [above] guidelines, each of which is to be evaluated in the context of the whole person" (ODNI, 2017). To that end, SEAD-4 advises adjudicators to consider the following factors to fully understand the potential risk that certain flagged behaviors may present:

- the nature, extent, and seriousness of the conduct;
- the circumstances surrounding the conduct, to include knowledgeable participation;
- the frequency and recency of the conduct;
- the individual's age and maturity at the time of the conduct;
- the extent to which participation is voluntary;
- the presence or absence of rehabilitation or other permanent behavioral changes;
- the motivation for the conduct;
- the potential for pressure, coercion, exploitation, or duress; and
- the likelihood of continuation or recurrence. (ODNI, 2017)

The SEAD-4 guidance, as well as the security clearance process, intentionally relies on the judgment of adjudicators to determine an applicant's eligibility, based on their assessment of the "whole person." As a result, the adjudication process is one in which human judgments are paramount. Consequently, our analysis, described later in this report, examines such human judgments involved in the adjudicative review and any systemic elements that may be factors of, and possibly contribute to, implicit biases during adjudication based on these guidelines. In particular, we found that guidelines E–J present potential areas in which human judgment—and the nature of certain data that are collected in the background investigation process to support those judgments—could lead to racial bias.

With the increased reliance on technology, it is important to consider that algorithmic bias or machine learning bias may exist and could be incorporated into algorithms that assess for risk to national security.

Appeals

Prior to formally denying or revoking a clearance, the federal agency adjudicating the case is required to provide the applicant with a written statement of reasons. This statement explains the basis for the decision and is supposed to list the specific security concerns related to the adjudicative guidelines, as well as the specific allegations of disqualifying incidents or conditions based on the investigation file. That statement of reasons is also accompanied by a letter that should explain the procedure for responding to the statement of reasons—usually a written response. An individual whose security clearance eligibility has been denied or revoked may appeal the decision. Historically, the process for doing so has differed for federal government employees (the majority of whom have appealed their decision to personnel security appeals boards) versus contractors (the majority of whom have appealed their decision through DOHA); some in the legal community have recently argued that the DOHA process is far more transparent and fair (Brown, 2021).

DOHA has regularly published documentation on these appeals cases pertaining to contractor adjudications, which we discuss in greater detail in the next section. These cases represent only a small subset of the full population of security clearance applicants, but DOHA provides a rare repository of public information on the factors considered during the appeals process. Of note, as of January 2021, DoD announced that it will streamline and consolidate the appeals process for all unfavorable security clearance eligibility hearings and appeals through DOHA, and its administrative judges will have the final say on appeals (Cohen, 2021). Since DoD conducts the vast majority of security clearance investigations and adjudications, this will mean a more consistent appeals process for the majority of security clearance applicants.[2]

Security Clearance Process Modernization

The security clearance process is modernizing to be more efficient and to make use of technology to increase the frequency and improve the accuracy of third-party data collected in the process through continuous vetting and automated record checks. Known as Trusted Workforce 2.0, the framework would shift suitability and security determinations from a one-time investigation followed by reassessments every five to ten years to an ongoing process. The data collected would generate "flags" when potentially derogatory information arose (from these automated record checks or other sources) that would then need to be either investigated and cleared or elevated in the security clearance system for adjudication of the problematic flag.

With the increased reliance on technology, it is important to consider that algorithmic bias or machine learning bias may exist and could be incorporated into algorithms that assess for risk to national security (Osoba et al., 2019). These algorithms may introduce bias that produces indications of increased risk that are systemically prejudiced because of unjustified assumptions in the machine learning process (Osoba and Welser, 2017).

Workforce Demographics and Recent DOHA Decision Patterns

In this section, we describe intelligence community (IC) workforce statistics and racial/ethnic demographics. We also discuss available data on DOHA cases. Although we were able to examine the reasons for hearings and appeals, we were not able to link cases directly to race; race data are not requested on the SF-86 or documented during the investigation, adjudication process, or appeals process. Thus, it is not possible at this time to determine whether any racial disparity exists within the security clearance process.

As required by the Intelligence Authorization Act, ODNI historically has released an annual report to Congress on security clearance determinations over the preceding fiscal year. The last publicly available report includes employees and contractors who held and were approved for security clearances at all levels and the percentage of clearance issues (i.e., denial, revocation, and incomplete information) that occurred during the clearance process. The fiscal year 2019 annual report indicates that there were 4.2 million people with security clearances, including

2.9 million people who were "eligible–in access" (i.e., they had clearances and access to classified information) and 1.3 million people who were "eligible–not in access" (i.e., they had clearances, were eligible to receive immediate access if needed, but did not currently have access to classified information) (Kyzer, 2021; U.S. National Counterintelligence and Security Center, 2020). There were also just less than 1 million (964,138) individuals who were approved for clearances following initial and periodic reinvestigations (U.S. National Counterintelligence and Security Center, 2020).

ODNI also regularly releases a report describing the demographic diversity of the IC workforce, which includes 18 organizations. In 2018, the total IC population of individuals from racially minoritized groups (African American, Hispanic, Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, or two or more races) was 26.2 percent. Specifically, ODNI reports that the percentages of IC employees who self-identified as these demographic groups were as follows:

- 12.1 percent African American
- 6.8 percent Hispanic

FIGURE 2

Number of DOHA Security Clearance Decisions, by Year
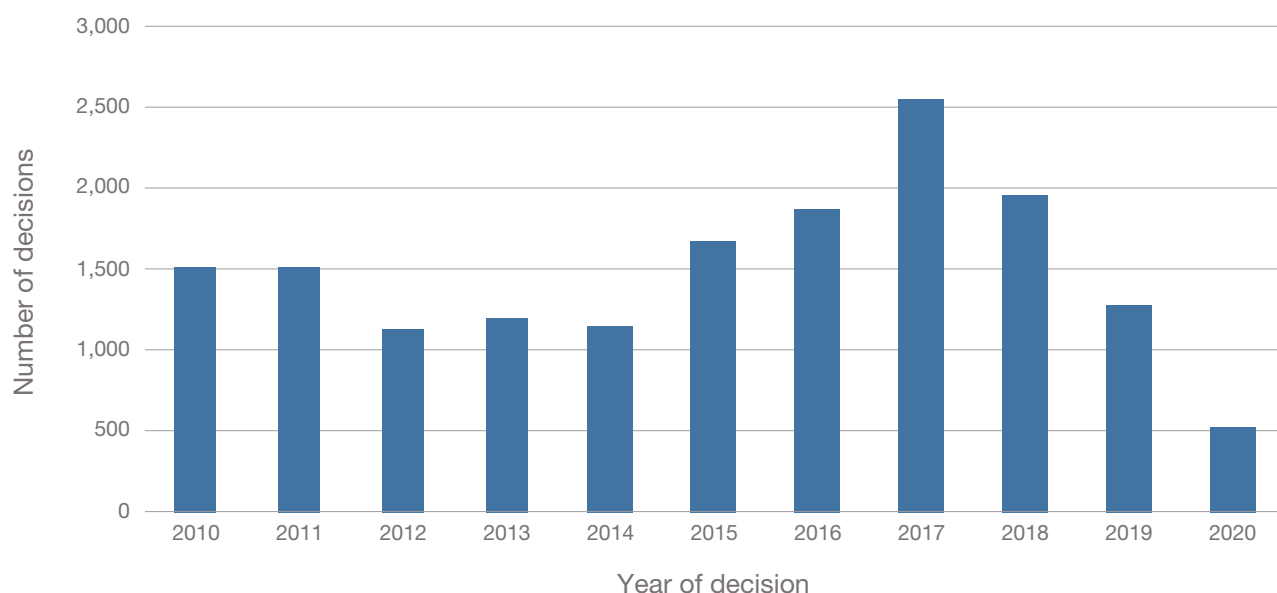
SOURCE: DOHA, undated-a; DOHA, undated-b.
NOTE: A spike in the number of DOHA security clearance decisions in 2017 was likely due to hiring 700+ additional interviewers to address backlog issues.

- 4.3 percent Asian
- 0.5 percent American Indian or Alaska Native
- 0.2 percent Native Hawaiian or other Pacific Islander
- 2.3 percent as two or more races.

As a point of comparison, in 2016, the percentage of racially minoritized employees was 36.4 percent of the federal workforce, 33.0 percent of the civilian labor force, and 38.2 percent of the U.S. workforce (U.S. Office of Personnel Management, 2018).

Number of DOHA Cases

DOHA's website resides within the Office of General Counsel at the Office of the Secretary of Defense (referred to as the DoD General Counsel) and maintains historical data on security clearance cases. As shown in Figure 2, between 2010 and 2019, the mean number of cases per year was 1,585 (standard deviation = 445), but the number of cases dropped to 530 in 2020, a reduction largely attributed to the COVID-19 pandemic (Hakamaa, 2021).

Reasons for Denial

In early 2021, Hakamaa examined the industrial security clearance case denials by DOHA in 2019 and 2020 by tallying the number of denials attributed to each adjudicative guideline (A–M; see Table 1).[3] Because a single denial decision was sometimes attributed to more than one adjudicative category, the counts in the following discussion refer to denial reasons and might not match the number of decisions shown in Figure 2. In both years, the primary reason for denial was attributed to guideline F: financial considerations. In 2019, 522 out of 1,144 denial reasons (45.6 percent) were attributed to financial considerations. In 2020, 287 out of 589 denial reasons (48.7 percent) were attributed to financial considerations. The second-most common reason for an initial denial was attributed to guideline E: personal conduct, which accounted for 211 out of 1,144 denial reasons (18.4 percent) in 2019 and 123 out of 589 denial reasons (20.9 percent) in 2020.

We were able to further analyze 57 cases from 2020 to obtain more information about reasons for

TABLE 1

Number of Security Clearance Case Denials by DOHA, by SEAD-4 Guideline Attribution

Guideline Letter	Guideline Topic	Number of 2019 Denials	Number of 2020 Denials
A	Allegiance to the United States	1	0
B	Foreign influence	135	56
C	Foreign preference	13	6
D	Sexual behavior	20	6
E	Personal conduct	211	123
F	Financial considerations	522	287
G	Alcohol consumption	61	26
H	Drug involvement and substance misuse	75	42
I	Psychological conditions	17	7
J	Criminal conduct	63	24
K	Handling protected information	14	7
L	Outside activities	2	0
M	Use of information technology	10	5

SOURCE: Hakamaa, 2021.

denial before the case data became inaccessible. Of these 57 cases, 24 were hearings (associated with a rebuttal to an initial statement of reasons), and 33 were appeals of hearing decisions (including two appeals initiated by the DoD General Counsel rather than by the applicant). The initial basis for denial was "financial considerations" in 29 of the 57 cases and was a combination of financial decisions and other reasons (personal conduct or alcohol consumption) in another ten cases. In short, the financial considerations guideline was a component in 39 of the 57 cases. Foreign influence or foreign preference was listed as a reason in seven cases, and the remainder were attributed to personal conduct, alcohol consumption, drug involvement and substance misuse, or criminal conduct. In the 24 hearings, six clearances were granted and 18 were denied. In the 33 appeals, one resulted in a reversal (favorable to the applicant); two appeals by the DoD General Counsel reversed a decision from favorable to unfavorable; and 30 decisions (unfavorable to the applicant) were sustained (i.e., these adverse decisions were affirmed). In summary, most decisions in these 57 cases were denials; most denials were due to financial reasons; and most of these decisions were sustained, even when the appeal outlined considerable efforts to resolve debts and other issues. Typically, the reasons for sustaining adverse decisions were that disagreement with the judge's weighing of the evidence was not a sufficient basis for appeal, that new evidence could not be considered on appeal, and that the negative impact of a decision could not be considered. The applicant needed to receive a reversal to establish that the judge committed a harmful error.

Race was not mentioned explicitly in the decision statements, but to the extent that societal factors related to financial challenges, involvement with drug abuse or criminal conduct, and foreign influence or preference are correlated with race, the possibility of disparate impact exists. Similarly, human judgment factors in the security clearance process could contribute to racial bias; we address these factors in the following section. Regardless, documenting the race of applicants during the security clearance process would help determine more definitively whether Black applicants receive more unfavorable clearance decisions, whether there are racial differences between those who challenge those decisions and those who do not, and whether Black applicants receive different outcomes from hearings and appeals.

Potential Factors in Which Racial Bias May Manifest Itself

With respect to granting national security clearances, it is important to recognize sources of potential racial bias and acknowledge the impact they may have on the racial diversity of the national security workforce. In this section, we discuss the historical context and human judgment factors that may play a role in shaping decisionmaking and, as a result, lower the probability that racially minoritized individuals receive security clearances. Although the SF-86 does not ask an applicant to identify their race, there are many ways in which an individual's race may become apparent in the investigative process. It could be inferred by information submitted on the SF-86 (e.g., name, hometown, organizational affiliations) or directly observed and documented (through the interview process).

Societal Factors

Historical differences in the outcomes listed here could result in racially minoritized individuals receiving denials at a disproportionate rate because the interviewer or adjudicator came into the investigative process with preconceived notions about the lack of trustworthiness of such racial/ethnic groups or with disproportional impressions on what would be required to mitigate concerns.

For example, adjudicative guideline F: financial considerations focuses on concerns that financial distress may lead to an increased risk of criminal conduct or make someone more susceptible to bribery or other threats to national security in order to gain financially. However, there are historical reasons that different financial realities exist for different races in the United States. Consider college debt. Rising college costs, parents' ability to contribute financially, and for-profit college enrollment are substantial factors in determining student indebted-

ness (Body, 2019; Houle, 2014; Jackson and Reynolds, 2013). Black students acquire more student loan debt compared with White students, owing to lower rates of historical accumulation of wealth and persistent financial instability among Black families (Kim, 2007). Although student loan debt is not limited to communities of color, it disproportionally affects Black and Latino students. For instance, according to published reports, Black college graduates owe $7,400 more on average than their White peers ($23,400 versus $16,000, as of 2016). And, a few years after graduation, this Black-White debt gap more than triples ($25,000 more, on average) because of differences in interest accrual and graduate school borrowing by Black college graduates (Ratcliffe and McKernan, 2013; Scott-Clayton and Li, 2016).

There are racial differences in levels of consumer debt as well (Ruetschlin and Asante-Muhammad, 2013; Seamster, 2019). Seamster, 2019, articulates the differences in perception of debt well: "Racial discrimination shapes who feels debt as crushing and who experiences it as an opportunity" (p. 32). Although Americans of all races have debt, the perception of whether that debt is "good" or "bad" debt often is based on the race of the debtor (Dickerson, 2004; Guzman, 2018). For example, carrying a mortgage debt is typically considered "good" debt, while credit card debt is considered "bad." These perceptions of debt and debtors are well established in the literature, and investigators, adjudicators, and judges may—like others in the general population—tend to have them.

Predatory lending is another practice that affects Black and Hispanic borrowers' credit scores and financial situations. For example, Bayer and colleagues examine the extent to which high-cost mortgage lending varies by race and ethnicity. Their paper shows that, after controlling for key mortgage risk factors, Black and Hispanic borrowers are more likely to have high-cost mortgages compared with their White counterparts. This finding would suggest that even when Black borrowers have "good" debt, their financial situations may differ from those of White borrowers because of predatory lending (Bayer, Ferreira, and Ross, 2014).

Unlike multiple felony convictions for domestic violence, debt has a more questionable connection to

negative personality characteristics (i.e., characteristics that might suggest a risk to national security). Specifically, prior research has not found a clear link between indebtedness and problems with impulse control, materialism, self-control, and self-esteem (Norvilitis et al., 2006).

Studies have documented that bankruptcy filings are much higher among Black people than among White people (Bernard, 2012; Braucher, Cohen, and Lawless, 2012; Sahiq, Ismail, and Nor, 2021). Data on the choice of bankruptcy filings also suggest that racial disparities exist. Specifically, Black people disproportionally file for the higher-cost Chapter 13 bankruptcy instead of Chapter 7 (Morrison, Pang, and Uettwiller, 2020). Furthermore, there is a persistent stigma associated with filing for bankruptcy (Efrat, 2006; Maroto, 2012). Some literature cites evidence of perceptions that people who are in need of financial relief are less trustworthy or more likely to be irresponsible (Frade, 2012) and that systemic bias may persist, contributing to the disparity seen in the national security workforce.

Additionally, historical factors have shaped the lives of White and non-White individuals differently with respect to the focus of two other adjudicative guidelines—H: drug involvement and substance misuse and J: criminal conduct. It is well established that the criminal justice system and policing strategies have disproportionally affected Black people and families in the United States (Natapoff, 2006; Roberts, 2001). The negative perception of Black people in the U.S. public derives from several factors, including the so-called war on drugs (Scully, 2002), depictions of cannabis use and users (Ghelani, 2020), and media portrayals of criminality of Black people, especially of Black men (Oliver, 2003).

We acknowledge that financial distress might affect an individual's decisionmaking capacity and their vulnerability to blackmail and that a history of drug involvement, substance misuse, or criminal conduct might indicate an unsuitable level of risk-taking and willingness to disregard laws, policies, or regulations. Nonetheless, historical context may warrant consideration when evaluating the "whole person" for risk to national security. We do not intend to suggest that adjudicative guidelines should not be applied or that the areas investigated are irrel-

evant to a risk assessment. But we do note that actual risk and perceived risk may differ among racially minoritized individuals based on historical context and persistent negative biases.

Human Judgment Factors

A large body of literature describes ways in which decisions can be influenced by individuals' biases, unconsciously or consciously. There is even evidence that individuals understand the role that bias plays in influencing decisions at large yet remain unable to recognize biases in themselves well enough to mitigate those biases in their own decisionmaking. In this section, we describe three common sources of bias that may affect investigators' and adjudicators' judgment of racially minoritized individuals during the security clearance process: affinity bias, confirmation bias, and statistical discrimination.

Affinity bias is the predisposition to show preference toward people who are more like ourselves and share similar interests and backgrounds. In the decisionmaking process, this often leads individuals to think highly of those who are in their affinity group while unintentionally thinking less of those who are not (Duster, 2008; Kairys, 2011; Quillian, 2008). It is also important to note that affinity bias is typically implicit bias, or unconscious bias, of which the individual is unaware (Greenwald, McGhee, and Schwartz, 1998; Vedantam, 2005). Affinity bias could contribute to racial bias during the investigation interview (when an applicant's race may become overtly apparent by their appearance or revealed during their responses) and could affect the level and manner of scrutiny applied by the adjudicator during the evaluation.

Confirmation bias is the tendency to process information by looking for, or interpreting, information that is consistent with one's existing beliefs (Sailors, 2020). Confirmation bias could affect the perception of evidence in the security clearance process: Evidence might mitigate concerns about some applicants, but not others, because of beliefs about people and their behaviors (or stereotypes) that are based on widely held racial perceptions.

Statistical discrimination entails using observable characteristics of individuals, such as physical traits

> Individuals understand the role that bias plays in influencing decisions yet remain unable to recognize biases in themselves well enough to mitigate those biases in their own decisionmaking.

of gender or race, as a proxy for otherwise unobservable characteristics that are outcome-relevant. For example, in the absence of direct information about an individual's productivity, qualifications, or criminal background, a decisionmaker may substitute group averages (actual or perceived) or stereotypes to fill that information void (Aigner and Cain, 1977; Blank, Dabady, and Citro, 2004). Statistical discrimination could manifest itself in the security clearance process during an investigation interview in which an investigator may have limited or incomplete information about the applicant. If an applicant's race differs from that of the investigator's, the investigator might apply assumptions based on their perceptions of the average person from the applicant's racial group. The "average" could be a biased calculation from information gathered over the years from various media. For instance, statistical discrimination may lead an interviewer to perceive a Black person as someone who is likely to have financial distress because of student loans or credit card debt. That perception in turn could lead that investigator to inquire disproportionately more about the finances of Black applicants compared with those of White applicants who have similar debt.

Although there is no direct evidence or measurement of bias currently available, biases have the

Perceptions of Bias

We used the Security Clearance Jobs Discussions board to explore, at least anecdotally, whether there were any perceptions of racial bias during the security clearance process (see ClearanceJobs, undated). Anonymous posts are written by individuals who claim to be applicants, investigators, adjudicators, and others who may be part of the security clearance process or interested in posting about the process. As of February 26, 2021, there were more than 4,000 discussion threads within the "Security Clearance Q&A" category of the discussion board. These posted comments, however, are not generalizable and, due in part to the anonymity of their authors, should not be considered as representative. In fact, they may contain biases of their own. Nevertheless, the discussions board is informative and provides a glimpse into possible perceptions of racial bias in the security clearance process.

Our analysis included a search of the discussion threads on the discussion board. A discussion thread could contain more than one post by more than one author. The racial identity of the author is not known unless stated, and the anonymous nature of this discussion board did not offer any direct means to assess racial identity. We searched the discussion threads for any text with selected key terms that focused on race or discrimination (e.g., "raci-st/sm/al," "unfair," "prejudice/d," "bias/ed," and "discrimina-te/ted/tion"). A subset of 82 discussion threads resulted. None of the authors of the posts self-identified their racial identity or their role in the process (i.e., applicant, interviewer, adjudicator, employee). Results from our review of the texts of these posts indicated that more than half of them could be classified as perceptions of bias in the security clearance process, because they often mention regulations or laws against discriminatory practices and biases that should apply to individual scenarios discussed in a thread. Of the 82 posts that we exam-

potential to shape the attitudes and, ultimately, the decisions of investigators and adjudicators during the process of determining trustworthiness and risk to national security.

ined, 49 contained at least one of our key terms of racial discrimination. Specifically, "race" was mentioned in five posts, 13 contained the term "unfair," seven had "prejudice," ten had "bias," and 14 had "discrimination."

In the posts that we reviewed, the primary concern related to clearance denial (e.g., receipt of a statement of reasons) or delays in case processing. When the post related to denials, the authors of the posts reported that their cases were determined to present insufficient evidence to mitigate the determination. Another concern that the posts revealed was related to denials about "trustworthiness of the applicant" and that the "appeals decision did not take into consideration new information" to reverse the adjudicative decision (ClearanceJobs, undated).

These posts suggest that there are at least some perceptions among participants that bias occurs in the security clearance process. However, it is unclear whether the generic bias terms were related to race, particularly without knowing the racial identities of the authors of these posts. Additionally, the use of an anonymous discussion board to question or express concerns with the process suggests to us that education on the process and the data collected from interviews could be helpful in mitigating perceptions of bias.

Observations and Recommendations

The DoD's Diversity, Equity, and Inclusion Statement stresses the importance of having a workforce that represents the diversity of the United States (DoD, Office for Diversity, Equity, and Inclusion, undated). Considering projections that the U.S. population will become even more diverse over time (Vespa, Medina, and Armstrong, 2020), reviewing areas where bias could manifest itself and acting to reduce or prevent bias could help efforts to ensure that the DoD and broader national security workforce become more representative of the U.S. population. The areas that we have identified where racial bias could manifest itself require further data and study to determine whether and to what extent racial disparities exist in the security clearance process and whether racial discrimination contributes to those racial dispari-

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ties (if found). To this end, we suggest the following actions to enhance transparency and data collection, ensure training and oversight, and increase awareness of the nature of data collected during the application process.

Transparency

To our knowledge, race data are not gathered during the security clearance process, which is generally coordinated by an organization's security personnel, although race data are collected as part of the separate hiring process conducted by an organization's HR department. Thus, existing information cannot be used to determine whether any racial disparities exist during the security clearance process (e.g., in the number of applicants or among those who receive denials) without integrating these two sets of data.

- We recommend collecting data on the race of applicants *during the security clearance process* to determine whether racial disparities exist in the submission of an application, completion of an interview, adjudication, or appeal decision. If any disparities exist, further analysis should be conducted to determine whether actual or perceived discriminatory actions contribute to those disparities. Collecting race data during the security clearance process could help expedite the identification of possible discriminatory areas in the security

clearance process and help decisionmakers to determine whether federal legislation would be a remedy, similar to the Home Mortgage Disclosure Act to address racial discrimination in the mortgage application process.

Also, as we were conducting this research, key portions of the DOHA website, which provides valuable and detailed information about the appeals process, became inaccessible in early March of 2021. DOHA noted that the website was experiencing issues and was not able to restore access to hearing and appeal decisions for months.

- We recommend prioritizing the maintenance of this important website to ensure its accessibility.

Training

We found that there are areas in which racial bias might manifest itself within human judgments and decisionmaking. Through possibly no fault of their own, because many human judgments are unconsciously applied during decisionmaking, investigators and adjudicators may be susceptible to bias arising from common human judgment factors (affinity bias, confirmation bias, and statistical discrimination) or historical racism.

- We recommend ensuring that training is in place for investigators and adjudicators to

recognize and mitigate any biases that might correlate to unjustifiable associations of race with an increased risk to national security.

- We recommend conducting an independent assessment to review a subset of applications to determine whether racial bias might have affected their outcomes.

Awareness

The security clearance process is modernizing to be more efficient and make use of technology for efficiency through continuous vetting and automated record checks. As technology and automation evolve, there might be areas where racial bias could surface within the algorithms because of programmer biases or historical racial differences.

- We recommend that governmental organizations responsible for oversight and accountability should be cognizant that algorithmic or machine learning models can reflect the biases of organizational teams and societal factors.

Also, our interpretation of the posts on the discussion board leads us to conclude that individuals may not have a clear understanding of the data collected about them during the investigation process that inform adjudicative decisions.

- We recommend that applicants request their security clearance investigation records. They can do so through the agency that conducted the investigation. For most clearance-holders, this request would be made through the Defense Counterintelligence and Security Agency (DCSA) because it conducts the investigations for the DoD workforce and 95 percent of the federal government, including 105 U.S. departments and agencies. Individuals can request a copy of their investigation records through a request to the DCSA Freedom of Information and Privacy Office for Adjudications (see DCSA, undated).

Notes

[1] The use of the term *minoritization* recognizes that systemic inequalities, oppression, and marginalization categorize individuals as a "minority" status instead of by their characteristics. These systems sustain the overrepresentation and dominance of historically privileged social identities (Harper, 2009; Hoffman and Mitchell, 2016). We have elected to use the term *minoritized* as scholars in higher education do to acknowledge that the concept of minority status is socially constructed (Benitez, 2010; Stewart, 2013).

[2] Cases outside DoD would be handled through the appeals process of the department or agency that adjudicated the eligibility decision.

[3] A caveat is that some cases have multiple issues. In our analysis, we determined that, in cases with multiple issues, Hakamaa counted a denial in more than one category of the adjudication guidelines, as the count across categories totaled 589, which exceeded the total of 530 cases heard. Of note, the count across categories in 2019 totaled 1,144 less than the 1,280 heard; one factor contributing to this difference could be that some cases did not lead to denials. We were not able to verify these counts because the website with industrial security clearance cases had broken links as of early March 2021. (We contacted DOHA in early March 2021, late April 2021, and again in late June 2021 and were told the website was having issues that the organization was working to resolve.)

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About This Report

In this exploratory report, the authors consider the security clearance process through the lens of racial justice. They identify areas where bias might create a barrier for Black Americans seeking positions or career advancement in U.S. departments and agencies with a national security mission. The authors describe societal factors (financial, drug-related, and criminal) and human judgment factors (affinity bias, confirmation bias, and statistical discrimination) that may contribute to racial bias. They recommend areas for improvement and further exploration in transparency, training, and awareness of bias.

The research reported here was completed in August 2021 and underwent security review with the sponsor and the Defense Office of Prepublication and Security Review before public release. The 2021 report was revised and reissued in August 2022 to clarify that although nowhere in the security clearance process are data on race gathered, data on race is collected during the hiring process—a separate and distinct process from the security clearance process. To assess the potential for racial disparities using existing information would require the integration of data from these two processes, which was outside the scope of this study. This version of the report also updates a data source citation and includes additional clarifying caveats to indicate that some data sources included in the report are of a more anecdotal nature and not generalizable.

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