ADDICTION POLICY FORUM

The Effects of Stigma on Naloxone Attitudes and Policy Endorsement

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Addiction Policy Forum

Addiction Policy Forum works to combat the deadly consequences of addiction and help patients, families, and communities affected by the disease. The nationwide nonprofit organization is dedicated to eliminating addiction as a major health problem by helping patients, families, and communities affected by the disease, translating the science around addiction, expanding access to evidence-based prevention and treatment, and ending the stigma around addiction.

University of Delaware

Led by Dr. Valerie Earnshaw, University of Delaware Associate Professor in the Department of Human Development and Family Sciences, her research aims to understand and intervene in associations between stigma and health inequities.

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Background

Understanding Stigma

Individuals with substance use disorders (SUD) are often subject to harsh moral judgments and frequent discrimination, preventing many who are struggling from reaching out for help and isolating families affected by the disease who fear being judged by their communities (Room, 2005). Negative attitudes and behaviors toward individuals with a specific characteristic, like an SUD or addiction, are also known as stigma.

Individuals who experience stigma due to a SUD are more likely to continue engaging in substance use (Tsai et al., 2019), and manifest greater delayed treatment access and higher rates of dropout (Earnshaw et al., 2025).

The three major domains of stigma include stereotypes, prejudice, and discrimination (Earnshaw, 2020):

- Stereotypes: often inaccurate beliefs or thoughts about a particular group of people;
- Prejudice: negative feelings or emotions towards a particular group of people; and
- Discrimination: negative or unjust treatment of a particular group of people.

Stigma often leads to discrimination in a variety of settings, including health care, criminal justice, employment, child welfare, and housing, and creates barriers to accessing evidence-informed treatment and harm reduction services (Earnshaw, 2020). The public and many professionals continue to view SUDs as a moral failing, which reinforces discriminatory policies and practices and further isolates and deters those struggling from seeking help.

Stigma and Naloxone Uptake

Addiction stigma can also impact state policies, resource allocation, and create barriers to access to care and essential services, from naloxone to medications to treatment for addiction (National Academies, 2019).

Naloxone is a medication that reverses an opioid overdose if administered quickly. It works by blocking the effects of opioids and reversing overdose symptoms such as respiratory depression. Naloxone can be administered by intranasal spray (into the nose), intramuscular (into the muscle), subcutaneous (under the skin), or intravenous injection (into the bloodstream). Research shows that when naloxone and overdose education are available to community members, deaths due to opioid overdose decrease in those communities (Walley et al., 2013). Despite the clear evidence that naloxone availability and education reduce overdose fatalities, barriers to access still persist, largely driven by addiction stigma. One study identified several primary barriers, which included stigma, bureaucratic policies and procedures, and inadequate post-distribution communication (Rudisil et al., 2020).

The 2016 National Academy of Sciences report on stigma highlights five effective stigma reduction strategies, including 1) education and awareness where the intervention replaces myths around addiction with accurate information; 2) literacy programs to improve knowledge, attitudes, and help-seeking behaviors; 3) contact strategies that engage individuals with lived experience to reduce prejudice; 4) protest and advocacy efforts; and 5) policy and legislative change to protect and improve services for stigmatized individuals (National Academies, 2016).

Addiction Policy Forum Stigma and Policies Survey

The survey was designed by the Addiction Policy Forum and the University of Delaware and administered by 57 participating organizations ranging from public health departments, hospital systems, colleges and universities, recovery community organizations, and criminal justice agencies. A total of 8.278 individuals participated in the cross-sectional survey between November 8, 2023, and July 16, 2024. After data cleaning (including the removal of respondents who were suspected to be bots/fraud or missing responses to key questions), there were 5,158 (62.3%) responses included in this report.

All research protocols, instruments, and recruitment materials were approved by the University of Delaware's Institutional Review Board. To participate, individuals had to be 18 or older and English speakers. Informed consent was obtained from all participants before the start of the anonymous survey. No incentives were offered. The survey was administered online via Qualtrics and took participants approximately 15-20 minutes to complete. The 57 participating organizational partners shared the survey with participants.

Survey Methods

N = 5,158
Convenience Sample:
- Unweighted
- 28 states

Mode: Web
Survey Dates: November 8, 2023 - July 16, 2024

Stigma measures, including measures of prejudice, stereotypes, and discrimination, were adapted from previously validated scales. Stereotype was assessed using five items rated on a 5-point Likert scale ranging from strongly disagree to strongly agree (α = .69; adapted from Yang et al., 2019). An example item is: 'I believe that a person who is in recovery from addiction cannot be trusted.' Prejudice was measured with ten items on a 5-point Likert scale ranging from not at all to extremely (α = .71; adapted from Brown, 2011 & Penn et al., 1994). An example item is: 'If you were to interact with someone who is in recovery from addiction, how would you feel?' Discrimination was assessed using seven items rated on a 5-point Likert scale ranging from definitely unwilling to definitely willing (α = .74; adapted from Link et al., 1987). An example item is: 'How would you feel about having someone in recovery from addiction as a neighbor?

Naloxone endorsement was assessed using a 5-point Likert scale ranging from strongly oppose to strongly support (adapted from Kennedy-Hendricks et al., 2017). Specifically, participants were asked to indicate how much they opposed or supported "making naloxone available to friends and family members of people with opioid addiction." For the analyses, participants were categorized based on whether they were supportive of naloxone availability versus whether they were opposed or neutral.

Data was then analyzed using chi-square and t-tests to explore differences in stigma, specifically stereotypes, prejudice, and discrimination, by naloxone support.

Demographics

Nearly eleven percent (10.7%) of respondents were aged 18-29, 30.7% were 30-44, 31.9% were 45-59, and 20.8% were 60 or older. The race and ethnicity breakdown included 85% White, 3.5% American Indian or Alaska Native, and 5.6% Black or African American. Almost seventy-two percent (71.9%) identified as female, 19.7% as male, 1.2% as non-binary, 0.5% as transgender, and 1.4% preferred not to share. Less than seven percent (6.7%) reported having a high school diploma or GED, 39.6% a college degree, and 29.3% a graduate degree or higher. Forty percent (40.5%) reported living in a rural or somewhat rural area, 43.5% in a suburban or somewhat urban area, and 9.7% in an urban area. Thirty-eight percent (37.9%) of the respondents reported knowing a friend or family member struggling with addiction, 14.5% self-reported as being in recovery, and 22.7% reported working in the addiction field.

Table 1. Characteristics of Survey Participants

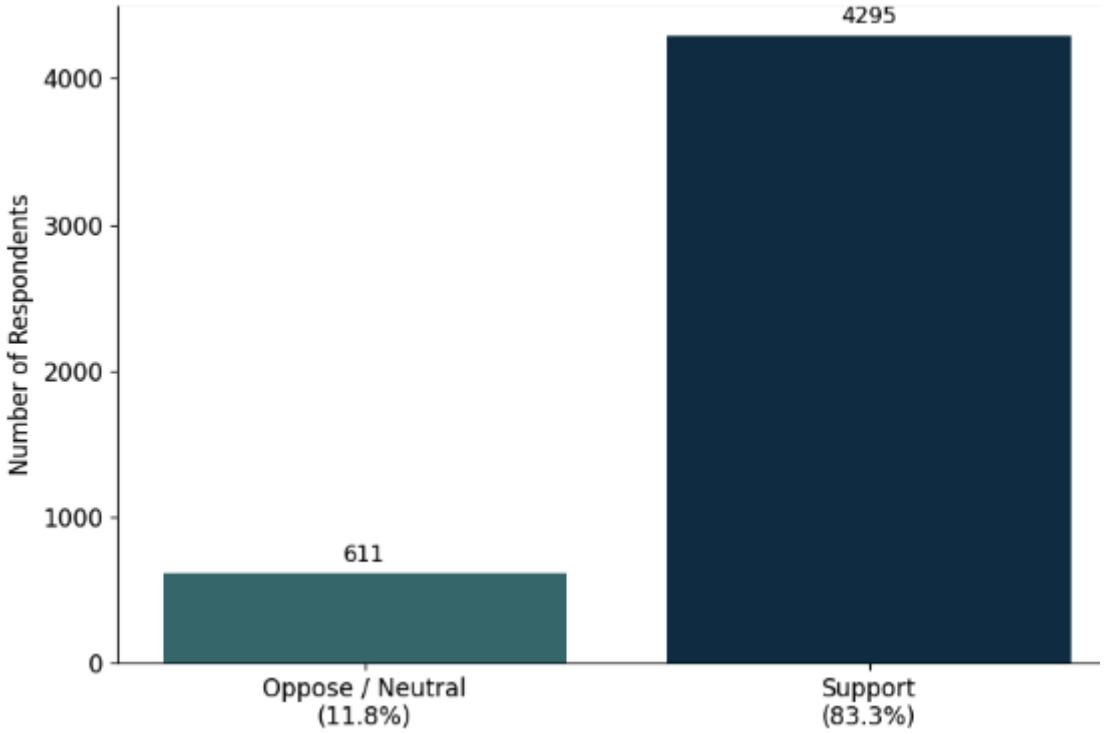
	n	%
Age		
18-29	550	10.7%
30-44	1,582	30.7%
45-59	1,643	31.9%
60+	1,075	20.8%
Race/Ethnicity		
White	4,385	85%
Black or African American	287	5.6%
American Indian or Alaska Native	183	3.5%
Korean	11	0.2%
Japanese	15	0.3%
Other Asian	67	1.4%
Some other Race	145	2.8%
Gender		
Man	1,017	19.7%
Woman	3,707	71.9%
Other	168	3.3%
Education		
Some high school or less	40	0.8%
Completed high school	345	6.7%
Some college (no degree) or technical school	896	17.4%
College degree (AA, BA, MA)	2045	39.6%
Some graduate school or more	1510	29.3%
Geographic Area		
Rural	1158	22.5%
Somewhat rural	929	18%
Suburban	1704	33%
Somewhat urban	543	10.5%
Urban	502	9.7%

Results

Broad Support for Naloxone Availability Nationwide

The majority of respondents indicated strong support for Naloxone, with 83.3% of participants supporting making Naloxone available to friends and family members of people with opioid use disorder, while 11.8% were opposed or neutral.

Figure 1. Support for Making Naloxone Available to Friends and Family Members of People With Opioid Use Disorder (n=4,906)

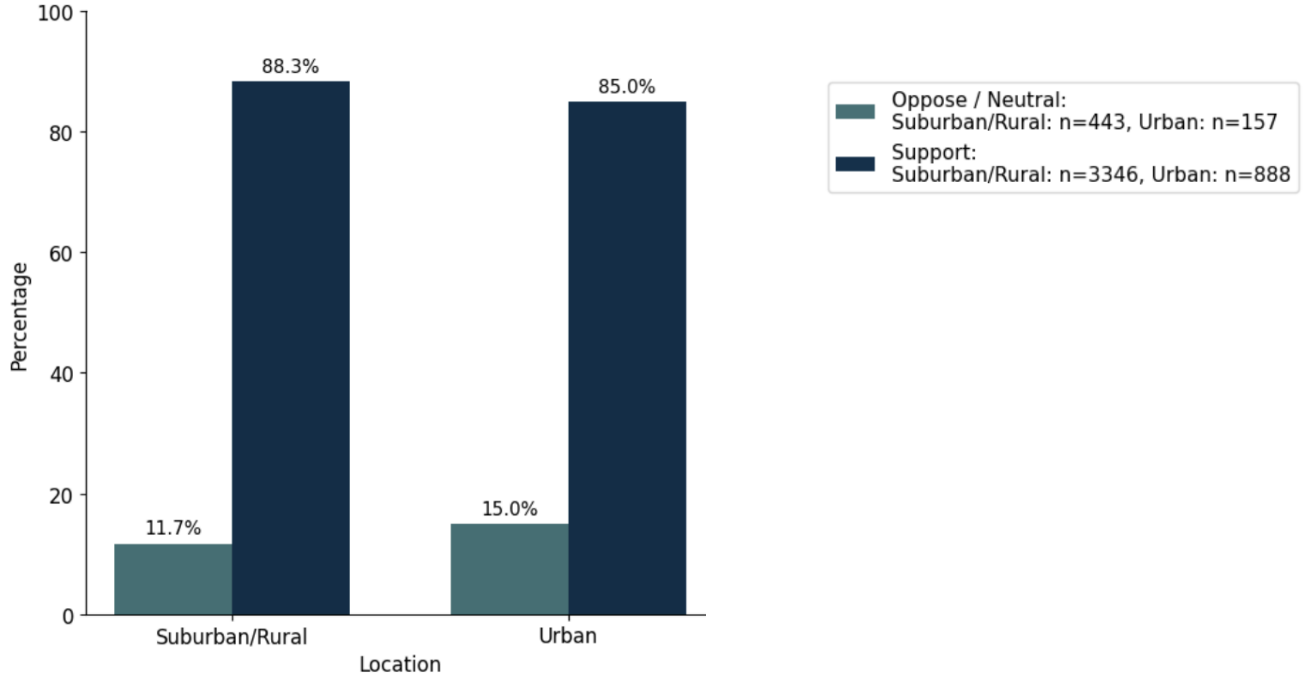


Note. The Opposed / Neutral sample includes 611 participants who selected "Opposed," "Strongly Opposed," or "Unsure." The Support sample includes 4,295 participants who selected "Support" or "Strongly Support".

Variations in Naloxone Support in Urban versus Suburban Communities

Participants from rural areas showed a statistically significantly higher level of support for naloxone compared to those living in urban areas (p=0.004). Eighty-eight percent (88.3%) of suburban/rural respondents endorsed naloxone availability, and 11.7% opposed it. In comparison to urban respondents, 85% endorsed naloxone availability, and 15% opposed it.

Figure 2. Comparison of Naloxone Endorsement Among Rural and Urban Participants



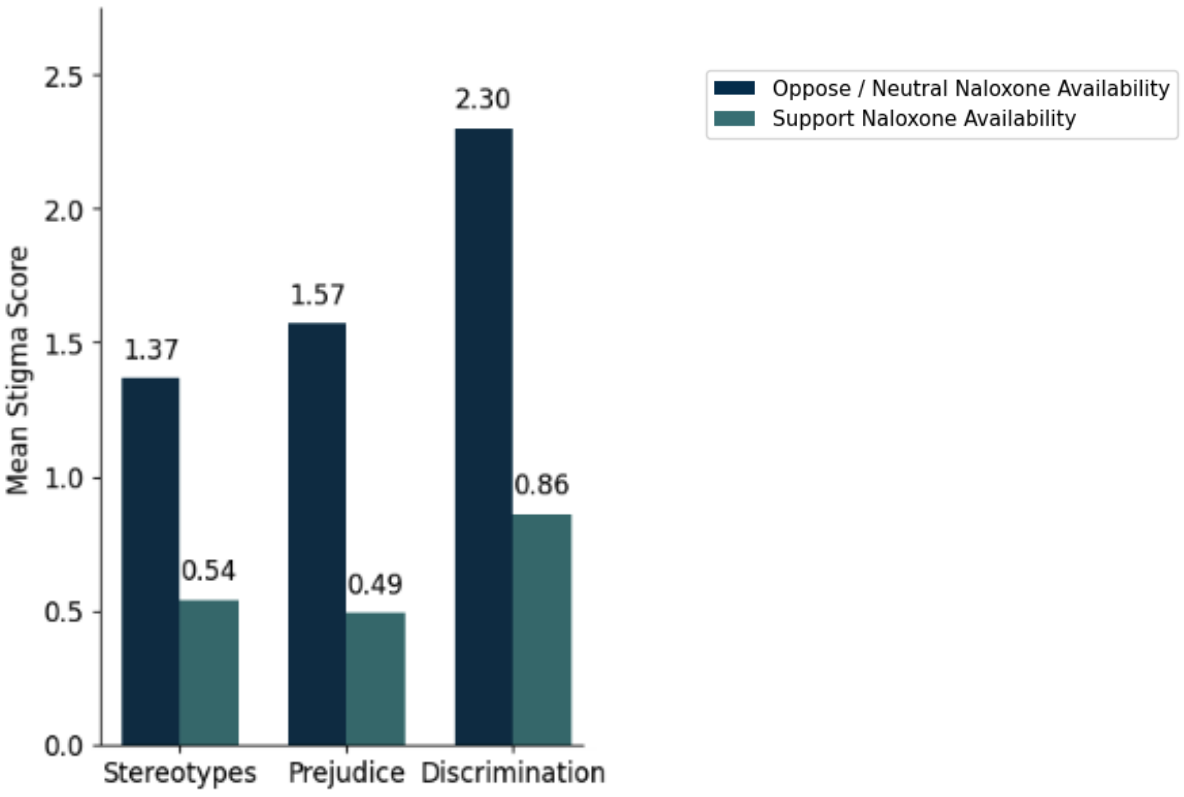
Note. The Rural sample includes participants who identified their community type as either "rural," "somewhat rural," or "suburban." The Urban sample includes participants who selected "urban" or "somewhat urban."

Understanding the Relationship Between Stigma and Lack of Support for Naloxone

Participants who supported Naloxone availability reported lower stigma scores across all domains of stigma (stereotypes, prejudice, and discrimination) compared to those who did not. Specifically, supporters had lower mean scores on stereotypes (0.54 compared to 1.37; range: 0–5), prejudice (0.49 compared to 1.57; range: 0–10), and discrimination (0.86 compared to 2.30; range: 0–7).

The results indicated statistically significant differences across all three domains ($p < .001$), suggesting that individuals who supported Naloxone reported significantly lower levels of stereotypes, prejudice, and discrimination compared to those who did not.

Figure 3. Association Between Naloxone Support and Stigma Levels Across Stereotypes, Prejudice, and Discrimination



Notes. Stigma was assessed across three domains: stereotypes (range: 0–5), prejudice (range: 0–10), and discrimination (range: 0–7), with higher scores indicating greater levels of stigma.

Definitions. Stereotypes = inaccurate beliefs or thoughts about a particular group of people. Prejudice = negative feelings or emotions towards a particular group of people. Discrimination = negative or unjust treatment of a particular group of people.

Stereotypes and prejudice scores among participants who did not support Naloxone were higher: 45.7% agreed or strongly agreed that people in recovery are unpredictable, 38% believed they are to blame for their own problems, 20.5% said they cannot be trusted, 18.5% said they do not make good decisions, and 15.4% believed that they are dangerous.

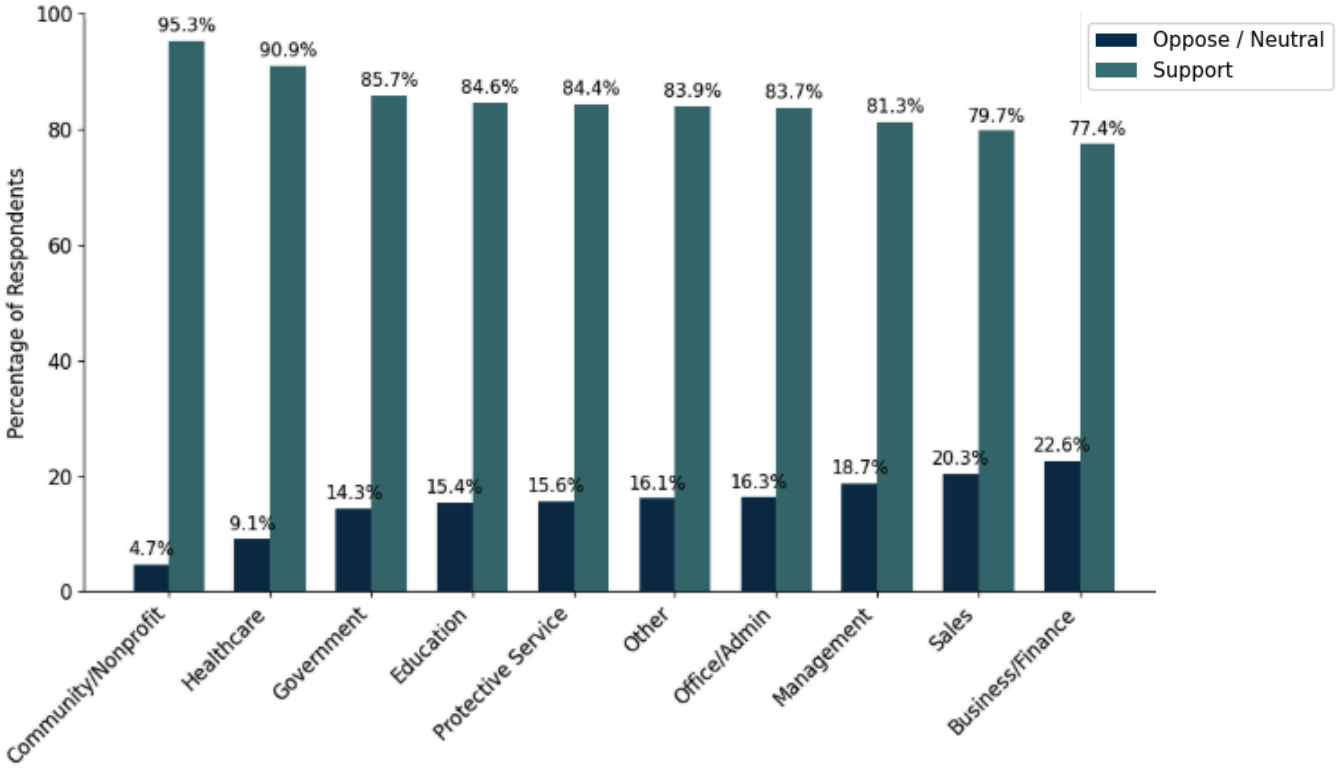
Prejudice refers to the feelings or emotions experienced in response to interacting with someone in recovery. Among respondents who supported Naloxone availability, 98.3% felt extremely or moderately supportive, 95.9% felt empathetic, 90.8% felt comfortable, 97.3% felt compassionate, and 83.5% felt relaxed about interacting with someone in recovery. However, 4.8% of respondents who supported Naloxone availability felt slightly to extremely anxious, 2.6% felt fearful, 2% felt angry, 5% felt nervous, and 1.1% felt disgusted about interacting with an individual in recovery.

Discrimination refers to the negative or unjust treatment of people in recovery as a group. Among those who supported Naloxone availability, 98.5% were willing or definitely willing to work with someone in recovery, 98.2% to have someone in recovery as a neighbor, 97.9% to introduce someone in recovery to their friends, 95% to recommend someone in recovery for a job working for a friend, 86.8% to have their children marry someone in recovery, 68.4% to have someone in recovery as a caretaker of their children, and 67.9% to rent a room in their home to someone in recovery.

Endorsement of Naloxone by Profession

Overall, participants who work in community services and nonprofits (95.3%), healthcare (90.9%), and government (85.7%) reported the highest support for Naloxone, while participants in business and financial operations (77.4%), sales (79.3%), and management (81.3%) reported lower endorsement levels.

Figure 4. Support for Naloxone Availability by Profession

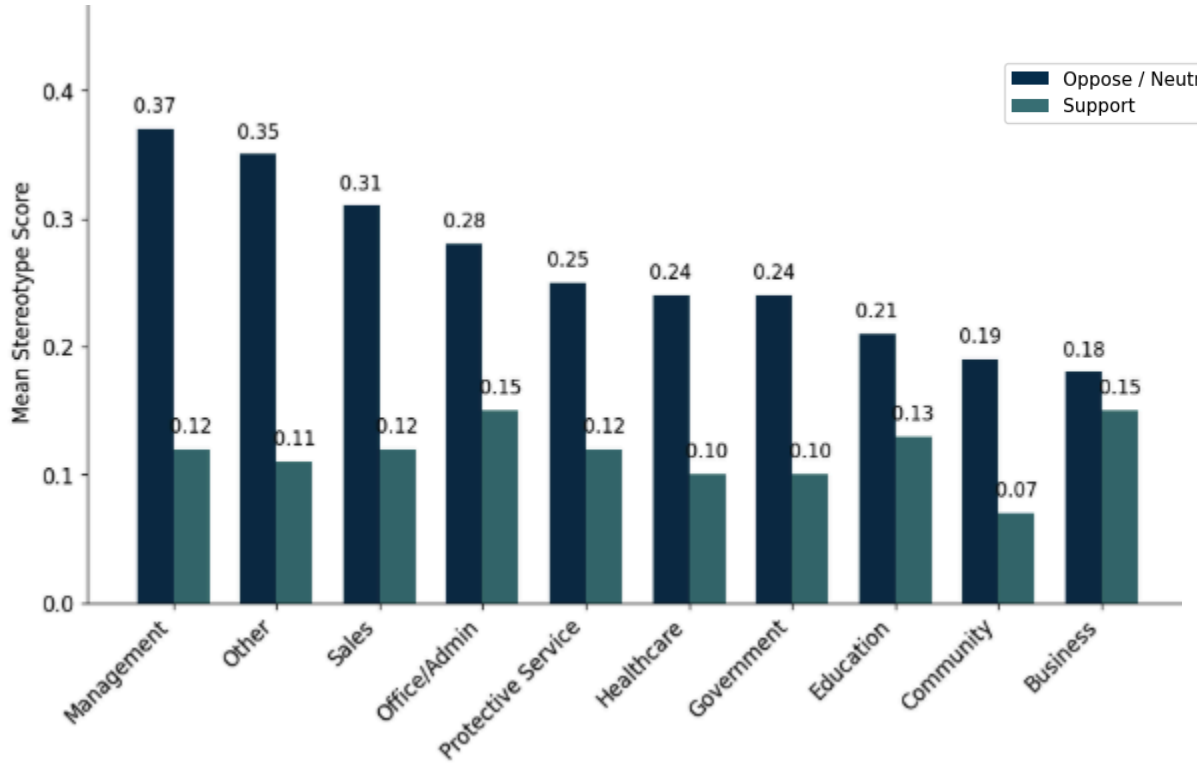


Notes. Professions were grouped into primary categories based on participants' self-reported roles. Participants coded as "Other" include respondents who selected "Architecture and Engineering," "Arts, Design, Entertainment, Sports, and Media," "Building and Grounds Cleaning and Maintenance," "Computer and Mathematical," "Construction and Extraction," "Farming, Fishing, and Forestry," "Food Preparation and Serving-Related," "Installation, Maintenance, and Repair," "Life, Physical, and Social Science," "Personal Care and Service," "Production," "Transportation and Material Moving," and "Other." Individuals who chose 'other' could write in their profession.

Stereotype Endorsement by Profession and Naloxone Endorsement

Mean stereotype scores were compared across professions for individuals who supported Naloxone and those who were opposed or neutral. The largest differences were observed in professions such as management, other, and sales, where non-supporters exhibited notably higher stereotypes. These findings suggest that support for Naloxone is consistently associated with reduced stereotypes across various professions.

Figure 5. Professional Differences in Stereotype Endorsement by Naloxone Support



Notes. This figure presents mean stereotype scores across professional categories, comparing individuals who supported naloxone availability with those who were opposed or neutral. Stereotype scores reflect endorsement of stigmatizing beliefs, with higher scores indicating greater agreement with negative stereotypes. Participant's coded as "Other" include respondents who selected "Architecture and Engineering," "Arts, Design, Entertainment, Sports, and Media," "Building and Grounds Cleaning and Maintenance," "Computer and Mathematical," "Construction and Extraction," "Farming, Fishing, and Forestry," "Food Preparation and Serving-Related," "Installation, Maintenance, and Repair," "Life, Physical, and Social Science," "Personal Care and Service," "Production," "Transportation and Material Moving," and "Other." Individuals who chose 'other' could write in their profession.

Professional and Occupational Characteristics

The occupation breakdown among survey respondents included healthcare (23.3)%, community services (17.2%), educational services (6.7%), government (9.5%), management (3%), office and administrative support (3.8%), business and financial operations (2.1%), protective service or criminal justice (5.7%). Nearly thirteen percent (12.6%) of respondents made up the other occupations.

Table 2. Professional and Occupational Characteristics (n=4,820)

	n	%
Architecture and engineering	35	0.7%
Arts, design, entertainment, sports, and media	46	0.9%
Building and grounds cleaning and maintenance	23	0.4%
Business and financial operations	106	2.1%
Community/nonprofit and social services	885	17.2%
Computer and mathematical	37	0.7%
Construction and extraction	28	0.7%
Education	344	6.7%
Farming, fishing, and forestry	15	0.3%
Food preparation and serving-related	51	1%
Government	489	9.5%
Healthcare practitioners, support, and technical	1,201	23.3%
Installation, maintenance, and repair	17	0.3%
Life, physical, and social science	64	1.2%
Management	155	3%
Office and administrative support	196	3.8%
Personal care and service	59	1.1%
Production	30	0.6%
Protective service / criminal justice / legal	295	5.7%
Sales and retail	69	1.3%
Transportation and material moving	24	0.5%
Other	651	12.6%

Note. Individuals who chose 'other' could write in their profession.

Limitations

Results should be interpreted in light of several limitations. This study utilized a non-random, convenience sample recruited through APF partner organizations, which may introduce selection bias and limit the generalizability of findings. The association with APF may have further influenced participant responses. The sample was also predominantly White (85%) and female (71.9%), which may limit the relevance of findings to more diverse populations. Finally, while many measures were adapted from validated scales and reviewed by experts, newly developed or modified items were not independently validated, which may affect the reliability of certain constructs.

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