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Explicit and implicit: Ableism of disability professionals

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ABSTRACT

Background: People who work with disabled people or whose work is about disability – disability professionals – often have direct power over disabled people and can impact their lives immensely; they also have a role in creating and institutionalizing knowledge about disability.
Objective: The aim of this study was to examine the explicit (conscious) and implicit (unconscious) disability attitudes of disability professionals.
Methods: Between October 2021 and February 2023, disability professionals ($n = 417$) completed the Symbolic Ableism Scale (SAS) and the Disability Attitudes Implicit Association Test (DA-IAT). We had the following research questions: (1.) What are disability professionals' explicit attitudes towards disability? (2.) What are disability professionals' implicit attitudes towards disability? (3.) What is the relationship between disability professionals' explicit and implicit disability attitudes? and (4.) What sociodemographic factors correlate with disability professionals' explicit and implicit disability attitudes? We examined these questions using descriptive statistics, *t*-tests, a two-dimensional model of prejudice, and linear regression models.
Results: In our sample, 77.24% of disability professionals preferred nondisabled people explicitly and 82.03% implicitly. Most commonly, disability professionals were symbolic ableists (37.8%). Race, political orientation, and job type correlated with disability professionals' explicit attitudes, while disability, gender, and job type correlated with their implicit attitudes.
Conclusions: Ableism cannot be eradicated until disability professionals look inward and rid themselves of negative attitudes; until that occurs, disability professionals will continue to do a disservice to the very people they have dedicated their careers to – disabled people.

Ableism, "stereotyping, prejudice, discrimination, and social oppression toward people with disabilities" (p. 652),[1] is very common in society, significantly hindering the health, well-being, and quality of life of disabled people.[2] Ableism not only describes the discrimination disabled people face but also compulsory able-bodied/mindness, where nondisabled bodies/minds are favored, and all others marked as deviant.[3] Society, including not only relations between people, but also environments, policies, and social practices, is structured accordingly, frequently oppressing disabled people.[4] In order to reduce ableism, it is critical to conduct research exploring the factors that create, reproduce, and contribute to ableist ideas and actions.

Disability attitudes

People hold both conscious (explicit) and unconscious (implicit) attitudes, including relating to disability.[5] People's explicit and implicit attitudes do not necessarily align because they may feel social pressure to conceal their bias and/or may be unaware they are biased.[5] For this reason, it is particularly important to examine both explicit and implicit attitudes, especially when related to topics like disability, where it may be socially undesirable to reveal having negative attitudes.

Combinations of explicit and implicit attitudes can be categorized into four categories, or prejudice styles: symbolic ableist; principled conservative; aversive ableist; and truly low prejudiced.[6] Symbolic ableists are those with high levels of explicit disability attitudes and high levels of implicit disability attitudes. Symbolic ableists strongly favor individualism and believe disabled people produce excessive demands on the system, although they do often have some empathy for disabled people and recognize

Abbreviations: BIPOC, Black, Indigenous, people of color; DA-IAT, Disability Attitudes Implicit Association Test; IRB, Institutional Review Board; SAS, Symbolic Ableism Scale.

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discrimination exists.[7] Principled conservatives have high levels of explicit disability attitudes but low levels of implicit disability attitudes, as a result of valuing abstract conservative ideas and disliking policies that stray from tradition.[6] Aversive ableists have low levels of explicit disability attitudes but high levels of implicit disability attitudes.[6] They often believe they are egalitarian, yet feel discomfort around disabled people and unconsciously participate in biased thought and action, especially in subtle ways. Truly low prejudiced people have low levels of explicit and implicit disability attitudes.

Disability professionals

People who work with disabled people or whose work is about disability – disability professionals – such as health care professionals, researchers, educators, and human service providers, have long played a role in shaping knowledge about disability, often in individualized ways that creates and reinforces ableism, both within their own fields and in society at large as 'experts' about disability.[8,9] Research indicates professionals such as genetic counselors, medical residents, nurses, physician assistant students, rehabilitation counseling students, physical therapists, and teachers are implicitly biased against disability.[10–16] For example, VanPuymbrouck et al.'s[10] study of 25,000 health care professionals, found that although the professionals explicitly reported having little to no bias about disability, implicitly, the majority preferred nondisabled people.

While research indicates high levels of bias among health care professionals, which is certainly problematic, the professionals in VanPuymbrouck et al.'s[10] study may not necessarily specialize in disability or primarily work directly with disabled people; in addition, many other fields interact with disabled people beyond just those in health care. Disability professionals on the other hand, often have direct power over disabled people, can serve as gatekeepers, and can impact disabled people's lives immensely; they also have a role in creating and institutionalizing knowledge about disability. For these reasons, the aim of this study was to examine the disability attitudes of disability professionals. We had the following research questions.

1. What are disability professionals' explicit attitudes towards disability?
2. What are disability professionals' implicit attitudes towards disability?
3. What is the relationship between disability professionals' explicit and implicit disability attitudes?
4. What sociodemographic factors correlate with disability professionals' explicit and implicit disability attitudes?

Given previous research, we hypothesized disability professionals would have negative explicit and implicit attitudes about disability, although we believed implicit attitudes would be worse than explicit attitudes, resulting in more people being aversive ableists than symbolic ableists. To examine these research questions and hypotheses, we had 417 disability professionals complete the Symbolic Ableism Scale (SAS) and the Disability Attitudes Implicit Association Test (DA-IAT).

Methods

Participants

A total of 417 disability professionals volunteered for this study (Table 1). The most common age range was 41–48 years old (24.9%). Most disability professionals were nondisabled (76.8%), women (79.5%), and White (83.8%). The most common level of education was bachelor's degree (45.9%). Political orientation was measured on a sliding scale from very liberal (0) to very conservative (100); the mean political orientation was 33.8 (SD = 23.8), which is approximately moderately liberal. Most disability professionals had family members and/or close friends (76.6%) with disabilities. Most professionals lived in the United States (85.6%). The most common professions were quality management (23.6%), direct support staff (20.1%), and support coordinator (15.2%). People worked in the disability field an average of 19.2 years.

Table 1
Demographics (n = 417).

Characteristic	n	%
Age (n = 394)		
18-25	11	2.8%
26-33	56	14.2%
34-40	80	20.3%
41-48	98	24.9%
49-56	80	20.3%
57-64	68	17.3%
65+	20	5.1%
Disabled (n = 396)		
Yes	92	23.2%
No	297	76.8%
Gender (n = 409)		
Woman	325	79.5%
Man	75	18.3%
Nonbinary or other	9	2.2%
Race (n = 402)		
White	337	83.8%
Black	28	7.0%
Latinx	13	3.2%
Asian	9	2.2%
Other or multiracial	15	3.7%
Highest level of education (n = 407)		
High school degree/equivalent	42	10.3%
Associate's degree	45	11.1%
Bachelor's degree	187	45.9%
Graduate or professional degree	101	24.8%
Political orientation (n = 411; M [SD])	33.8 (23.80)	
Have disabled family and/or close friends (n = 401)		
Yes	307	76.6%
No	94	23.4%
Country		
United States	357	85.6%
Other	60	14.4%
Profession (n = 407)		
Quality management	96	23.6%
Direct support staff	82	20.1%
Support coordinator	62	15.2%
Disability rights advocate	59	14.5%
Frontline supervisor	55	13.5%
Human service provider executive leadership	49	12.0%
Human service provider administration	39	9.6%
Clinician	20	4.9%
Educator or special educator	18	4.3%
Disability researcher/academia	9	2.2%
Other	59	14.5%
Years in disability field (n = 410; M [SD])	19.2 (12.0)	

Note. People could select more than one profession.

Measures and variables

Symbolic Ableism Scale

To measure participants' explicit attitudes, we used the SAS, a valid and reliable measure of explicit disability attitudes.[7] The SAS has participants respond to a series of statements about disability on a 7-point Likert scale ranging from 'strongly disagree' to 'strongly agree.' For example, one item is "disabled people are demanding too much from the rest of society." Scores on the SAS,

which range from 0 to 1, represent how much people explicitly prefer nondisabled people; scores of 0.24 or less indicate little to no explicit preference, scores of 0.24–0.31 indicate slight explicit preference for nondisabled people, scores of 0.32–0.40 indicate moderate explicit preference for nondisabled people, and scores of greater than 0.40 indicate strong explicit preference for nondisabled people.[7]

Disability Attitudes Implicit Association Test

To measure participants' implicit attitudes, we used the DA-IAT. The DA-IAT presents participants with stimuli (words and icons) relating to two target-concept discriminations (i.e., disabled persons and abled persons) and two attribute dimensions (i.e., good and bad). Participants sort the stimuli in ways that are both congruent and incongruent with stereotypes; their reaction time is an indicator of how strongly they associate the groups and traits. Scores on the DA-IAT, which range from −2 to 2, represent how much people implicitly prefer disabled or nondisabled people. Scores of −0.14 to 0.14 reveal no preference for disabled or nondisabled people, scores of 0.15–0.34 a slight preference for nondisabled people, 0.35 to 0.64 a moderate preference, and 0.65 or greater a strong preference. Negative values of the same ranges reveal preferences for disabled people.

Research indicates IATs have test-retest reliability, and discriminant, construct, convergent, and predictive validity.[17–22] In fact, the predictive validity of IATs has been shown to relate to health outcomes and health care professionals' treatment of people.[19,21] For example, Black, Indigenous, People of color (BIPOC) who live in places higher in implicit racism have worse health outcomes[23]; moreover, physicians' racial implicit bias negatively impacts their clinical decision-making for Black patients.[24]

Procedure

After exemption approval from our Institutional Review Board (IRB), participants were recruited via email and social media distributed through disability related organizations (e.g., health care professional networks; national disability advocacy organizations; research centers on disability; human service provider networks; national disability associations for researchers, educators, clinicians, practitioners, and/or policy makers; direct support staff associations) between October 2021 and February 2023. Upon accessing the study website, participants completed the informed consent and then answered questions about their demographics. Following their demographics, participants completed the DA-IAT. This began with the DA-IAT instructions which indicated they should select the 'E' key on their keyboard if stimuli belong in categories on the left side of the computer screen and the 'I' key if stimuli belong to the right. They are told to do so as quickly as possible. If participants make a mistake, a red X appears until they select the correct answer. After the instructions, the participants were given seven rounds of categorization tasks, including a series of practice sessions, where they sorted stimuli in ways that were congruent and incongruent with stereotypes. After completing the DA-IAT, participants completed the SAS, answering the 13 Likert statements. They were then thanked for their participation. People were not compensated for participating.

Analyses

Explicit disability attitudes

To examine explicit attitudes, we first calculated SAS scores. We reverse coded the applicable SAS items and then averaged participants' answers to all of the SAS items. We then conducted descriptive statistics. Next, we used a one-way *t*-test to examine if the explicit attitudes on the SAS significantly differed from no bias (0).

Implicit disability attitudes

To examine implicit attitudes, we calculated DA-IAT scores using Greenwald et al.'s[25] updated IAT scoring protocol. We then conducted descriptive statistics. We then used a one-way *t*-test to determine if the implicit attitudes on the DA-IAT significantly differed from no prejudice (0).

Relationship between explicit and implicit

To explore the relationship between disability professionals' explicit and implicit attitudes we used an adapted version of Son Hing et al.'s two-dimensional model of racial prejudice.[26] (Participants that did not complete both the SAS and DA-IAT were removed from this analysis due to the missing data.) Participants' explicit and implicit disability attitudes were categorized as low and high using the equivalent of moderate preference for nondisabled people on both the explicit (0.32) and implicit (0.35) measures. Then, we grouped participants' combinations of explicit and implicit attitude levels into the four prejudice styles: symbolic ableist (high explicit and high implicit); principled conservatives (high explicit and low implicit); aversive ableist (low explicit and high implicit); and truly low prejudiced (low explicit and low implicit).

Sociodemographic correlates

To examine sociodemographic correlates of disability professionals' explicit and implicit attitudes, we used linear regression models. Participants' explicit and implicit disability attitudes served as the dependent variables in separate models. Participants' sociodemographic characteristics served as the independent variables. (Political orientation was included as a variable due to the relationship between attitudes and political orientation – despite both commonly holding prejudicial attitudes, liberals tend to have lower explicit and implicit attitudes than conservatives, and are more likely to be aversive ableists than symbolic ableists or principled conservatives.[6,27]).

Results

Explicit disability attitudes

Disability professionals' explicit attitudes ($n = 413$) ranged from 0 (no preference) to 1.00 (strongly prefer nondisabled people), with a mean of 0.32 (moderately prefer nondisabled people; $SD = 0.11$). A one-way *t*-test revealed this score was significantly different than a mean score of 0 (no preference), $t\ (412) = 61.47$, $p < 0.001$, indicating an explicit preference for nondisabled people among disability professionals. In our sample, 22.8% of disability professionals ($n = 94$) had no explicit preference for nondisabled people, 23.0% ($n = 95$) slightly preferred nondisabled people, 36.3% ($n = 150$) moderately preferred nondisabled people, and 17.9% ($n = 74$) strongly preferred nondisabled people (Fig. 1).

Implicit disability attitudes

Disability professionals' implicit attitudes ($n = 395$) ranged from −1.48 (strongly prefer disabled people) to 1.53 (strongly prefer nondisabled people), with a mean of 0.54 (moderate prejudice; $SD = 0.46$). A one-way *t*-test revealed this score was significantly different from a score of 0 (no prejudice), $t\ (394) = 23.32$, $p < 0.001$, indicating an implicit preference for nondisabled people among disability professionals. In our sample, 10.4% of disability professionals ($n = 41$) had no implicit preferences for nondisabled

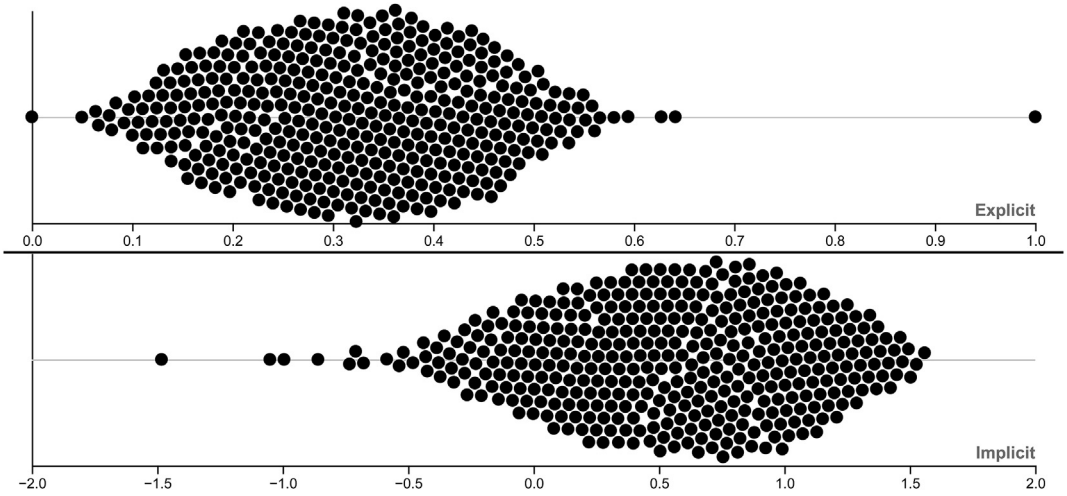

Fig. 1. Bee swarm distributions of disability professionals' explicit and implicit disability attitudes.

or disabled people, 13.7% ($n = 54$) slightly preferred nondisabled people implicitly, 23.5% ($n = 93$) moderately preferred nondisabled people, and 44.8% ($n = 177$) strongly preferred nondisabled people. Meanwhile, 3.8% ($n = 15$) slightly preferred disabled people, 2.0% ($n = 8$) moderately preferred disabled people, and 1.8% ($n = 7$) strongly preferred disabled people.

Prejudice styles

Of the 392 participants who completed both the explicit and implicit attitude measures, the majority of disability professionals (37.8%) were symbolic ableists, followed by aversive ableists (31.1%), principled conservatives (15.3%), and truly low prejudiced (15.8%; Table 2).

Correlates of implicit and explicit disability attitudes

The model between explicit attitudes and participants' sociodemographics was significant, F (31, 356) = 2.78, $p < 0.001$, $R^2 = 0.21$ (Table 3). Controlling for all other variables, Black disability professionals (0.32) had higher explicit attitudes than White disability professionals (0.07). More conservative disability professionals had higher explicit attitudes than more liberal disability professionals – explicit attitudes increased by 0.001 for every 1-unit increase in conservativism (out of 100). For example, controlling for all other variables, a disability professional with a political orientation of 0 (very liberal) is expected to have an explicit attitude of 0.27, whereas a disability professional with a political orientation of 100 (very conservative) is expected to have an explicit attitude of 0.38. Controlling for all other variables, disability rights advocates (0.23) had lower explicit attitudes than all other professionals (0.27). In addition, controlling for all other variables, frontline supervisors (0.31) had higher explicit attitudes than professionals that were not frontline supervisors (0.27).

Table 2
Relationship Between Explicit and Implicit Attitudes.

Explicit % (n)	Implicit % (n)		Total
	High	Low	
High	37.8% (148)	15.3% (60)	53.1% (208)
Low	31.1% (122)	15.8% (62)	46.9% (184)
Total	68.9% (270)	31.1% (122)	100% (392)

The model between implicit attitudes and participants' sociodemographics was significant, F (31, 340) = 1.95, $p = 0.002$, $R^2 = 0.16$ (Table 2). Controlling for all other variables, disability professionals who had disabilities themselves (0.44) had lower implicit attitudes than nondisabled disability professionals (0.58). Controlling for all other variables, women disability professionals (0.40) had lower implicit attitudes than men disability professionals (0.58). Controlling for all other variables, human service provider administration (0.76) had higher implicit attitudes than professionals with other jobs (0.58). Controlling for all other variables, disability researchers/academics (0.22) had lower implicit attitudes than professionals with other jobs (0.58).

Discussion

The attitudes of disability professionals can impact disabled people immensely. For this reason, the aim of this study was to examine the disability attitudes of disability professionals. In doing so, we found most disability professionals had negative explicit and implicit attitudes towards disability. In fact, 45% of disability professionals strongly preferred nondisabled people implicitly. While implicit disability bias is common in the general public, to which disability professionals are not immune, disability professionals' implicit disability attitudes in this study ($M = 0.54$, $SD = 0.46$) were statistically significantly worse than Friedman's[6] study of 350,000 nondisabled members of the general public ($M = 0.45$, $SD = 0.44$; $t = 4.06$, $p < 0.001$). Most disability professions operate via a medical model that pathologizes disability and interprets it as deviance, something inherently missing, and in needing of fixing.[8,9] Given the prevalence of ableism in society, disability professionals likely enter their professions with preconceived biased understandings of disability; those perspectives are likely strengthened as a result of medical and impairment based models of education and practice in their fields.[8,9,28]

In addition, as disability professionals reported higher levels of explicit disability bias than common in the general public, significantly fewer disability professionals were truly low prejudice than in Friedman's[6] study (15.8% versus 29.0%), and more disability professionals were symbolic ableists (37.8% versus 11.3%). Although symbolic ableists have some empathy for disabled people, an integral component of symbolic ableism is individualism – where one is directly responsible for their own outcomes and can achieve

Table 3
Demographic Correlates of Professionals' Disability Attitudes.

Characteristic	Explicit attitudes (*B* [95% CI])	Implicit attitudes (*B* [95% CI])
(Constant)	0.27 [0.21, 0.33]***	0.58 [0.29, 0.88]***
Age (ref: 18–25)		
26-33	−0.007 [-0.05, 0.03]	−0.16 [-0.35, 0.03]
34-40	−0.01 [-0.05, 0.02]	−0.02 [-0.19, 0.15]
41-48	−0.02 [-0.05, 0.010]	−0.08 [-0.23, 0.07]
49-56	0.01 [-0.02, 0.05]	−0.02 [-0.18, 0.14]
57-64	−0.02 [-0.06, 0.02]	−0.08 [-0.29, 0.12]
65+	−0.03 [-0.09, 0.04]	−0.23 [-0.53, 0.08]
Disabled (ref: nondisabled)	−0.003 [-0.03, 0.02]	−0.14 [-0.26, −0.01]*
Gender (ref: man)		
Woman	−0.01 [-0.03, 0.02]	−0.18 [-0.32, −0.05]**
Nonbinary/queer	−0.07 [-0.15, 0.0003]	−0.26 [-0.61, 0.10]
Race (ref: White)		
Asian	0.03 [-0.04, 0.10]	−0.10 [-0.47, 0.27]
Black	0.05 [0.005, 0.09]*	0.10 [-0.10, 0.29]
Latinx	−0.006 [-0.06, 0.05]	0.16 [-0.12, 0.44]
Other or multiracial	−0.01 [-0.07, 0.05]	−0.06 [-0.36, 0.23]
Education level (ref: graduate or professional degree)		
High school degree/equivalent	0.004 [-0.04, 0.04]	0.13 [-0.06, 0.32]
Associate's degree	0.01 [-0.03, 0.04]	−0.01 [-0.18, 0.16]
Bachelor's degree	−0.01 [-0.04, 0.01]	0.02 [-0.10, 0.14]
Has disabled family and/or close friends (ref: no)	−0.009 [-0.03, 0.02]	−0.01 [-0.13, 0.11]
Country: United States (ref: other)	0.02 [-0.006, 0.06]	0.02 [-0.12, 0.17]
Political orientation	0.001 [0.0007, 0.002]***	0.001 [-0.001, 0.003]
Profession		
Quality management (ref: no)	0.02 [-0.005, 0.05]	0.07 [-0.06, 0.19]
Direct support staff (ref: no)	0.02 [-0.005, 0.05]	0.05 [-0.08, 0.18]
Support coordinator (ref: no)	0.02 [-0.01, 0.05]	0.10 [-0.05, 0.25]
Disability rights advocate (ref: no)	−0.04 [-0.07, −0.01]*	−0.10 [-0.24, 0.05]
Frontline supervisor (ref: no)	0.04 [0.003, 0.07]*	0.04 [-0.12, 0.19]
Human service provider executive leadership (ref: no)	−0.02 [-0.06, 0.01]	0.06 [-0.11, 0.22]
Human service provider administration (ref: no)	−0.02 [-0.05, 0.02]	0.18 [0.01, 0.34]*
Clinician (ref: no)	0.003 [-0.05, 0.06]	0.12 [-0.14, 0.37]
Educator or special educator (ref: no)	0.02 [-0.03, 0.07]	0.16 [-0.08, 0.40]
Disability researcher/academia (ref: no)	0.05 [-0.01, 0.12]	−0.36 [-0.68, −0.03]*
Other (ref: no)	−0.005 [-0.04, 0.03]	−0.13 [-0.29, 0.02]
Years in disability field	0.0002 [-0.001, 0.001]	0.005 [-0.0009, 0.01]

anything if they work hard enough.[7] Individualism portrays disability as a "problem" individual people "suffer" from and, as a result, focuses on "fixing" people rather than environments and systems.[3,28] Doing so aligns with the medical model of disability, the lens through which most disability professions have throughout history not only understood disability, but have also have reproduced knowledge about, and, pathologized, disability.[8,9,28] Since individualization depoliticizes disability while naturalizing and justifying ableism, disability professionals who are symbolic ableists are likely not only doing a disservice to the disabled people they work with, if applicable, but also spreading and reinforcing ableism writ large.[3]

In addition, for the 31.1% of disability professionals that were aversive ableists, there was a mismatch between their explicit and implicit disability attitudes – they consciously believed they were significantly less ableist than they actually were unconsciously. As a consequence of this mismatch in attitudes, aversively ableist disability professionals will have more anxiety and awkwardness interacting with disabled people[6]; since being egalitarian is important to their self-concepts, they will also disassociate and deflect any prejudiced thought and behavior they participate in.[6,27] As a result of this disassociation as well as the subtle nature, these disability professionals likely often unknowingly reinforce ableism. For example, aversive ableist disability professionals may believe they are having positive interactions with disabled people, but disabled people are more likely to be dissatisfied and recognize their subtly prejudicial behavior.[29] Moreover, since aversive ableist disability professionals consciously believe they are not prejudiced, it can be harder to reduce their unconscious attitudes.

Correlates of Disability Professionals' Attitudes.

There were generally high levels of explicit and implicit bias among the disability professionals regardless of their sociodemographics. For example, regardless of their education level or how long they worked in the field, disability professionals had similar levels of explicit and implicit disability attitudes. However, there were a handful of sociodemographic variables that correlated with disability professionals' explicit and implicit attitudes. For example, consistent with previous research,[7,10] women disability professionals had lower implicit disability attitudes than men disability professionals.

Disabled disability professionals had significantly lower implicit attitudes than nondisabled disability professionals. This finding is similar to past research about the general population, where disabled people often have less negative attitudes than nondisabled people.[7,10] Despite having lower levels of implicit ableism than nondisabled professionals, disabled professionals still had high levels of implicit ableism and frequently preferred nondisabled people. Given how prevalent ableism is in society, especially in disability fields, many disabled people internalize ableism, and this may be reflected in these findings.[30]

Black disability professionals had slightly higher explicit attitudes than White disability professionals, which is similar to previous research about health care professionals.[10] However, it should be noted that there were no significant differences based on race for implicit attitudes, including for Black disability professionals. Thus, the finding about increased explicit attitudes might be due to cultural differences in the SAS or in different communities' attitudes

about disability. In addition, according to social minority group relations theory, minority groups "might adopt the dominant attitudes of majority groups, including stereotypes of and discrimination against other minorities" (p. 661),[31] which could contribute to explicit differences. Given the mismatch between explicit and implicit attitudes, more research should be conducted to examine this trend, particular as Black people are more likely to acquire disabilities because of racism.[32]

In addition, more conservative disability professionals had higher levels of explicit bias than less conservative disability professionals. This aligns with previous research about two-dimensional prejudice, which indicates conservatives are more likely to report conscious bias than liberals, although both often have high levels of unconscious bias.[6,27] This is likely also why there was not a significant relationship between political orientation and implicit attitudes as both had high levels of implicit bias.

There were also several differences in explicit and implicit attitudes based on what disability profession the participant was from, specifically for disability rights advocates, frontline supervisors, human service provider administration, and researchers/academics. For example, frontline supervisors had slightly higher explicit attitudes than disability professionals who were not frontline supervisors. Frontline supervisors' focus on operations, monitoring, and management may lead them to commodify disability,[9] thus increasing their explicit attitudes. However, this difference did not extend to implicit attitudes, but this may be due to the fact that most disability professionals had high implicit attitudes regardless of their role.

Disability rights advocates had lower implicit attitudes than disability professionals with other roles. This may be due to their focus on disability rights and justice, or their lower attitudes may draw them to this work in the first place. There may also be an interaction between disability rights advocates and disability status, with disabled professionals being more likely to be rights advocates, that was not explored in this study.

Human service provider administrators had higher implicit attitudes than disability professionals with other roles, strongly preferring nondisabled people implicitly. This may be due to these professionals not directly interacting with disabled people frequently. In fact, research suggests that while regular contact with social minorities can help reduce bias, those with only brief exposure to disability may have increased negative disability attitudes.[33]

Moreover, disability researchers/academics had lower implicit attitudes than disability professionals who were not researchers/academics. This finding may be due to only nine people representing this group. It should also be noted that disability researchers/academics can have a wide range of orientations to disability – like disability professionals in general they are a heterogeneous group – and there may be further differences amongst them that should be explored in future research.

Implications

Ableism is harmful regardless of who it is that holds the bias. However, negative disability attitudes may be especially problematic when held by disability professionals as they not only commonly interact with disabled people, but often have power over disabled people and are positioned as experts about disability. As a result of having negative disability attitudes, especially negative implicit attitudes which they may not be aware of, disability professionals may not recognize when they discriminate. They may also downplay or dismiss disabled people's experiences, and individualize them, attributing barriers to the person, rather than systemic oppression. Not being able to recognize ableism is a barrier to disability professionals producing knowledge about disability that reflects disabled people's lived experiences. It also is a barrier to disability professionals providing quality services, supports, and health care to disabled people. Both of which hinder the health, well-being, and quality of life of disabled people. For example, the disability attitudes of health care providers contribute to health care disparities among disabled people.[29,34,35]

Given the impact on the quality of life of disabled people, reducing disability professionals' ableism is of critical importance. A richer education about ableism as well as disability more broadly would be beneficial for disability professionals. While disability is not commonly included in school curricula, beyond education for a disability related degree, when it is, it is often from a medical model perspective about individualized impairments, rather than about attitudes, environments, and systems that impact disabled people immensely.[36] For example, disability simulations, a common component of health care education, often rely on stereotypes about disability, rather than lived experience, and as a result have been shown to reinforce negative attitudes about disability.[37,38]

While education based in lived experience and disability justice would be beneficial, it, alone, is not enough to eradicate ableism. In fact, very few interventions have successfully reduced people's implicit attitudes beyond a few days, especially disability attitudes.[39] As such, research must continue to examine the many ways ableism operates as well as work to develop evidence-based interventions to reduce disability professionals' ableism.

Limitations

When interpreting the findings from this study, several limitations should be noted. People volunteered to participate; as such, there is a chance of self-selection bias. The sample was not necessarily representative of the disability professional workforce. For example, the overwhelming majority of participants were White, while most direct support staff are BIPOC.[40] In addition, there was an uneven distribution among demographic groups, with some groups (e.g., nonbinary or other gender) represented by only a few participants, which may have impacted results. In addition, as disability fields are broad and heterogenous, there may have been factors we did not explore in this study that correlate with people's attitudes. There are several critiques of IATs, including related to validity and generalizability; however, evidence also suggests IATs predict social behavior and social judgements, including to a better extent than explicit measures.[19]

Conclusion

Disability professionals' bias against disabled people is problematic not only for those disabled people they directly interact with, but because their power in creating and sharing information about disability can also help serve to reinforce ableism in society at large. When we examined the disability attitudes of disability professionals, we found high levels of both explicit and implicit attitudes, with most professionals scoring as symbolic ableists. The negative disability attitudes of disability professionals are a direct threat to the health and quality of life of disabled people. Ableism cannot be eradicated until disability professionals look inward and rid themselves of negative attitudes; until that occurs, disability professionals will continue to do a disservice to the very people they have dedicated their careers to – disabled people.

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Conflict of Interest Statement

The author has no conflicts of interest.

References

1. Bogart KR, Dunn DS. Ableism special issue introduction. *J Soc Issues*. 2019;75:650–664.
2. Krieger N. Discrimination and health inequities. *Int J Health Serv*. 2014;44:643–710.
3. Kafer A. *Feminist, Queer, Crip*. Bloomington, IN: Indiana University Press; 2013.
4. Goodley D. *Dis/ability Studies: Theorising Disablism and Ableism*. Routledge; 2014.
5. Amodio DM, Mendoza SA. Implicit intergroup bias: cognitive, affective, and motivational underpinnings. In: Gawronski B, Payne BK, eds. *Handbook of Implicit Social Cognition: Measurement, Theory, and Applications*. New York City: Guilford Press; 2011:353–374.
6. Friedman C. Mapping ableism: A two-dimensional model of explicit and implicit disability attitudes. *Canadian J Dis Stud*. 2019;8:95–120.
7. Friedman C, Awsumb J. The symbolic ableism scale. *Rev Dis Stud: Int J*. 2019:15.
8. Oliver M. *The Politics of Disablement: A Sociological Approach*. New York, NY: Saint Martin's Press; 1990.
9. Albrecht GL. *The Disability Business: Rehabilitation in America*. Sage Publications; 1992.
10. VanPuymbrouck L, Friedman C, Feldner H. Explicit and implicit disability attitudes of healthcare providers. *Rehabil Psychol*. 2020;65:101–112.
11. Pruett SR, Chan F. The development and psychometric validation of the disability attitude implicit association test. *Rehabil Psychol*. 2006;51:202–213.
12. Gould H, Hashmi SS, Wagner VF, Stoll K, Ostermaier K, Czerwinski J. Examining genetic counselors' implicit attitudes toward disability. *J Genet Counsel*. 2019;28:1098–1106.
13. Lum J, Morean W, Maccarrone A, Carpenter TP, Aaberg V, Bentley JA. Implicit associations related to physical disability among nursing students. *Disability and Health J*. 2021;14:101150.
14. Dunn B, Mcintosh J, Ray L, McCarty D. The prevalence of implicit bias in practicing physical therapists. *Carolina J of Interdiscip Medi*. 2022;2.
15. Omori A, Tateno A, Ideno T, et al. Influence of contact with schizophrenia on implicit attitudes towards schizophrenia patients held by clinical residents. *BMC Psychiatr*. 2012;12:205.
16. Hornstra L, Denessen E, Bakker J, van den Bergh L, Voeten M. Teacher attitudes toward dyslexia: effects on teacher expectations and the academic achievement of students with dyslexia. *J Learn Disabil*. 2010;43:515–529.
17. Cunningham WA, Preacher KJ, Banaji MR. Implicit attitude measures: consistency, stability, and convergent validity. *Psychol Sci*. 2001;12:163–170.
18. Greenwald AG, Brendl M, Cai H, et al. The Implicit Association Test at age 20: what is known and what is not known about implicit bias. https://psyarxiv.com/bf97c/; 2020.
19. Greenwald AG, Uhlmann EL, Poehlman TA, Banaji MR. Understanding and using the implicit association test: III. meta-analysis of predictive validity. *J Pers Soc Psychol*. 2009;97:17–41.
20. Lindgren KP, Baldwin SA, Olin CC, et al. Evaluating within-person change in implicit measures of alcohol associations: increases in alcohol associations predict increases in drinking risk and vice versa. *Alcohol Alcohol*. 2018;53:386–393.
21. Nosek BA, Greenwald A, Banaji MR. The Implicit Association Test at age 7: a methodological and conceptual review. In: Bargh JA, ed. *Automatic Processes in Social Thinking and Behavior*. Psychology press; 2007:265–292.
22. Nosek BA, Smyth FL. A multitrait-multimethod validation of the Implicit Association Test: implicit and explicit attitudes are related but distinct constructs. *Exp Psychol*. 2007;54:14–29.
23. Zestcott CA, Ruiz JM, Tietje KR, Stone J. The relationship between racial prejudice and cardiovascular disease mortality risk at the state and county level. *Ann Behav Med*. 2022;56:959–968.
24. Green AR, Carney DR, Pallin DJ, et al. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *J Gen Intern Med*. 2007;22:1231–1238.
25. Greenwald AG, Nosek BA, Banaji MR. Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *J Pers Soc Psychol*. 2003;85:197–216.
26. Son Hing L, Chung-Yan G, Hamilton L, Zanna M. A two-dimensional model that employs explicit and implicit attitudes to characterize prejudice. *J Pers Soc Psychol*. 2008;94:971–987.
27. Gaertner SL, Dovidio JF. The aversive form of racism. In: Gaertner SL, Dovidio JF, eds. *Prejudice, Discrimination, and Racism: Theory and Research*. Orlando: Academic Press; 1986:61–89.
28. Linton S. *Claiming Disability, Knowledge and Identity*. New York: New York University Press.; 1998.
29. Dovidio JF, Fiske ST. Under the radar: how unexamined biases in decision-making processes in clinical interactions can contribute to health care disparities. *Am J Publ Health*. 2012;102:945–952.
30. Campbell FAK. Exploring internalized ableism using critical race theory. *Disabil Soc*. 2008;23:151–162.
31. Bratton KA, Haynie KL. Agenda setting and legislative success in state legislatures: the effects of gender and race. *J Polit*. 1999;61:658–679.
32. Schalk S. *Black Disability Politics*. Duke University Press; 2022.
33. Kallman D. Integrating disability: boomerang effects when using positive media exemplars to reduce disability prejudice. *Int J Disabil Dev Educ*. 2017;64:644–662.
34. Hall WJ, Chapman MV, Lee KM, et al. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: a systematic review. *Am J Publ Health*. 2015;105:e60–e76.
35. Lagu T, Haywood C, Reimold K, DeJong C, Walker Sterling R, Iezzoni LI. 'I am not the doctor for you': physicians' attitudes about caring for people with disabilities. *Health Aff*. 2022;41:1387–1395.
36. Lalvani P, Broderick AA. Institutionalized ableism and the misguided "Disability Awareness Day": transformative pedagogies for teacher education. *Equity & Excell Educ*. 2013;46:468–483.
37. Nario-Redmond MR, Gospodinov D, Cobb A. Crip for a day: the unintended negative consequences of disability simulations. *Rehabil Psychol*. 2017;62:324.
38. Silverman AM, Gwinn JD, Van Boven L. Stumbling in their shoes: disability simulations reduce judged capabilities of disabled people. *Soc Psychol Personal Sci*. 2015;6:464–471.
39. FitzGerald C, Martin A, Berner D, Hurst S. Interventions designed to reduce implicit prejudices and implicit stereotypes in real world contexts: a systematic review. *BMC psychol*. 2019;7:1–12.
40. Campbell S. *Racial and Gender Disparities within the Direct Care Workforce: Five Key Findings*. NY: PHI: Bronx; 2017.