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Sociodemographic disparities in everyday discrimination among a national sample of adults in the United States, 2023

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ABSTRACT

Objective: Discrimination is a social determinant contributing to health inequities in the United States (US). This study investigated the prevalence of, and sociodemographic disparities in, perceived everyday discrimination among a national sample of US adults.
Methods: We used data from the 2023 National Health Interview Survey (n = 27,538) and estimated the prevalence of three perceived everyday discrimination outcomes (1) any discrimination, (2) unique components of the discrimination experience, and (3) the Everyday Discrimination Scale (EDS) (range: 0–20) overall and by age, sex assigned at birth, race and ethnicity, sexual orientation, educational attainment, income-to-poverty ratio, and urban-rural status.
Results: Over half of US adults experienced any discrimination (55.8 %), and the most common form of perceived discrimination was being treated with less respect (45.2 %). Adults who were younger (aged 18–44), female, non-Hispanic Black, sexual minority, some college-educated, low income, or urban-living generally reported higher discrimination. For example, among the sample, non-Hispanic Black (vs. non-Hispanic White) (OR: 1.61, 95 % CI: 1.44–1.81) and sexual minority (vs. heterosexual) (OR: 2.48, 95 % CI: 2.12–2.90) adults had the highest odds of any discrimination and EDS scores (β: 1.38 (95 % CI: 1.17–1.59) and β: 1.65 (95 % CI: 1.35–1.94), respectively). The odds of perceived discrimination varied in magnitude by specific experience; for example, sexual minority adults had the highest odds of being threatened or harassed (OR: 2.93, 95 % CI: 2.52–3.42).
Conclusions: Perceived everyday discrimination is prevalent and differentially affects adults, especially members of marginalized and underserved populations. Understanding discrimination patterns will benefit public health and medical efforts aimed at mitigating exposure and deleterious health consequences.

1. Introduction

Discrimination is a social determinant of health and a salient factor driving health inequities in the United States (US) (Williams et al., 2019a; Davis, 2020; Krieger, 2014). Discrimination stems from negative attitudes or beliefs about an individual or a group of people and results in unequal and unfair treatment (Williams et al., 2019a; Davis, 2020; Krieger, 2014). In many cases, discriminatory experiences are rooted in systems of oppression and marginalization and are perpetuated by members of dominant groups mistreating others assumed to be affiliated with a perceived subordinate group (Williams et al., 2019a; Davis, 2020; Krieger, 2014). A commonly recognized form of discrimination is racial and ethnic discrimination, a process that occurs first through racialization, or assigning dominant and non-dominant racial or ethnic groups, and then is followed by interpersonal mistreatment that occurs because of the assigned racial or ethnic identity or perceived skin color (Williams et al., 2019a; Davis, 2020; Krieger, 2014; Mattingly et al., 2023; Williams et al., 2019b; White et al., 2020). However, discrimination also occurs due to other attributes including gender identity and sexual orientation (Lund and Burgess, 2021; Mattingly et al., 2022; SteelFisher et al., 2019), and these experiences may be differentially patterned by education, socioeconomic/occupational status and location, such as in urban housing markets (Meisel et al., 2022; Pager and Shepherd, 2008). Discriminatory experiences have been linked to detrimental health

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outcomes through proposed physiological and psychological stress response mechanisms (Lawrence et al., 2022; Pascoe and Smart, 2009; Sawyer et al., 2012; Agbonlahor et al., 2024), and thus it is important to understand the distribution of everyday discrimination among the national US adult population.

In many studies, prevalence estimates describing discrimination among US adults examine the frequency by which discrimination occurred (e.g., everyday discrimination) (Lawrence et al., 2022), the specific type of discrimination experienced (e.g., racial discrimination) (Mattingly et al., 2023), and the target population (e.g., racial and ethnic minorities) (Mattingly et al., 2023). For decades, efforts have aimed to better understand the extent to which the general US adult population experiences everyday discrimination and how these experiences lead to deleterious health outcomes (Kessler et al., 1999; Nong et al., 2020). However, investigations of discrimination experiences with samples representative of the US adult population are lacking. Thus, this study leverages recent nationally representative data to further understand the prevalence of perceived everyday discrimination among US adults by 1) examining the extent to which adults have ever experienced discrimination and the frequency with which those experiences have occurred and 2) analyzing sociodemographic disparities in such experiences.

2. Materials and methods

2.1. Data and participants

We analyzed data from the National Health Interview Survey (NHIS), an annual repeated cross-sectional household study sponsored by the

Table 1
Prevalence of adult participant characteristics in the US National Health Interview Survey, 2023 (n = 27,538).

Participant characteristics	n (%)	95 % CI
Age in years		
18–29	3531 (20.2)	19.5, 20.9
30–44	6388 (25.6)	25.0, 26.2
45–64	8498 (31.4)	30.8, 32.1
65+	9121 (22.8)	22.2, 23.4
Sex assigned at birth		
Male	12,573 (48.9)	48.2, 49.6
Female	14,965 (51.1)	50.4, 51.8
Race and ethnicity		
Hispanic	4078 (17.4)	16.1, 18.7
Non-Hispanic White	18,378 (62.6)	61.1, 64.0
Non-Hispanic Black	2895 (11.4)	10.6, 12.3
Non-Hispanic Asian	1519 (6.2)	5.6, 6.7
Another non-Hispanic race [a]	668 (2.5)	2.2, 2.9
Sexual orientation status		
Heterosexual	26,201 (94.7)	94.3, 95.0
Sexual minority [b]	1337 (5.3)	5.0, 5.7
Educational attainment		
High school graduate or less	9271 (37.0)	36.1, 38.0
Some college	7684 (29.6)	28.9, 30.3
College graduate or more	10,583 (33.4)	32.4, 34.3
Income-to-poverty ratio [c]		
Low	7806 (27.7)	26.7, 28.7
Middle	8246 (30.1)	29.4, 30.8
High	11,486 (42.2)	41.1, 43.3
Urban-rural status [d]		
Urban	23,257 (86.0)	85.1, 86.9
Rural	4281 (14.0)	13.1, 14.9
Any perceived everyday discrimination		
No	12,448 (44.2)	43.2, 45.2
Yes	15,090 (55.8)	54.8, 56.8
Each component of the discrimination experience		
Treated with less respect (yes)	12,265 (45.2)	44.3, 46.2
Received poor service (yes)	7317 (27.7)	26.8, 28.5
Treated as not smart (yes)	6927 (26.5)	25.7, 27.2
Treated as feared (yes)	3588 (13.6)	13.0, 14.2
Threatened or harassed (yes)	3767 (13.9)	13.3, 14.5
Everyday discrimination scale, mean (SD)	2.47 (3.33)	2.40, 2.53

[a] Another non-Hispanic race includes non-Hispanic American Indian/Alaska Native and multiracial (two or more races) adults.
[b] Sexual minority includes adults who identified as gay or lesbian, bisexual, or "something else".
[c] Income-to-poverty ratio is calculated by dividing total household income by the federal poverty level and multiplying the result by 100.
[d] Urban included large central, large fringe, medium, and small metropolitan counties whereas rural included counties classified as nonmetropolitan according to the 2013 NCH Urban-Rural Classification Scheme for Counties.

Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) (National Center for Health Statistics, 2024). Data collected are weighted to be nationally representative of the US civilian, noninstitutionalized population (National Center for Health Statistics, 2024). NHIS employed a complex stratified cluster sample design. We used data from the 2023 NHIS, which was the first year that the survey included measures of everyday discrimination (National Center for Health Statistics, 2024). The household response rate was 53.7 %, with 87.6 % of sampled adults completing interviews resulting in a population of 29,522 (National Center for Health Statistics, 2024). After excluding adults with missing data on discrimination measures (n = 1154) and relevant sociodemographic characteristics (n = 830), our sample included 27,538 respondents. This study was deemed exempt from review by the University of Kentucky's institutional review board given use of publicly available, deidentified data.

Table 2
Prevalence of perceived everyday discrimination by sociodemographic characteristics among adults in the US National Health Interview Survey, 2023 (n = 27,538).

	Perceived everyday discrimination						
	Any discrimination (yes)	Each component of the discrimination experience (yes), n (%)					Everyday discrimination scale, mean (SD)
Sociodemographic characteristics		Treated with less respect	Received poor service	Treated as not smart	Treated as feared	Threatened or harassed	
Age in years							
18–29	2245 (61.6)**	1885 (51.3)**	1037 (29.0)**	1253 (35.0)**	577 (15.4)**	751 (19.7)**	3.08 (2.96)**
30–44	4002 (61.9)**	3335 (51.1)**	2047 (32.5)**	1997 (31.1)**	1071 (16.8)**	1206 (17.6)**	2.91 (3.34)**
45–64	5001 (57.8)**	4111 (46.9)**	2489 (29.3)**	2176 (24.8)**	1254 (14.4)**	1152 (12.4)**	2.49 (3.28)**
65+	3842 (40.9)**	2934 (30.9)**	1744 (18.8)**	1501 (16.0)**	686 (7.3)**	658 (6.5)**	1.39 (2.90)**
Sex assigned at birth							
Male	6724 (54.7)*	5297 (43.1)**	3240 (27.0)	2777 (23.8)**	2038 (16.8)**	1565 (12.5)**	2.41 (3.24)*
Female	8366 (56.8)*	6968 (47.3)**	4077 (28.3)	4150 (29.0)**	1550 (10.5)**	2202 (15.2)**	2.51 (3.41)*
Race and ethnicity							
Hispanic	1987 (47.8)**	1560 (37.2)**	1051 (25.8)**	968 (23.2)**	444 (9.9)**	448 (9.9)**	2.12 (2.96)**
Non-Hispanic White	9887 (55.8)**	8061 (45.5)**	4222 (24.0)**	4274 (25.0)**	2188 (12.7)**	2439 (13.8)**	2.30 (3.21)**
Non-Hispanic Black	1947 (67.7)**	1600 (56.0)**	1302 (46.2)**	1077 (38.9)**	648 (24.3)**	503 (18.9)**	3.85 (4.06)**
Non-Hispanic Asian	828 (52.2)**	684 (42.3)**	488 (30.4)**	364 (22.6)**	169 (10.7)**	246 (14.3)**	2.07 (2.73)**
Another non-Hispanic race [a]	441 (66.0)**	360 (53.1)**	254 (39.1)**	244 (37.6)**	139 (20.8)**	131 (19.5)**	3.55 (3.92)**
Sexual orientation status							
Heterosexual	14,058 (54.5)**	11,361 (44.0)**	6838 (27.2)**	6337 (25.3)**	3291 (13.1)**	3290 (12.6)**	2.36 (3.25)**
Sexual minority [b]	1032 (78.5)**	904 (67.9)**	479 (35.6)**	590 (46.4)**	297 (22.4)**	477 (36.4)**	4.40 (3.93)**
Educational attainment							
High school graduate or less	4466 (50.0)**	3408 (38.2)**	2175 (24.9)**	2250 (25.5)**	1048 (12.2)**	867 (10.0)**	2.30 (3.22)*
Some college	4427 (59.2)**	3592 (48.6)**	2179 (29.5)**	2056 (28.4)**	1096 (14.8)**	1075 (14.6)**	2.70 (3.40)*
College graduate or more	6197 (59.2)**	5265 (50.1)**	2963 (29.1)**	2621 (25.7)**	1444 (14.1)**	1825 (17.5)**	2.44 (3.32)*
Income-to-poverty ratio [c]							
Low	4052 (52.7)**	3167 (41.1)**	1930 (25.7)**	2094 (27.5)*	972 (12.8)*	1073 (13.7)*	2.57 (3.70)*
Middle	4480 (55.2)**	3635 (44.7)**	2224 (28.1)**	2083 (26.9)*	1033 (12.9)*	1009 (12.6)*	2.43 (3.30)*
High	6558 (58.2)**	5463 (48.4)**	3163 (28.6)**	2750 (25.5)*	1583 (14.6)*	1685 (14.8)*	2.42 (3.09)*
Urban-rural status [d]							
Urban	13,038 (56.7)**	10,648 (46.1)**	6488 (28.8)**	5991 (26.9)*	3118 (13.9)*	3370 (14.6)**	2.52 (3.33)**
Rural	2052 (50.4)**	1617 (39.8)**	829 (20.7)**	936 (23.8)*	470 (11.4)*	397 (9.2)**	2.11 (3.29)**

* $p < 0.05$, ** $p < 0.001$ for chi-square tests of independence or student's t-tests/ANOVA comparing each discrimination measure by each sociodemographic characteristic.

[a] Another non-Hispanic race includes non-Hispanic American Indian/Alaska Native and multiracial (two or more races) adults.

[b] Sexual minority includes adults who identified as gay or lesbian, bisexual, or "something else".

[c] Income-to-poverty ratio is calculated by dividing total household income by the federal poverty level and multiplying the result by 100.

[d] Urban included large central, large fringe, medium, and small metropolitan counties whereas rural included counties classified as nonmetropolitan according to the 2013 NCH Urban-Rural Classification Scheme for Counties.

2.2. Measures

2.2.1. Everyday discrimination

NHIS included five measures derived from the Everyday Discrimination Scale (EDS) (Williams et al., 1997). Adults were asked to indicate how often the following happened to them in their day-to-day lives: (1) "You are treated with less courtesy or respect than other people", (2) "Compared to other people, you receive poorer service at restaurants or stores", (3) "People act as if they think you are not smart", (4) "People act as if they are afraid of you", and (5) "You are threatened or harassed". These components were abbreviated to "treated with less respect," "received poor service", "treated as not smart", "treated as feared", and "threatened or harassed". Response options for each question were (1) *at least once a week*, (2) *a few times a month*, (3) *a few times a year*, (4) *less than once a year*, and (5) *never*.

We created two types of perceived everyday discrimination (hereafter: discrimination) measures. First, we dichotomized each of the five experiences to create one measure representing any discrimination across the five measures, and five measures representing unique components of the discrimination experience (0: *never*, 1: *less than once a year* to *at least once a week*). Second, we reverse coded and summed each measure to create a summary scale for the EDS (range: 0–20) with higher scores indicating experiencing more discrimination. For the EDS, the Cronbach's alpha was 0.73, demonstrating acceptable reliability.

2.2.2. Sociodemographic characteristics

We included age in years (18–29, 30–44, 45–64, 65+), sex assigned at birth (male, female), race and ethnicity (Hispanic, non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, another non-Hispanic race), sexual orientation (heterosexual, sexual minority), educational attainment (high school graduate or less, some college, college graduate or more), income-to-poverty ratio (low, middle, high), and urban-rural status (urban, rural) as sociodemographic characteristics. Another non-Hispanic race included respondents who identified as non-Hispanic American Indian/Alaska Native, multiracial, or another race; sexual minority included respondents who identified as gay or lesbian, bisexual, or something else. The income-to-poverty ratio is the ratio of household income to poverty threshold provided by the US Census Bureau. This ratio is calculated by dividing the household's total income by the federal poverty level, which is updated annually and adjusted for family size, and then multiplying the result by 100 (National Center for Health Statistics, 2024). Urban-rural status categories were obtained from the 2013 NCHS Urban-Rural Classification Scheme for Counties (Ingram and Franco, 2013); urban included large central, large fringe, medium, and small metropolitan counties whereas rural included counties classified as nonmetropolitan.

2.3. Statistical analysis

We estimated the prevalence (i.e., unweighted counts, weighted percentages, means and standard deviations, and 95 % confidence intervals) for each participant characteristic and the prevalence for each discrimination measure by each sociodemographic characteristic. Differences in the distributions for each sociodemographic characteristic and each component of the discrimination experience were determined using chi-square tests of independence, and differences in distributions for each sociodemographic characteristic and the EDS were determined using student's *t*-tests or ANOVA. We fit adjusted logistic regression models to evaluate associations between each sociodemographic characteristic and any discrimination as well as each unique component of the discrimination experience, independent of all other characteristics in the model. We also conducted an adjusted linear regression analysis to examine the association between each sociodemographic characteristic and EDS, independent of all other characteristics in the model. We adjusted for the complex survey design of the NHIS and differential probability of nonresponse using appropriate survey weights (National Center for Health Statistics, 2024) and conducted the analysis using Stata 18.5.

3. Results

3.1. Participant Characteristics

The prevalence of sociodemographic and discrimination characteristics is presented in Table 1. A higher proportion of adults were 45–64 years old (31.4 %), followed by 30–44 (25.6 %), 65+ (22.8 %), and 18–29 (20.2 %). The sample was comprised of more female (51.1 %) than male (48.9 %) respondents and non-Hispanic White (62.6 %) as compared to Hispanic (17.4 %), non-Hispanic Black (11.4 %), and non-Hispanic Asian (6.2 %) respondents. About one in twenty adults identified as a sexual minority (5.3 %). A higher proportion had high school graduate or less (37.0 %) educational attainment followed by college graduate or more (33.4 %) and some college (29.6 %). Most lived in urban areas (86.0 %), and 42.2 % had high income-to-poverty ratio, 30.1 % had middle ratios, and 27.7 % had low ratios.

Over half of the sample experienced any discrimination (55.8 %). The most prevalent discrimination component was being treated with less respect (45.2 %), followed by received poor service (27.7 %), treated as not smart (26.5 %), threatened or harassed (13.9 %) and treated as feared (14.6 %). The mean EDS was 2.47 (SD: 3.33), meaning that the average adult experienced discrimination as infrequently as less than once a year.

3.2. Perceived everyday discrimination by sociodemographic characteristics

3.2.1. Age in years

Each discrimination measure varied by age group (Table 2). Generally, younger adults reported more ever discrimination for each component and by the EDS, compared to adults aged 65+. For example, EDS mean scores were higher for adults aged 18–29 (mean: 3.08, SD: 2.96), 30–44 (mean: 2.91, SD: 3.34), and 45–64 (mean: 2.49, SD: 3.28) relative to adults aged 65+ (mean: 1.39, SD: 2.90) ($p < 0.001$).

3.2.2. Sex assigned at birth

Ever discrimination varied by sex. More female adults indicated that they ever experienced being treated with less respect (47.3 %) ($p < 0.001$), treated as not smart (29.0 %) ($p < 0.001$), and threatened or harassed (15.2 %) ($p < 0.001$) as opposed to males. In contrast, male adults reported higher proportions of being treated as feared (16.8 %) compared to females (10.5 %) ($p < 0.001$). Receiving poor service did not differ by sex ($p = 0.06$).

3.2.3. Race and ethnicity

Non-Hispanic Black adults generally had higher prevalence of ever discrimination than their racial and ethnic counterparts. For example, 46.2 % of non-Hispanic Black adults reported receiving poor service ($p < 0.001$) and 38.9 % reported being treated as not smart ($p < 0.001$). In addition, adults who identified as another non-Hispanic race had higher prevalence of ever discrimination as compared to Hispanic, non-Hispanic White, and non-Hispanic Asian adults ($p < 0.001$). The mean EDS was highest for non-Hispanic Black (mean: 3.85, SD: 4.06) and another non-Hispanic race (mean: 3.55, SD: 3.92) adults compared to their racial and ethnic counterparts (mean range: 2.07–2.30) ($p < 0.001$).

3.2.4. Sexual orientation

Sexual minority adults consistently reported experiencing more discrimination than heterosexual adults. For example, 67.9 % of sexual minority adults reported ever being treated with less respect compared to 44.0 % of heterosexual adults ($p < 0.001$). In addition, the proportion of sexual minority adults who were ever treated as not smart (46.4 %) far

Table 3
Adjusted associations between sociodemographic characteristics and perceived everyday discrimination among adults in the US National Health Interview Survey, 2023 (n = 27,538).

	Perceived everyday discrimination						
	Any discrimination (yes)	Each component of the discrimination experience (yes)					Everyday discrimination scale
		Treated with less respect	Received poor service	Treated as not smart	Treated as feared	Threatened or harassed	
Sociodemographic characteristics	OR (95 % CI) [a]	OR (95 % CI) [a]	OR (95 % CI) [a]	OR (95 % CI) [a]	OR (95 % CI) [a]	OR (95 % CI) [a]	β (95 % CI) [a]
Age in years (ref: 65+)							
18–29	2.25 (2.03, 2.48)	2.33 (2.11, 2.57)	1.60 (1.43, 1.80)	2.67 (2.39, 2.97)	2.10 (1.82, 2.42)	3.25 (2.80, 3.77)	1.46 (1.31, 1.62)
30–44	2.29 (2.12, 2.47)	2.28 (2.11, 2.46)	1.90 (1.74, 2.08)	2.36 (2.15, 2.59)	2.39 (2.12, 2.69)	2.77 (2.44, 3.14)	1.41 (1.29, 1.52)
45–64	1.99 (1.86, 2.14)	1.98 (1.84, 2.13)	1.70 (1.57, 1.85)	1.77 (1.62, 1.94)	2.06 (1.83, 2.32)	2.00 (1.77, 2.26)	1.08 (0.98, 1.18)
Sex assigned at birth (ref: male)							
Female	1.10 (1.03, 1.17)	1.20 (1.13, 1.28)	1.07 (1.00, 1.14)	1.32 (1.24, 1.41)	0.57 (0.52, 0.62)	1.23 (1.13, 1.34)	0.08 (−0.01, 0.18)
Race and ethnicity (ref: non-Hispanic White)							
Hispanic	0.67 (0.61, 0.74)	0.68 (0.62, 0.75)	1.06 (0.95, 1.19)	0.77 (0.69, 0.86)	0.72 (0.63, 0.82)	0.62 (0.54, 0.71)	-0.43 (−0.57, −0.28)
Non-Hispanic Black	1.61 (1.44, 1.81)	1.52 (1.36, 1.69)	2.68 (2.41, 2.98)	1.75 (1.56, 1.97)	2.21 (1.95, 2.50)	1.38 (1.21, 1.58)	1.38 (1.17, 1.59)
Non-Hispanic Asian	0.77 (0.67, 0.88)	0.77 (0.67, 0.88)	1.26 (1.09, 1.46)	0.82 (0.71, 0.95)	0.77 (0.62, 0.94)	0.87 (0.73, 1.03)	-0.36 (−0.54, −0.19)
Another non-Hispanic race [b]	1.33 (1.07, 1.65)	1.18 (0.96, 1.45)	1.94 (1.60, 2.36)	1.45 (1.16, 1.81)	1.71 (1.34, 2.18)	1.20 (0.91, 1.58)	0.87 (0.49, 1.26)
Sexual orientation status (ref: heterosexual)							
Sexual minority [c]	2.48 (2.12, 2.90)	2.17 (1.88, 2.51)	1.35 (1.17, 1.56)	2.00 (1.73, 2.31)	1.77 (1.49, 2.10)	2.93 (2.52, 3.42)	1.65 (1.35, 1.94)
Educational attainment (ref: college graduate or more)							
High school graduate or less	0.77 (0.71, 0.84)	0.69 (0.64, 0.75)	0.87 (0.79, 0.95)	1.02 (0.93, 1.12)	0.89 (0.79, 1.00)	0.56 (0.49, 0.63)	−0.11 (−0.23, 0.10)
Some college	1.02 (0.94, 1.10)	0.96 (0.89, 1.04)	1.04 (0.95, 1.13)	1.10 (1.00, 1.20)	1.06 (0.95, 1.19)	0.78 (0.70, 0.87)	0.17 (0.05, 0.29)
Income-to-poverty ratio (ref: high) [d]							
Low	0.93 (0.86, 1.01)	0.88 (0.81, 0.96)	0.86 (0.78, 0.94)	1.05 (0.96, 1.16)	0.93 (0.83, 1.05)	1.18 (1.04, 1.32)	0.18 (0.05, 0.32)
Middle	0.98 (0.91, 1.06)	0.97 (0.89, 1.04)	1.00 (0.92, 1.08)	1.06 (0.97, 1.15)	0.91 (0.82, 1.01)	0.96 (0.86, 1.07)	0.04 (−0.07, 0.16)
Urban-rural status (ref: urban) [e]							
Rural	0.82 (0.72, 0.94)	0.84 (0.74, 0.95)	0.73 (0.64, 0.84)	0.88 (0.77, 0.99)	0.86 (0.73, 1.00)	0.66 (0.57, 0.76)	−0.33 (−0.50, −0.15)

[a] Models were adjusted for age in years, sex assigned at birth, race and ethnicity, sexual orientation status, educational attainment, income-to-poverty ratio, and urban-rural status.
[b] Another non-Hispanic race includes non-Hispanic American Indian/Alaska Native and multiracial (two or more races) adults.
[c] Sexual minority includes adults who identified as gay or lesbian, bisexual, or "something else".
[d] Income-to-poverty ratio is calculated by dividing total household income by the federal poverty level and multiplying the result by 100.
[e] Urban included large central, large fringe, medium, and small metropolitan counties whereas rural included counties classified as nonmetropolitan according to the 2013 NCH Urban-Rural Classification Scheme for Counties.

exceeded that of heterosexual adults (25.3 %) ($p < 0.001$). Sexual minority adults also had the highest EDS score of 4.40 (SD: 3.93) across all subgroups in the sample, indicating that, on average, sexual minority adults experienced discrimination more frequently than other population groups.

3.2.5. Educational attainment

Discrimination components varied by educational attainment. For example, adults with some college (48.6 %) or college graduate or more (50.1 %) education had higher prevalence of being treated with less respect than adults who had high school graduate or less education (38.2 %) ($p < 0.001$). We observed a similar trend for ever receiving poor service ($p < 0.001$), being treated as feared ($p < 0.001$), and being threatened or harassed ($p < 0.001$). Adults with some college education had the higher EDS score (mean: 2.70, SD: 3.40) compared to their counterparts ($p = 0.011$).

3.2.6. Income-to-poverty ratio

Adults with high income-to-poverty ratios tended to report higher prevalence of ever discrimination compared to adults with middle or low ratios. For example, 14.6 % of these adults reported being treated as feared ($p = 0.002$) and 14.8 % reported being threatened or harassed (p = 0.002) compared to 12.9 % and 12.6 % of adults with middle ratios and 12.8 % and 13.7 % of adults with low ratios. However, adults with low income-to-poverty ratios reported higher EDS scores (mean: 2.57, SD: 3.70) compared to their counterparts ($p = 0.017$).

3.2.7. Urban-rural status

Adults who live in urban areas consistently reported higher prevalence of ever experiencing discrimination. For example, urban-living adults had a higher prevalence of ever receiving poor service (28.8 %) than rural-living adults (20.7 %) ($p < 0.001$). Furthermore, urban-living adults reported a higher EDS score (mean: 2.52, SD: 3.33) as opposed to rural-living adults (mean: 2.11, SD: 3.29) ($p < 0.001$).

3.3. Adjusted associations between sociodemographic characteristics and perceived everyday discrimination

3.3.1. Age in years

Younger age was associated with higher discrimination across each measure (Table 3). For example, adults aged 18–29 (vs. 65+) had higher odds of experiencing any discrimination (OR: 2.25, 95 % CI: 2.03–2.48) and higher EDS scores (β: 1.46, 95 % CI: 1.31–1.62). Associations appeared to be the strongest for being threatened or harassed for adults aged 18–29 (OR: 3.25, 95 % CI: 2.80–3.77) and 30–44 (OR: 2.77, 95 % CI: 2.44–3.14), compared to adults aged 65+. Further, associations tended to attenuate per older age groups (30–44, 45–64) as compared to the youngest age group (18–29).

3.3.2. Sex assigned at birth

Female sex was associated with higher discrimination for being treated with less respect (OR: 1.20, 95 % CI: 1.13–1.28), being treated as not smart (OR: 1.32, 95 % CI: 1.24–1.41), and being threatened or harassed (OR: 1.23, 95 % CI: 1.13–1.34), but associated with lower discrimination for being treated as feared (OR: 0.57, 95 % CI: 0.52–0.62). In addition, female sex was associated with higher any discrimination (OR: 1.10, 95 % CI: 1.03–1.17).

3.3.3. Race and ethnicity

Non-Hispanic Black and another non-Hispanic race adults reported higher any discrimination and EDS scores, relative to non-Hispanic White adults. Further, for each component of the discrimination experience, the strongest association among non-Hispanic Black (OR: 2.68, 95 % CI: 2.41–2.98) and another non-Hispanic race (OR: 1.94, 95 % CI: 1.60–2.36) was for receiving poor service. Conversely, compared to non-Hispanic White adults, Hispanic (OR: 0.67, 95 % CI: 0.61–0.74) and non-Hispanic Asian (OR: 0.77, 95 % CI: 0.67–0.88) adults reported lower any discrimination and EDS scores (β: -0.43, 95 % CI: −0.57, −0.28 for Hispanic; β: -0.36, 95 % CI: −0.54, −0.19 for non-Hispanic Asian).

3.3.4. Sexual orientation

Sexual minority (vs. heterosexual) adults had higher odds of any discrimination (OR: 2.48, 95 CI: 2.12–2.90) and higher EDS scores (β: 1.65, 95 % CI: 1.35–1.94). In addition, sexual minority adults reported higher discrimination for each component of the discrimination experience, with the strongest associations observed for being treated with less respect (OR: 2.17, 95 % CI: 1.88–2.51) and being threatened or harassed (OR: 2.93, 95 % CI: 2.52–3.42), compared to heterosexual adults.

3.3.5. Educational attainment

Compared to adult college graduates, adults who completed some college had higher EDS scores (β: 0.17, 95 % CI: 0.05–0.29). Adults with a high school education or less also had lower odds of being treated with less respect (OR: 0.69, 95 % CI: 0.64–0.75) and being threatened or harassed (OR: 0.56, 95 % CI: 0.49–0.63). Like adults with a high school education, adults with some college education had lower odds being threatened or harassed (OR: 0.78, 95 % CI: 0.70–0.87).

3.3.6. Income-to-poverty ratio

Low (β: 0.18, 95 % CI: 0.05–0.32) but not middle (β: 0.04, 95 % CI: −0.07-0.16) income-to-poverty ratios, relative to high ratios, were associated with higher EDS scores. Income-to-poverty ratio was not associated with being treated with less respect, receiving poor service, being treated as smart, or being treated as feared. However, low income-to-poverty ratio was associated with higher odds of being threatened or harassed (OR: 1.18, 95 % CI: 1.04–1.32).

3.3.7. Urban-rural status

Compared to adults living in urban areas, rural-living adults experienced lower any discrimination (OR: 0.82, 95 % CI: 0.72–0.94) and EDS scores (β: -0.33, 95 % CI: −0.50, −0.15). Associations for each component of discrimination were nearly consistent with the strongest associations observed for receiving poor service (OR: 0.73, 95 % CI: 0.64–0.84) and being threatened or harassed (OR: 0.66, 95 % CI: 0.57–0.76).

4. Discussion

This study found that ever exposure to everyday discrimination and the frequency by which everyday discrimination is perceived to occur may differ by various sociodemographic characteristics among a national sample of US adults. We found that over half of respondents experienced any everyday discrimination, the most common experience was being treated with less respect, and each component of the discrimination experience differed by sociodemographic groups. For example, nearly half of sexual minority adults reported ever being treated as not smart compared to about one-fourth of heterosexual adults. Younger, non-Hispanic Black, sexual minority, some college-educated, lower income, and urban-living adults reported higher EDS scores. These patterns of observed disparities in everyday discrimination measures were generally consistent with findings from adjusted models.

Despite differences in time of assessment, samples, and methodologies, our finding that over half of US adults experienced any everyday discrimination is consistent with prior work (Kessler et al., 1999; Thurber et al., 2021). Furthermore, our results complement existing research detailing the salience of discrimination as a social determinant of health for structurally disadvantaged groups (Williams et al., 2019a; Davis, 2020; Krieger, 2014). Enhanced exposure to discrimination for these groups relative to others may be driving health inequities and is best addressed through the development of policies and interventions aimed at eliminating the causes of everyday discrimination in society and systems such as healthcare (Carter et al., 2020; Beard et al., 2022). Discrimination can elicit a stress response with deleterious health consequences (Lawrence et al., 2022; Pascoe and Smart, 2009; Sawyer et al., 2012), and the context through which the experience occurs (e.g., being threatened or harassed) may also determine the extent to which the experience is harmful. Culturally sensitive interventions can help address discriminatory experiences in a more equitable way, across a wide range of social, cultural, and geopolitical identities and contexts. In addition, everyday discrimination may occur based on multiple social identities (Bauer et al., 2021). Future work illuminating the role intersectionality may play in experiences of everyday discrimination with large, representative samples is needed.

Prior research has determined groups most at-risk for experiencing everyday discrimination in the US (Williams et al., 2019a; Davis, 2020; Krieger, 2014), and this study updates our understanding of these phenomena using recent nationally representative data. Additionally, our findings highlight identities that are particularly vulnerable to

discrimination across various contexts, with important implications for promoting health equity. For instance, female adults reported higher levels of discrimination across most components of the discrimination experience, except for being treated as feared, where male adults reported higher levels, and for receiving poor service, where levels were similar. Furthermore, the magnitude of associations in the adjusted regression models revealed that some contexts were more relevant than others in relation to the discriminatory experience. For example, sexual minority adults showed the strongest association with being threatened or harassed among all components, whereas this association was weaker for non-Hispanic Black adults relative to receiving poor service. Understanding the contexts in which specific populations face the most discrimination can help inform anti-discriminatory policies and interventions aimed at protecting vulnerable populations, reducing health impacts, and mitigating inequities.

4.1. Limitations

Our study has associated limitations. One, data are self-reported and subject to reporting biases such as social desirability (e.g., underreporting certain experiences to avoid seeming sensitive or weak) and recall (e.g., accurately remembering experiences within the past year). Two, certain subgroups of adults had low sample sizes and were aggregated (e.g., categorizing adults who identify as gay or lesbian or bisexual as sexual minority adults), which may mask differences among these groups. Three, we included biological sex as a covariate; thus, this study cannot share insights on variation due to gender identity, including the perspectives of persons who identify as non-binary or transgender. Similarly, due to sample size limitations, we aggregated certain racial and ethnic categories, potentially masking variation in discrimination experiences across these groups. Four, the EDS discrimination components may be more relevant to some groups than others, which could affect results, especially cross-group comparisons (Bastos and Harnois, 2020). Further, although the measure of discrimination employed has been well validated (Krieger et al., 2005; Taylor et al., 2004), additional work is needed to determine whether its reliability and validity differ based on intersecting forms of marginalized identity.

5. Conclusions

This study examined the prevalence of, and sociodemographic disparities in, everyday discrimination among a national sample of US adults. More than half of US adults reported ever experiencing any discrimination. Certain subgroups, such as young, non-Hispanic Black, sexual minority, some college-educated, low-income, and urban-living adults had higher odds of components of the discrimination experience and EDS scores, compared to their respective subgroup counterparts. Our findings inform public health efforts aimed at mitigating exposure to discrimination and its health detriments.

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CRediT authorship contribution statement

Delvon T. Mattingly: Writing – review & editing, Writing – original draft, Visualization, Methodology, Formal analysis, Conceptualization. **Osayande Agbonlahor:** Writing – review & editing, Conceptualization. **Joy L. Hart:** Writing – review & editing, Supervision, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

Data availability

Data will be made available on request.

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