How Do Physical Disability Cues Influence Assumptions about Consumer Tastes? Unpacking the Disability Preference Stereotype

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> Across 10 experimental studies, this research identifies and provides evidence of a disability preference stereotype whereby observers infer that disabled consumers prefer utilitarian products more than nondisabled consumers and prefer hedonic products less than nondisabled consumers. We show that this stereotype occurs because of societal associations between physical disability and pity. Pity elicits a multidimensional response such that considering the interests of a disabled person increases feelings of personal discomfort, driving both an inclination to help (helpgiving orientation) and a tendency to assess the perceived misfortune (misfortune appraisal) in parallel. Thus, when considering the preferences of disabled individuals, the help-giving orientation increases focus on functional (utilitarian) goods, while the misfortune appraisal decreases focus on pleasurable (hedonic) goods. Importantly, this stereotype can be mitigated through increased disability representation. Representation of empowered disabled individuals in media can dampen the help-giving orientation, reducing inferred utilitarian preferences, while representation of disabled people partaking in daily pleasures through increased accessibility can reduce misfortune perceptions, increasing inferred hedonic preferences. This work addresses the paucity of disability-related consumer research, identifies how aspects unique to consumption can limit consumers with disabilities, and highlights opportunities to minimize ableist stereotypes by expanding representation and increasing marketplace inclusion.

> Keywords: disability, accessibility, pity, medical/social models of disability, hedonic/utilitarian preferences, stereotypes

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"I just couldn't understand what I had to do to be seen as an ordinary person."

—Judith Heumann, Being Heumann: An Unrepentant Memoir of a Disability Rights Activist

In December 2022, The Washington Post published the article, "Holiday gifts for people with a disability or chronic illness" (Morris 2022). The gift suggestions included "a hot water bottle," "compression gloves," or "a weighted blanket" and spanned a variety of needs and conditions. The article suggested that giving a gift that specifically considers a person's disability "can be a great way to make them feel seen and supported." Notably, the comments in response, many from people sharing that they had disabilities, conveyed frustration with the suggestions and underlying message. One person stated that focusing on their disability "leads to the feeling that your disability is the thing people identify as your main characteristic. Versus your love of music, your joy in wearing red shirts, or your appreciation of good chocolate." Another person stated, "Ick. How about ... you just give disabled people the same thing you'd give anyone else-something that appeals to their interests?" These comments reflect exasperation with a person's hedonic interests being overlooked due to their disability. Although people with disabilities certainly have practical needs and preferences, they also have varying penchants and passions (Brown 2020; Wong 2020). Such responses raise the question: are the inferences observers make about the preferences of disabled consumers biased toward utilitarian and against hedonic goods or services? If so, why? And what is the role of marketing in trying to shift these beliefs?

In the present research, we introduce the "Disability Preference Stereotype," characterized by the assumption that physically disabled people have greater utilitarian interests relative to nondisabled people, and lower hedonic interests relative to nondisabled people. Due to this stereotype, elements of pleasure and enjoyment are overlooked for disabled individuals, despite recognition of the importance of pleasure and happiness for consumers (Hirschman and Holbrook 1982; see Alba and Williams 2013 for a review), and despite hedonic enjoyment being a fundamental dimension of well-being (Kahneman, Diener, and Schwarz 1999; Ryan and Deci 2001). We rely on two important models within the field of disability studies to elucidate this process. We argue that the dominant medical model of disability, or the view of disability as an individual impairment that must be "normalized" (Oliver 2012), fosters the belief that people with disabilities are somehow deficient, driving perceptions of pity that shape inferred hedonic and utilitarian preferences. We also argue that emphasis on tenets of the social model of disability (Abberley 1987), or the belief that society creates the

greatest limitations for disabled people, facilitates interventions to attenuate this disability preference stereotype.

This stereotype is crucial to explore given that people with disabilities make up 15% of the world population (World Health Organization 2021), with one in four people becoming permanently or temporarily disabled in their lifetimes (Social Security Administration 2022). The notion that society overemphasizes utilitarian interests and deemphasizes hedonic ones for the large segment of disabled consumers can be interpreted as a form of ableism if people with disabilities feel seen as an object of pity by nondisabled individuals—an alienating experience resonant with The Washington Post article comments. Further, if a large segment of consumers is perceived as less interested in hedonic products than they actually are (study 2 discussion), the market is not adequately providing value via products or services for these consumers, reflecting a missed opportunity for firms. Finally, we believe that understanding the disability preference stereotype and finding strategies to curb it can benefit both consumers with and without disabilities, and marketers who aim to provide value for this segment sensitively and effectively. At present, the burden is often placed on people with disabilities to work for their own inclusion (Barbarin 2020a, 2020b; Mayes 2023)—effort that is emotionally and socially taxing (Reeve 2006). By understanding this stereotype and, thus, interventions to correct it, nondisabled people can take on more responsibility for increasing disability inclusion.

Notably, despite the importance of understanding the biases toward disabled consumers, there has been limited work in this area. Research on perceptions of disabled individuals often focuses on group-level stereotypes, such as the perception that people with disabilities are high in warmth and low in competence (Cuddy, Fiske, and Glick 2008), though distinctions are not made between cognitive and physical disabilities. Critically, in the premier marketing journals, academic research on disability is largely missing, with the limited work noting disability's important influence in a broader context, such as in experiences of temporarily unhoused women (Hill 1991), but rarely centering on disability (for an exception, see exploration of perceived tradeoffs with accessibility in Grewal and van der Sluis 2024). To our knowledge, no research has yet examined the inferred preferences of people with physical disabilities.

In the present work, we focus on physical disability, or a physiological disorder, disfigurement or anatomical loss that substantially limits a person's ability to perform self-care (*The Americans with Disabilities Act* 1990). We do so because physical disability elicits powerful categorization and stereotyping responses, more than gender, race, or age (Rohmer and Louvet 2009). People respond to individuals with physical versus intellectual or "invisible" disabilities (e.g., mental illness) differently because a burden is often

placed on people with invisible disabilities to "prove" they are disabled (Dunn 2019). In contrast, with physical disabilities, an "impairment" is immediately inferred (Santuzzi and Waltz 2016).

We situate our work within extant work in societal models of disability, stereotyping, and emotion. We propose that due to the prevailing medical model's "body-asimpaired" view (Oliver 2012; Olkin and Pledger 2003), nondisabled individuals feel pity when considering the lives of physically disabled people. Consistent with the notion that pity is an ambivalent, multidimensional emotion (Florian, Mikulincer, and Hirschberger 1999; Lazarus 1991), we argue that a global pity response emerges in which observers feel personal discomfort, which in parallel elicits both a desire to help (i.e., help-giving orientation) and feelings of sorrow (i.e., misfortune appraisal). As a result, when considering the preferences of disabled individuals, the help-giving orientation increases focus on functional (utilitarian) goods, while the misfortune appraisal suppresses focus on pleasurable (hedonic) goods. This response results in the belief that disabled (vs. nondisabled) individuals prefer utilitarian products more and hedonic products less. Though it is not rational that someone who uses a wheelchair would enjoy a (utilitarian) documentary channel any more than someone who does not use a mobility aid, or would enjoy a (hedonic) scented candle any less, we document the existence and pervasiveness of this stereotype.

Importantly, we argue that stereotypes stemming from a medical model lens can be countered through greater reliance on tenets of the social model of disability, which suggests society itself, through prejudicial attitudes of ableism and inaccessible spaces, is the fundamental impairment that marginalizes people with disabilities (Abberley 1987; Oliver 2012). This view of "society as impairing" also implies that efforts to change society can play a vital role in reducing ableism. We propose that witnessing representation of disabled people contributing to popular culture and partaking in accessible daily life pleasures (1) attenuates observers' orientations to help disabled people, lowering inferences of their utilitarian product interests and (2) decreases the belief that disabled individuals are living lives of misfortune, heightening inferences of their hedonic product interest. In this way, social model interventions can affirm the dignity (Lamberton 2019; Lamberton et al. 2024) of disabled people and reduce stereotyping.

Our work makes multiple contributions. First, we introduce to consumer research how the prevailing medical model of disability manifests in increased perceptions of pity for disabled (vs. nondisabled) individuals, and reveal the multidimensional pity response that goes on to shape inferred preferences. Second, in revealing a societal belief that disabled (vs. nondisabled) people prefer hedonic products less, even for gifts, we qualify and reverse documented findings of hedonic gift-giving orientations (Galak, Givi,

and Williams 2016; Lu, Liu, and Fang 2016). Third, crucially, we show how social model interventions promoting inclusion via representation, in addition to empowering disabled consumers, can reduce the disability preference stereotype. In doing so, we identify a consumption-specific benefit of disability representation, and thus, of applying the social model to the marketplace. Finally, we highlight the importance of disability visibility, a lens with farreaching impact because awareness of accessibility often leads to social change and increased equity for other marginalized groups (Ford Foundation 2020).

In this work, we use person-first and identity-first language interchangeably to describe people with disabilities (i.e., person-first: person with a disability; identity-first: disabled person) because we recognize that people in the disability community have varying preferences in how they identify (Dunn and Andrews 2015). This convention is in line with bias-free language guidelines provided by the American Psychological Association (2022).

CONCEPTUAL FRAMEWORK

Perceptions of Disability and Historical Background

Research in psychology identifies persistent biases against people with disabilities, evident in negative (Dunn 2019) or infantilizing attitudes (Robey, Beckley, and Kirschner 2006), and perceptions of relatively low competence (Fiske et al. 2002). These biases often stem from ableism, or the stereotyping, prejudice, and discrimination of disabled people that inhibits their rights and well-being (Bogart and Dunn 2019). Understanding the harrowing history of discrimination toward disabled people is crucial to contextualize research on disability. People with disabilities have faced centuries of irrational fears and harmful stereotypes, been ridiculed as objects of entertainment in circuses and exhibitions, and been banished to institutions and asylums (Parten and Citchen-Spruce 2023). In fact, until 1974, many states imposed "ugly laws" mandating that disabled individuals stay out of public view (Schweik 2009), and as of 2022, 31 U.S. states still had laws allowing doctors to sterilize disabled people without their consent (National Women's Law Center 2022). Only during World War II did disability rights issues become more prominent as injured veterans returned home (Parten and Citchen-Spruce 2023), motivating a "grateful nation" to focus on medical advances and reintegrating veterans into society (Carmel 2020). In the 1960s and 1970s, activists demanded initiatives to address the physical and social barriers confronting the disability community, resulting in the first legislation specific to disability discrimination, the Rehabilitation Act of 1973. Notably, this act remained unsigned and unimplemented for four years, prompting the longest nonviolent sit-in in U.S. history at a federal

building, where disability activists protested for 25 days to force lawmakers to sign the Rehabilitation Act. As organizer Kitty Cone described, "for the first time, disability really was looked at as an issue of civil rights rather than an issue of charity and rehabilitation..." (Grim 2015). Disability activists continued to fight to expand protections, resulting in the signing of the Americans with Disabilities Act (ADA) in 1990 (Carmel 2020), which called for reasonable accommodations in the workplace, mandated accessibility in buildings and public spaces, and forbade discrimination based on disability.

Although the ADA brought progress, it is often criticized for falling short on its material consequences for society. It often lacks enforcement, is selectively applied, and treats people with disabilities as "exceptions" to society (Baker and Kaufman-Scarborough 2001). Moreover, policy alone cannot change societal attitudes. As Disability Visibility Project founder, Alice Wong (2020), notes, "The A.D.A. can only do so much to correct inequalities in a society that is uncomfortable with disability." Indeed, research in disability studies proposes the social model of disability as a way to challenge these attitudes (Oliver 2012), as we describe next.

Disability Studies and Models of Disability

In the 1960s, the field of disability studies coalesced as an interdisciplinary area examining the interaction of disability with the social world, incorporating interests of sociology, history, medical anthropology, politics, law, literature, and psychology (Goodley 2016; Oliver 2012; Olkin and Pledger 2003). This research area critiqued the prevailing medical model of disability, whereby a disabled person is seen as having a specific perceived physical, psychiatric, intellectual, or sensory abnormality that must be cured to "normalize" them (Oliver 2012). This view is often criticized as ableist because it views disabled bodies as inferior and in need of fixing (Adams et al. 2013) and "...puts the burden of living in an inaccessible world on disabled people rather than dismantling or addressing the structures and institutions that are inaccessible" (Barbarin 2020a, 2020b). It also fosters the narrative that without the potential to be "fixed," it is impossible to have high quality of life, a notion repeatedly disproven in work on the "disability paradox," which shows that people with serious and persistent disabilities frequently describe experiencing good or excellent quality of life-far higher than nondisabled outsiders predict (Albrecht and Devlieger 1999; Ubel et al. 2005).

In contrast to the medical model, the *social model* argues that society fundamentally limits opportunities for disabled people through ableism and inaccessibility (Oliver 2012; Siminski 2003). That is, as opposed to *individual* deficiencies, the social model emphasizes *society's* failure to account for disabled people's needs by providing

appropriate products, services, and environments, which thereby excludes disabled people from full participation in society (Oliver 2012), and inherently limits their visibility and representation. This perspective focuses on creating inclusive environments and transforming societal attitudes, a dignity-affirming view (Lamberton 2019) that dovetails with the tenets of inclusive design (Patrick and Hollenbeck 2021). Thus, when the social model is emphasized, disability is not a personal tragedy, nor do disabled people need to be "fixed," but rather disability is neutral, a marker of diversity that can coexist with accessible systems and environments (Dunn and Andrews 2015). In the words of pioneering disability rights advocate Judy Heumann, "We were not medical problems. I was never going to undo the damage polio had done to my nerve cells and walk again, nor was this my goal...Accidents, illnesses, genetic conditions, neurological disorders, and aging are facts of the human condition, just as much as race or sex" (2020, 55).

Disability and the Global Pity Response

Given the prevalence of the medical model in society, we argue that people with physical disabilities are often seen as having a "deficiency," a belief that we contend leads observers to feel pity when considering a physically disabled person. Pity refers to the "negative evaluation and affect that witnessing the suffering of others may elicit" (Florian et al. 1999, 4). Lay definitions of pity involve feelings of sympathy and sadness caused by the suffering and troubles of others (Oxford 2024) or even sorrow for one's suffering (Merriam-Webster 2024). However, the academic conceptualization of pity has long been problematic (Florian et al. 1999; Lazarus 1991) in part due to its multidimensionality. It can elicit helping behavior (Dijker 2001), but also stigma and rejection (Harris and Fiske 2006). Further, behavioral responses to pity include active facilitation and passive neglect (Cuddy et al. 2008)—wanting to help, yet ignoring the stated desires of, or having a passive attitude toward, the suffering of the object of pity.

Our research builds upon the multidimensional pity conceptualization by Florian et al. (1999), who found that people have three fundamental responses to pity: one characterized by personal vulnerability and discomfort in facing the suffering of others, a second comprised of caring and support-seeking behaviors, and a third consisting of sorrow-related emotions and misfortune contemplation. Notably, although Florian et al.'s (1999) work did not examine physical disability specifically or test the specific order of the response, it did provide the scaffolding and description of the multidimensional pity response. In the present research, we introduce a framework describing how the global pity response shapes nondisabled observers' inferences about the lives and preferences of people with disabilities.

First, consistent with the notion that pity increases feelings of personal discomfort (Florian et al. 1999), attributions of physical disability may heighten awareness of one's own vulnerability to physical injury (Novak and Lerner 1968) or one's own mortality (Hirschberger, Florian, and Mikulincer 2005). Research shows that non-disabled people often feel anxious in the presence of people with disabilities (Dunn 2019).

Second, we propose that observers engage in two parallel coping responses to deal with this discomfort, capturing the caring/support-seeking and sorrow-related pathways described by Florian et al. (1999). We argue that these feelings of discomfort give way to both: (1) a help-giving orientation, or consideration of how one can help the pitied target and (2) a misfortune appraisal, or an assessment of the degree to which the target is living an unfortunate or sorrowful life. We propose that these parallel pity responses subsequently influence how observers think about the lives of people with disabilities, and in turn, their preferences, as we describe next.

Product Types and the Disability Preference Stereotype

utilitarian/hedonic The nature of consumption (Hirschman and Holbrook 1982; Voss, Spangenberg, and Grohmann 2003) has long been explored in marketing and consumer research. Utilitarian products or services emphasize functional, helpful, or practical aspects, whereas hedonic products or services emphasize fun, delightful, enjoyable aspects (Dhar and Wertenbroch 2000; Voss et al. 2003). We propose the pity response will shape inferred utilitarian and hedonic preferences. First, we argue that the help-giving orientation to improve the lives of disabled people leads to an emphasis on functionality, making utilitarian products seem particularly appropriate, generalizing to make any utilitarian product seem like a better fit for disabled (vs. nondisabled) consumers. This view is consistent with feeling compelled to "help" disabled individuals in unsolicited ways (e.g., pushing a stranger's wheelchair, holding the door for someone on crutches uncomfortably far away; Swanson 2015). Because people with disabilities in contemporary society do have varied fundamental needs that remain unmet (Heumann 2020; Wong 2020), it is logical to intuit they might require more functional goods. However, we propose that this emphasis on functionality creates a presumption that disabled (vs. nondisabled) individuals are more interested in any utilitarian item, even those that in no way address their disability (e.g., a documentary channel, a monthly book subscription).

Second, we argue that the misfortune appraisal limits the consideration of enjoyment or pleasure-focused products for people with disabilities. Research on how the focusing illusion (Wilson et al. 2000) shapes reactions to the emotional lives of pitied others (O'Brien et al. 2018) finds that

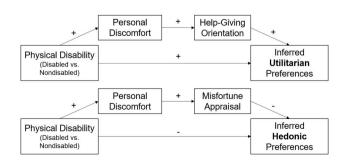
pitied others are viewed as having uniformly unfortunate lives—a homogenous exaggeration of their salient "bad features." Thus, we expect observers to overlook physically disabled people's sources of potential enjoyment, and extend O'Brien et al.'s (2018) work on pity to propose that for people with disabilities, heightened perceptions of misfortune lead to a denial of the possibility that they would even be interested in *seeking* pleasure. Thus, we introduce the disability preference stereotype, where utilitarian products are seen as of greater interest to disabled (vs. nondisabled) individuals, and hedonic products are seen as of lesser interest to disabled (vs. nondisabled) individuals. We present our conceptual model in figure 1.

Notably, we argue for a process distinct from dehumanization, which suggests that for individuals from marginalized groups, physical needs are deemed more important than psychological ones (Schroeder and Epley 2020) and implies a diminished perception of morality, mind, and humanity (Gray, Young, and Waytz 2012). In study 2, we explicitly test and rule out the alternative explanations of disability increasing morality perceptions through higher perceived adversity overcome, and disability increasing perceptions of dehumanization. We also use utilitarian stimuli that satisfy psychological needs, such as documentary streaming channels or book-of-the-month clubs, to replicate our effect and rule out a dehumanization account.

In sum, we expect that the parallel dimensions of the pity response, help-giving orientation, and misfortune appraisal lead observers to (1) increase their expectations of a disabled (vs. nondisabled) person's preference for utilitarian items and (2) decrease their expectations of a disabled (vs. nondisabled) person's preference for hedonic items. Notably, we do not expect observers to infer that physically disabled individuals always prefer utilitarian over hedonic options—our focus is on observers' inferences of a disabled (vs. nondisabled) person's utilitarian and hedonic preferences. Thus, if someone is described as having various hedonic interests, observers will be more likely to view hedonic products as appropriate gifts, regardless of disability. However, we suggest that there is a

FIGURE 1

CONCEPTUAL MODEL



societal perspective that all else equal, disabled (vs. nondisabled) people are less interested in hedonic and more interested in utilitarian options.

Mitigating Inferred Preferences through the Social Model of Disability

Importantly, although we argue that the disability preference stereotype emerges due to society's medicalized view of disability, we also propose that its consequences can be mitigated by employing tenets of the social model. Specifically, we argue that increased counterstereotypical disability representation can mitigate help-giving and misfortune appraisal perceptions. Such interventions incorporate the social model perspective that stereotypes contribute to the exclusion of disabled individuals. Indeed, work on impression formation describes how people can proceed from category-based (i.e., people with disabilities as a group) to individuating processes (i.e., a person with a disability; Fiske and Neuberg 1990). Counterstereotypical information about a disabled person can elicit decategorization, or deemphasize the medicalized view of disability. and encourage classification through valued individuating information (Lyons et al. 2017; e.g., a disabled person's status as an empowered public figure). Such decategorization uncovers a view of the whole person, rather than just one salient aspect.

We propose that such individuation can occur via increased representation, such that increased exposure to individuating and counterstereotypical representation of disabled individuals—whether in media, the marketplace, or daily life—will reduce prejudice by operating on the mechanisms of help-giving orientation and misfortune appraisal. Specifically, highlighting a real disabled person's empowerment should reduce the perceived need for help (and the help-giving orientation), lowering the bias toward inferred utilitarian preferences. Similarly, highlighting disabled people enjoying accessible pleasures should attenuate perceptions of misfortune through a defocusing intervention that makes salient "small positives" (O'Brien et al. 2018), increasing perceived interest in hedonic products and services.

OVERVIEW OF STUDIES

We test our predictions across six studies using a range of products and services, stimuli, types of physical disability, and consumption contexts. First, using real-world product suggestions, a pilot study shows that an Amazon search for gifts for individuals with a mobility disability yields fewer hedonic results than a similar search for people with other defining physical characteristics (i.e., people who are left-handed or pregnant). In a consequential gift paradigm, study 1 extends this finding to show that people are more likely to choose utilitarian gift options when the recipient

is disabled (vs. nondisabled). Study 2 replicates this effect and compares the choices to the desires of actual consumers with disabilities using a follow-up survey. Study 3 identifies the pity mechanism and shows that the discomfortdriven help-giving orientation and misfortune appraisal uniquely influence utilitarian and hedonic preferences. Study 4 attenuates the disability preference stereotype through representation of an empowered disabled public figure, and study 5 attenuates the effect via representation of a disabled person enjoying pleasurable, accessible activities. We analyzed all data only after all responses were collected. No participants were excluded unless explicitly stated in study methods. See https://osf.io/cj957 for all surveys, stimuli, data, and syntax, web appendix A for survey procedures and measures, and web appendix B for sample characteristics. In determining sample size, we sought to recruit at least 100 participants per cell (Maxwell 2004; Simmons, Nelson, and Simonsohn 2018) and exceeded this goal when feasible. We report all measures and conditions.

PILOT STUDY: REAL-WORLD ALGORITHMIC STEREOTYPING

In a preregistered (https://osf.io/m9bzx) pilot study, we examined whether the Amazon A9 Algorithm presents gift search results for individuals with disabilities with fewer hedonic/more utilitarian options than for other groups defined by physical characteristics. Thus, we test the existence and strength of a systematic bias toward inferring lower hedonic preferences for individuals with disabilities. By understanding the types of gifts generated for people with disabilities compared to other groups, we can examine whether this consumer demographic is perceived differently. Subsequent studies explore why this occurs, and how to attenuate it.

The Amazon A9 Algorithm determines search rankings for products by combining keywords and estimated sales conversion potential (Dunne 2018), thereby showing results most likely to increase sales and margin (Nguyen 2020). Thus, the search results reflect the items that previous consumers who used these same keywords were most likely to purchase. In this manner, a search for "gifts" can be seen as reflecting societal expectations of what consumers think recipients will want. We predict that the primary (i.e., first page of) search results for gifts for people with a mobility disability, who make up 12% of the world (CDC 2023), will be less hedonic than for people in other groups defined by a physical condition with similar or lower proportional representation (i.e., pregnant people, \sim 5% of the world at any moment, CDC 2019; left-handed people, 12% of the world, BBC 2020). We test this proposition by recording the first page of results from the algorithm and randomly assigning participants to rate each of the (48–60) search results as utilitarian versus hedonic.

Importantly, observing this reduced hedonic preference for disabled recipients would qualify prior work showing people generally prefer giving more hedonic gifts (Galak et al. 2016; Lu et al. 2016). Though exploratory, we also assessed the perceived variety of the items to see if the types of products offered were more restricted. We found less variety in product options for someone with a mobility disability, consistent with the documented frustrations of disabled consumers (e.g., in fashion, Brown 2020). We describe these results in web appendix C.

Method

Identifying Products. To obtain results independent of prior search history, the first author went to a local coffee shop to use an IP address unaffiliated with her computer activity, opened a previously unused browser, cleared all cookies and history, navigated to Amazon.com, searched "gifts for people with mobility disability," and printed the first page of search results to a PDF. She then again cleared the cookies and history and repeated these steps with "gifts for pregnant people¹" and "gifts for left-handed people." These searches yielded 60 unique products for left-handed people, 48 for pregnant people, and 60 for people with a mobility disability. Research assistants unaware of the conditions and hypothesis took screenshots of each product and uploaded them and their Amazon product names to a Qualtrics survey (web appendix A).

Rating Products. Once the products were in the survey, 314 participants² were randomly assigned to one of three gift search results conditions: people with mobility disability, pregnant people, or left-handed people. We presented all products shown on the first page of results to participants for completeness.³ See web appendix B for full details on sample race and ethnicity, disability status, and any exclusions due to missing data on the dependent variables.

Participants were asked to rate a large number of products for a shopping study. They viewed each product for their assigned condition one at a time, and indicated whether they thought the item was primarily utilitarian (defined as useful, practical, functional, something that helps achieve a goal) or hedonic (defined as pleasant and fun, something that is enjoyable and appeals to senses) on a seven-point scale (1 = primarily utilitarian, 7 = primarily hedonic; Dhar and Wertenbroch 2000; $\alpha_{\text{mobility disability}} = 0.98$; $\alpha_{\text{pregnant}} = 0.91$; $\alpha_{\text{left-handed}} = 0.96$). After rating all

products, they indicated perceived variety (web appendix C) and completed demographic items.

Results and Discussion

We conducted a one-way ANOVA with the index of utilitarian/hedonic ratings as the dependent measure. After removing duplicates, the product counts were: $n_{\text{mobility disability}} = 57$; $n_{\text{pregnant}} = 48$, $n_{\text{left-handed}} = 58$. See web appendix C for analysis with duplicates.

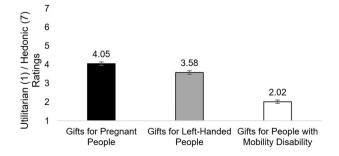
Utilitarian/Hedonic Ratings. Results revealed the predicted effect of condition on ratings (F(2, 311) = 156.65, p < .0001; $\eta_p^2 = 0.50$). Participants rated the search results for people with a mobility disability ($M_{\rm mobility}$ disability = 2.02, SD = 1.00) as less hedonic than those for pregnant people ($M_{\rm pregnant} = 4.05$, SD = 0.72; F(1, 311) = 285.71, p < .0001; $\eta_p^2 = 0.48$) or for left-handed people ($M_{\rm left-handed} = 3.58$, SD = 0.85; F(1, 311) = 168.59, p < .0001; $\eta_p^2 = 0.35$; figure 2).

Discussion. Even with gifts, real-world search results provide less hedonic product recommendations for individuals with mobility disabilities relative to gifts for consumers with other physically defining characteristics: pregnant people and left-handed people. Given that the algorithm is intended to reflect the most frequently purchased items using these keywords, these results serve as preliminary real-world evidence that disabled consumers' preferences are viewed differently and beg the question of why this is the case. We propose this occurs because when considering a disabled person's preferences, society emphasizes helpful items and deemphasizes pleasurable ones due to pity perceptions, which we demonstrate later in our empirical package.

Importantly, while the pilot study revealed an algorithmic (and thus, we argue, societal) stereotype of the types of gifts disabled individuals are expected to prefer, in study 1, we use a controlled experiment to extend our inquiry to the gifts chosen for a person with a disability.

FIGURE 2

UTILITARIAN/HEDONIC GIFT SEARCH RESULTS RATINGS (PILOT)



¹ We confirmed that all gifts presented were for the pregnant person, and not for the baby.

Of 316 recruited TurkPrime participants, two rated no products, leaving 314 participants (49.5% female, 49.5% male, 1.0% did not identify with these gender options; $M_{\rm age}=42.0$, ages 20–74).

There was one triplicate product in the left-handed search results, three duplicate products in the mobility disability search results, and no duplicates in the pregnant people search results. Although participants viewed all products, for the focal analyses, we removed duplicate products as a more conservative test. Results are consistent in direction and significance using all products.

STUDY 1: CONSEQUENTIAL GIFT CHOICE

In study 1 (preregistered: https://aspredicted.org/8TZ_15R), we test our research question in the context of choosing a consequential thank you gift for an alumna described as disabled or nondisabled. When given a choice, we expect participants to be less likely to choose a hedonic (vs. utilitarian) gift when the alumna is portrayed as disabled, using crutches as a disability cue.

Method

We partnered with a North American introductory marketing course, where students $(n=419^4)$ completed the study ostensibly as an academic exercise for extra credit. They were randomly assigned to one of two conditions (gift recipient: nondisabled vs. disabled, between).

We told participants that we were interested in their ability to identify strengths and weaknesses of a sales pitch and that we had asked a former student if we could film her pitching a security system to train business students. Participants viewed one of two (\sim 1.5 minute) videos of a real alumna's sales pitch for a "DigiSmart Lock System." The pitch content was the same, but the alumna was either using forearm crutches or not (web appendix A). To maintain the cover story, we then asked participants to list 2–3 strengths and weaknesses of the sales pitch.

Next, we told participants we would like to involve them in selecting gift basket items to thank the former student. We asked them to vote for items we would send to her. Participants were asked, "Which gift do you think she would prefer in the gift basket?" and then chose between three similarly priced (hedonic/utilitarian) product pairs: a chic stainless steel travel mug (H) and a coffee cup attachment (U), a wine-of-the-month subscription (H) and a book-of-the-month subscription (U), and a sweet perfume and lilac blooms candle (H) and a stone grey backpack (U). We varied whether the utilitarian or hedonic option was on the left, and each product included a photo and brief description (web appendix A).

Participants completed manipulation checks of how hedonic and utilitarian each product was and whether the person in the video had a disability. They also completed demographic items. All manipulations were effective; see all study manipulation checks in web appendix D. After study completion, we purchased and sent the alumna the gift choices with the most votes.

Results and Discussion

Gift Choice. As preregistered, we recoded participants' choices (1 = hedonic, 0 = utilitarian), summed the choices (i.e., values ranging from 0 to 3), and conducted a one-way ANOVA on this sum. We found the predicted effect of disability on choice (F(1, 417) = 20.56, p < .0001; $\eta_p^2 = 0.05$). Participants were less likely to choose hedonic items for the gift basket when the alumna was disabled (M = 1.81, SD = 0.91) versus nondisabled (M = 2.20, SD = 0.83). See web appendix E for individual item choices for this and all studies.

Discussion. These results align with the pilot study: consumers chose fewer hedonic gifts for the alumna's gift basket when she was portrayed as disabled compared to when she was not. The cue of crutches elicited lower expectations of her hedonic, relative to utilitarian, preferences. Study 2 extends our investigation to another gift-giving context and compares observers' inferred preferences to those of a recruited sample of people with disabilities.

STUDY 2: GIFT PREFERENCE AND COMPARISON TO A DISABLED SAMPLE

We next examine the context of selecting a more utilitarian or hedonic massage as a birthday gift for a coworker. Given that massages (and gifts) are typically seen as more hedonic, this is another conservative test of the disability preference stereotype. We compared responses across three conditions: no disability, visible disability, and disclosed disability. We included a disclosed disability to assess whether the verbal cue of a physical disability changed inferred preferences—even if no actual "impairment" was visible. We also test whether our effects are explained by perceived adversity, morality perceptions, and dehumanization. As discussed above, beliefs that disabled people experience significant adversity may increase their perceived morality, potentially increasing a focus on utilitarian services because they are seen as more necessary (Lu et al. 2016). Although we expect adversity and morality perceptions to be higher when the target is disabled, we do not expect these inferences to show the same pattern as gift choice. We argue that a disability cue, whether observed or disclosed, should lead to perceptions of deficiency, cascading into the global pity response and in turn, higher perceptions of utilitarian preferences and lower perceptions of hedonic preferences. If adversity (driving morality) plays a role, this effect would hold more strongly for the target who was visibly disabled (i.e., seen as experiencing the most adversity). Relatedly, if this effect were due to dehumanization, we would expect consumers to attribute diminished (and not increased) morality to disabled people, since moral sensibility is associated with humanity and mind attribution (Gray et al. 2012).

⁴ Of 421 recruited students, 2 participants did not complete the focal dependent variables, leaving 419 participants after this preregistered exclusion (38.7% female, 60.4% male, 1.0% did not identify with these gender options; $M_{\rm age} = 21.1$, ages 18-51).

Finally, and crucially, we compare participants' inferred gift preferences to the actual preferences of a separate sample of disabled consumers to assess whether study 1 participants are correct in their inferences regarding the gift preferences of individuals with disabilities, or if their inferred preferences instead reveal a misperception about disabled consumers' preferences.

Method

Prolific Academic participants ($n = 454^5$) completed this study in exchange for payment and were randomly assigned to one of three conditions (no disability vs. visible disability vs. disclosed disability, between). We asked participants to imagine they worked in a small office where they pool funds for coworkers' birthdays. This month, the participant was in charge of choosing a gift for Michelle, a friendly coworker whom they did not know well. The lack of familiarity was made explicit because it should further increase the likelihood of selecting a hedonic gift (Lu et al. 2016). In the two disability conditions, participants read that Michelle had told them she was born with a physical disability and that they had noticed that she got around in a wheelchair (visible disability) or that they had not noticed any visible indication of the disability (disclosed disability). In the nondisabled condition, no disability information was provided. Participants subsequently read that they overheard Michelle mention she gets massages when she can. They then decided on a massage gift certificate and narrowed the choices to a utilitarian and a hedonic option. All participants viewed two descriptions—the utilitarian "Therapeutic Massage" was "...popular with clients who seek a targeted, results-oriented approach..." whereas the hedonic "Luxury Massage" was "...popular with clients who seek a full-body, enjoyment-driven approach..." among other verbiage. Massage prices were identical.

Participants then indicated their gift choice for Michelle by using the scale, 1 = definitely the therapeutic massage to 7 = definitely the luxury massage. To rule out alternative explanations of morality and therefore, dehumanization, participants rated the extent to which they thought Michelle was moral, ethical, genuine, and sincere (Samper, Yang, and Daniels 2018; 1 = not at all, 7 = very much; $\alpha =$ 0.95). To assess adversity, participants rated their agreement with three statements: "She has overcome adversity," "She has been through a lot," and "She knows what it's like to be judged harshly" (1 = strongly disagree, 7 = strongly agree; $\alpha =$ 0.87).

Participants completed manipulation checks assessing how hedonic and utilitarian each massage was and responded to one item assessing whether they recognized Michelle had a disability, and one assessing whether they recognized Michelle had a visible disability. They also completed demographic items. All manipulations were effective (web appendix D) and, notably, the Therapeutic Massage was indeed seen as more utilitarian and less hedonic than the Luxury Massage, despite the overall hedonic nature of the service category.

Results and Discussion

Gift Choice. We found the predicted effect of disability on choice (F(2, 451) = 12.84, p < .0001; $\eta_p^2 = 0.05$): participants were more likely to choose the hedonic massage for Michelle when she had no disability (M = 4.54, SD = 2.14) versus when she had a visible disability (M = 3.54, SD = 2.28; F(1, 451) = 15.48, p < .0001; $\eta_p^2 = 0.03$), or when she disclosed her disability (M = 3.34, SD = 2.20; F(1, 451) = 22.33, p < .0001; $\eta_p^2 = 0.05$; figure 3). There was no difference between the two disability conditions (F(1, 451) = 0.59, p = .444).

Perceived Morality. The pattern of results for perceived morality was distinct from gift choice: there was an effect of disability (F(2, 451) = 3.94, p = .020; $\eta_p^2 = 0.02$) whereby Michelle was seen as more moral when she had a visible disability (M = 5.18, SD = 0.99) versus a disclosed disability (M = 4.98, SD = 1.09; F(1, 451) = 3.14, p = .077; $\eta_p^2 = 0.01$), or no disability (M = 4.86, SD = 0.93; F(1, 451) = 7.70, p = .01; $\eta_p^2 = 0.02$). No differences emerged between the disclosed and no disability conditions (F = 1.01, p = .316). This result also casts doubt on dehumanization as the process, as it would predict *lower* perceived morality in the disabled conditions.

Perceived Adversity Overcome. The stepwise effect of disability on perceived adversity overcome ($F(2, 450^6) = 163.84, p < .0001; \eta_p^2 = 0.42$) was also distinct from gift choice: adversity was higher in the visible (vs. disclosed) disability condition ($M_{\text{visible}} = 5.74, \text{SD} = 0.77; M_{\text{disclosed}} = 5.13, \text{SD} = 0.88; F(1, 450) = 47.41, p < .0001; \eta_p^2 = 0.10$), and versus the nondisabled condition ($M_{\text{nondisabled}} = 4.16, \text{SD} = 0.63; F(1, 450) = 321.37, p < .0001; \eta_p^2 = 0.42$). Adversity was also higher in the disclosed (vs. nondisabled) condition ($F(1, 450) = 122.23, p < .0001; \eta_p^2 = 0.21$).

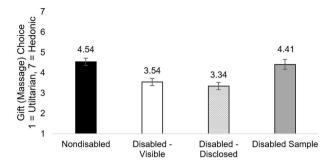
Discussion. Replicating study 1, participants chose the less hedonic and more utilitarian gift option (i.e., therapeutic massage) for their coworker when she had a physical disability. This effect emerged regardless of whether the disability was visible or disclosed, revealing the impact of the physical disability label. That is, in neither of the disability conditions did we describe pain or that Michelle sought a specific treatment; yet, consistent with the medical model, we propose that the notion of physical disability

⁵ U.S. based, 47.5% female, 51.2% male, 1.3% did not identify with these gender options; $M_{\text{age}} = 33.3$, ages 18–76).

⁶ Denominator degrees of freedom are different because one participant had missing data on the adversity measure.

FIGURE 3

CHOICE OF MASSAGE (STUDY 2)



elicits discomfort and pity perceptions which increase focus toward the utilitarian (and away from the hedonic) option.

Comparison with a Disabled Sample. Importantly, to assess the actual preferences of people with a physical disability, we recruited a separate sample of 101 participants who reported to Prolific that they had physical or reduced mobility disabilities. We removed men (n = 38) to match the study target's (i.e., Michelle's) gender, leaving 63 participants ($M_{\text{age}} = 49.3$, ages 20–69; 93.7% White, 3.2%, Asian, 1.6% Hispanic). They imagined receiving a massage as a gift from their coworkers, viewed the same two options as in the main study, and rated their gift preference on the same scale ($M_{\rm disabled~sample} = 4.41$, SD = 2.49). Post hoc comparisons with study 1 showed that this mean was no different from the nondisabled target's inferred preference $(M_{S2 \text{ nondisabled}} = 4.54, SD = 2.14; F(1, 513) = 0.13, p =$.714) and was more hedonic relative to participants' inferred preferences of the disabled targets with a visible disability ($M_{S2 \text{ visible}} = 3.54$, SD = 2.28; F(1, 513) = 6.76, p = .010; $\eta_p^2 = 0.01$) and disclosed disability ($M_{S2 \text{ disclosed}}$ = 3.34, SD = 2.20; F(1, 513) = 10.16, p = .002; η_p^2 0.02). This result indicates that although participants inferred that the disabled targets had more utilitarian preferences, these inferences do not reflect the preferences reported by members of the disability community.

Study 2 also rules out perceived adversity overcome, morality, and dehumanization as potential mechanisms. Notably, we recognize that participants may have inferred a distinct physical benefit for the different massages. Additionally, because participants received limited information about the target, the disability may have received disproportionate weight. To address these concerns, we replicate the focal effect in supplementary studies 1 and 2 with targets who are men: one providing extensive information about the target, including his hedonic interests (web appendix F) and another where participants inferred a disabled target's interest between hedonic versus utilitarian

product choices and included filler choices (web appendix G). Having established the focal effect across multiple studies, in study 3, we unpack our framework to examine hedonic and utilitarian products individually (Voss et al. 2003) and test our process.

STUDY 3: PROCESS EVIDENCE

In study 3 (preregistered: https://aspredicted.org/JYF_632), we provide evidence of the disability preference stereotype's directionality and explore our proposed mechanism. In prior studies, we asked participants to choose between a hedonic and utilitarian product, consistent with work in this area (Chitturi, Raghunathan, and Mahajan 2007; Dhar and Wertenbroch 2000). However, it is unclear whether our effect is driven by suppression of inferred interest in hedonic products, magnified inferred interest in utilitarian products, or both simultaneously, as we propose. Thus, to test the stereotype's directionality, we compare the target's inferred interest in four hedonic and four utilitarian products separately.

We test our proposed process whereby physical disability (vs. none) elicits discomfort, which prompts parallel helpgiving and misfortune appraisal pathways. We expect the help-giving dimension of pity to increase inferred interest in utilitarian products, whereas we expect the misfortune appraisal dimension of pity to decrease inferred interest in hedonic items. In sum, by asking participants to rate how interested they think a disabled or nondisabled person is in the four hedonic and four utilitarian products, and to rate feelings of discomfort, help-giving orientation, and misfortune appraisal, we test the directionality of the disability preference stereotype and our proposed mediation pathways.

Method

North American undergraduates completed this study for course credit ($n = 604^7$) and were randomly assigned to a 2 (target: nondisabled vs. disabled, between) \times 2 (utilitarian vs. hedonic, within) mixed design experiment with four hedonic and four utilitarian replicates.

We told participants we were interested in how people make inferences about product preferences, and that they would learn about a consumer and answer questions. They read, "Meet Samantha. She is a graduate student living in a medium-sized city. She has a good sense of humor and gets along well with her friends and fellow students. Outside of her studies, she likes to hang out with friends, listen to music, or stream the latest shows, depending on her mood."

We then showed participants one of two 4-second videos of a young woman using or not using crutches as she entered a room. Next, we showed participants eight products individually and in a random order and asked them to rate the extent to which Samantha would be interested in

purchasing each one (1 = not at all, 7 = very much so). The four hedonic items were a set of candles, a fashion TV subscription, a chic travel mug, and a wine-of-the-month subscription. The four utilitarian items were an adjustable backpack, a documentary subscription, a coffee cup attachment, and a book-of-the-month subscription. Each product was accompanied by a price, photo, and tagline (web appendix A). The items were matched on price. We chose items that captured utilitarianism in terms of functionality and high-brow taste to show the strength of this effect, and to ensure that it was not solely due to a desire to fulfill functional, lower-order needs.

Next, to examine our proposed process, we asked participants to rate misfortune appraisal items about how they viewed Samantha: "I feel pity for Samantha," "I feel sorry for Samantha," "I feel Samantha's situation is unfortunate," and "I feel Samantha's situation is miserable" (1 = not at all, 7 = very much so; $\alpha = 0.91$). We used the word "pity" as a misfortune appraisal item consistent with its lay dictionary definitions described above; it also loaded with the other misfortune appraisal items in a factor analysis (web appendix C). Next, we asked participants to rate a series of help-giving items about the extent to which the following thoughts came to mind: "How you can improve Samantha's situation," "How you can change Samantha's situation," "Your need to comfort Samantha," and "Your obligation to help Samantha" (1 = not at all, 7 = very muchso; $\alpha = 0.86$). These items were selected from Florian et al.'s (1999) pity thoughts inventory, which characterized the help-giving and misfortune dimensions of pity.

We measured personal discomfort by asking, "When you think of Samantha, to what extent do YOU feel the following emotions?" (anxiety, discomfort, anguish, and despair) (1 = not at all, 7 = very much so; $\alpha = 0.91$). Importantly, factor analyses also verified that help-giving orientation, misfortune appraisal, and personal discomfort are distinct factors (web appendix C). We also measured exploratory items including more general discomfort not specific to the individual (i.e., "To what extent do the following emotions come to mind?") which exhibited the same pattern and significance as the personal discomfort items, as well as a series of more paternalistic overaccommodating behaviors (see web appendix C for all exploratory item analyses). Lastly, participants completed manipulation checks of disability condition and product type (web appendix D), and demographic information.

Results and Discussion

Studies 3 and 4 employ mixed designs, so we report results with the standard deviation of the index of items across groups to capture dispersion in the data. In web appendix E, we also report standard errors to capture uncertainty in the estimates and individual item means.

Inferred Purchase Interest. A 2 (condition: disabled vs. nondisabled, between) \times 2 (product type: hedonic vs. utilitarian, within) mixed ANOVA on ratings showed a main effect of product type $(F(1, 602) = 131.27, p < .0001, \eta_p^2)$ = 0.18), whereby people inferred higher purchase interest in hedonic (vs. utilitarian) products ($M_{\text{hedonic}} = 4.55$, SD = 0.89 vs. $M_{\text{utilitarian}} = 4.08$, SD = 0.96). A main effect of disability $(F(1, 602) = 6.01, p = .015, \eta_p^2 = 0.01)$ showed higher inferred interest in all items when the woman was disabled (vs. nondisabled) ($M_{\text{disabled}} = 4.39$, SD = 0.69 vs. $M_{\text{nondisabled}} = 4.25$, SD = 0.66). Importantly, the interaction was significant $(F(1, 602) = 197.04, p < .0001, \eta_p^2 =$ 0.25): participants inferred lower interest in hedonic items when the woman was disabled (vs. nondisabled) (M_{disabled} = 4.33, SD = 0.87 vs. $M_{\text{nondisabled}}$ = 4.77, SD = 0.86; t(602) = 6.45, p < .0001, η_{p}^{2} = 0.06), and greater interest in utilitarian items when she was disabled ($M_{\rm disabled}$ = 4.44, SD = 0.95 vs. $M_{\text{nondisabled}} = 3.73$, SD = 0.83; t(602) = -10.38, p < .0001, $\eta_{\text{p}}^2 = 0.15$; figure 4).

Help-Giving Orientation. Because there was one between-subjects condition (disabled vs. nondisabled), we use a one-way ANOVA to test the effect of disability on help-giving orientation, misfortune appraisal, and personal discomfort. We found that physical disability increased the help-giving orientation toward Samantha ($M_{\rm disabled}=3.64$, SD=1.23 vs. $M_{\rm nondisabled}=2.50$, SD=1.25; F(1,602)=129.47, p<0.001; $\eta_p^2=0.18$).

Misfortune Appraisal. Disability also increased appraisal of Samantha's misfortune ($M_{\rm disabled}=4.10$, SD = 1.11 vs. $M_{\rm nondisabled}=1.89$, SD = 0.95; $F(1, 602)=693.03, p < .0001; <math>\eta_{\rm p}^{\ 2}=0.54$).

Personal Discomfort. Disability also increased feelings of personal discomfort ($M_{\rm disabled}=2.35$, SD=1.33 vs. $M_{\rm nondisabled}=1.60$, SD=1.00; F(1, 600)=59.95, p<0.001; $\eta_{\rm p}^{\ 2}=0.09$).

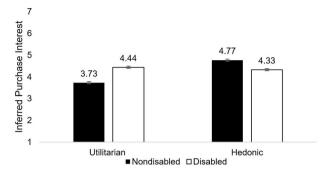
Serial Mediation. To test the serial mediation pathways, we conducted two analyses (PROCESS model 6; Hayes 2018): one with inferred *utilitarian* interest as the dependent variable and one with inferred *hedonic* interest as the dependent variable.

Utilitarian Ratings Mediation. Testing the path with disability as the independent variable, personal discomfort and help-giving orientation as serial mediators, and utilitarian ratings as the dependent variable, the serial mediation was significant and positive (b = 0.02, SE = 0.01, CI₀₅:

When we completed the preregistration, we were earlier in the research program and proposed only two mediators, then termed "feelings of pity" (now "misfortune appraisal") and "motivation to remedy" (now "help-giving orientation"). Personal discomfort was exploratory at the time, but we have since incorporated it into our conceptual model.

FIGURE 4

INFERRED PURCHASE INTEREST (STUDY 3)



0.004, 0.046; figure 5). Disability increased personal discomfort, which increased help-giving, and heightened perceived interest in utilitarian products. Crucially, discomfort and misfortune appraisal, the proposed serial mediators for hedonic ratings, did not mediate utilitarian ratings (b = 0.003, SE = 0.01, CI₉₅: -0.02, 0.03).

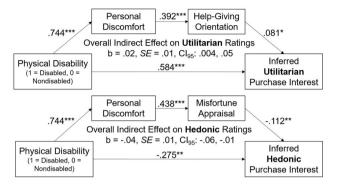
Hedonic Ratings Mediation. We found the opposite pattern with the hedonic items. In the path with disability as the independent variable, personal discomfort and misfortune appraisal as serial mediators, and hedonic ratings as the dependent variable, the indirect effect through discomfort and misfortune was significant and negative $(b=-0.04, SE=0.01, CI_{95}:-0.06, -0.01;$ figure 5). Disability increased discomfort, which increased misfortune appraisal, and lowered perceived interest in the hedonic products. Discomfort and help-giving, the proposed process for utilitarian ratings, did not mediate hedonic ratings $(b=0.004, SE=0.01, CI_{95}:-0.02, 0.02)$.

Discussion. Study 3 makes two key contributions. First, by examining utilitarian and hedonic ratings individually, we empirically support our theory that the disability preference stereotype operates in two opposing directions. Relative to a nondisabled person, consumers expect individuals with a disability to prefer hedonic gifts *less* and utilitarian gifts *more*.

Study 3 also provides evidence for our proposed mechanisms. We show that seeing someone with a physical disability elicits feelings of discomfort, which results in (1) a help-giving orientation that leads participants to think the target's interest in utilitarian products is higher than for a nondisabled target and (2) a misfortune appraisal that leads participants to think the target's interest in hedonic products is lower than for a nondisabled target. In another preregistered study (web appendix H; https://aspredicted.org/K8V_RGB), we replicate our focal effects and rule out the role of several alternative explanations, including risk

FIGURE 5

MEDIATION RESULTS ON UTILITARIAN, HEDONIC RATINGS (STUDY 3)



NOTE.—***p < .001, **p < .01, *p < .05.

minimizing orientation (i.e., desire to choose a "safe" option) and perceived similarity of preferences.

Thus far, we have shown support for the disability preference stereotype and have demonstrated that the inferred preferences for hedonic and utilitarian products are shaped by a global pity response whereby personal discomfort drives two parallel processes: help-giving orientation and misfortune appraisal. Such a process also suggests that trying to impact either lever—help-giving orientation or misfortune appraisal—could attenuate one of the outcomes of the disability preference stereotype. In the next study, we manipulate the help-giving orientation by lowering beliefs that a disabled target must be comforted or helped through empowered representation, which should attenuate the emphasis on utilitarian products.

STUDY 4: ATTENUATION OF THE HELP-GIVING RESPONSE

Study 4 (preregistered: https://aspredicted.org/Y5Q_ 7B6) has two goals. First, we employ a process by moderation approach (Spencer, Zanna, and Fong 2005) and test our model. Specifically, we aim to mitigate the biasing effect of disability toward utilitarian preferences by reducing the help-giving response via representation of an empowered disabled person. In this study, across all conditions, we introduce participants to a real influencer and actor, Lauren "Lolo" Spencer. In the empowerment conditions, we add that she is challenging boundaries in her current acting role by portraying an audacious, bold, and confident character, one whom Spencer states she strongly identifies with. Because such empowered representation is counter to how disabled people are viewed in society, this intervention leverages the social model by making empowerment and disability more visible. It was important to us to depict a real influencer to see how present-day disability visibility shapes perceptions of disabled people.

Notably, this intervention does not manipulate perceptions of the "ups and downs" of Spencer's daily life, making it less likely to impact perceptions of her misfortune because only highlighting day-to-day pleasures (i.e. "small positives") has been shown to defocus persistent beliefs of the misfortune of pitied others (O'Brien et al. 2018).

Another goal of study 4 was to test whether the disability preference stereotype extends to expectations that disabled influencers are a better fit to endorse utilitarian (vs. hedonic) products and whether this belief can be attenuated. We focused on "fit" as it is associated with endorsement, yet perceptions of fit also can reflect the stereotyping of social groups (Colella and Varma 1999). We return to a choice rating context to replicate our focal effect.

Method

Participants on CloudResearch Connect completed this study in exchange for payment $(n = 1,010^9)$ and were randomly assigned to one of four conditions in a 2 (target: nondisabled vs. disabled) \times 2 (empowerment: control vs. high) between-participants experiment.

Participants were told we were interested in their impressions of influencers and were introduced to Lauren Spencer, a real actress, model, speaker, creator, and lifestyle influencer who loves to travel around the world. In the disabled target condition, participants additionally learned that when she was 14, Spencer was diagnosed with a neurodegenerative physical disability and had difficulty walking, so she travels in a power chair and adaptive vehicles.

Next, participants viewed a real post (with comments hidden) from Spencer's public Instagram profile. Across conditions, the photos were identical, except the nondisabled condition's photo was cropped to obfuscate her power chair (web appendix A). Participants then read a passage from Spencer's bio that mentioned her YouTube channel, "Sitting Pretty." In the disabled condition, participants read that her vlogs discuss disability fashion tutorials, everyday challenges in society as a disabled woman, dating, and her evolving diagnosis journey. In the nondisabled condition, participants read that her vlogs discuss fashion tutorials, everyday challenges in society, dating, and her evolving journey. These passages stressed hedonic interests (e.g., fashion, dating) and thus showed another conservative context in which to replicate our effect. Participants in the control empowerment condition only saw this information.

All participants in the high empowerment conditions read additional information about Spencer's role as

"Jocelyn" in the (HBO) Max show, "The Sex Lives of College Girls," excerpted from a recent interview with Spencer in *New Mobility* magazine (Sherer 2022). They read that Jocelyn is a quick-witted, tell-it-like-it-is, sexpositive freshman at Essex College. The passage described how Spencer identified with this character, stating, "This is me...I get to talk trash. I have a fake ID business. Hell yeah! This is exactly up my alley." This portrayal represented a disabled person counterstereotypical to prevailing societal views. We expected that within the disabled condition, the intervention of Spencer describing herself in an empowered way would reduce inclinations to help her, attenuating their inference that she would be a better fit with utilitarian products in this bipolar choice study.

Finally, all participants indicated which products seemed like a good fit for an influencer like Spencer to endorse. Participants viewed three product categories (presented in a random order) that included a hedonic and utilitarian option on a bipolar scale. Specifically, participants responded to, "Which [product category] seems like the best fit for Lauren?" (anchored at, 1 = definitely [product 1], 6 = definitely [product 2]). We alternated positioning of utilitarian and hedonic options, but recoded scores for analysis such that higher numbers indicated preference for the utilitarian option. The three categories were: footwear (sneakers [U] vs. high-heeled shoes [H]), eyewear (modern designer sunglasses [H] vs. lightweight comfort eyeglasses [U]), and travel accessory (electronics pouch [U] vs. jewelry pouch [H]).

Participants completed manipulation checks (web appendix D) on the extent to which Spencer felt empowered ("Lauren Spencer feels empowered to take on bold acting roles," and "Lauren Spencer is not intimidated by society's expectations of her," 1 = completelydisagree, 7 = completely agree, r = 0.54). For completeness, we also examined the extent to which the high empowerment condition impacted misfortune appraisal ("When I think of Lauren, I feel her life must be miserable," and "When I think of Lauren, I feel pity for her," r = 0.78). As we note in detail in web appendix D, the manipulation was successful such that Spencer was seen as more empowered in the empowerment condition (p = .002). Further, there was no influence of the empowerment manipulation on misfortune perceptions (p = .156). Lastly, participants completed disability and product type manipulation checks, followed by demographic information.

Help-Giving Post-Test. We also conducted a separate post-test to confirm that our empowerment manipulation reduced the help-giving orientation when Spencer was portrayed as disabled. We recruited 503 Prolific participants (~250/cell, as in study 4) and randomly assigned them to one of two (empowerment: high vs. control) conditions. All participants saw the disabled target stimuli and the same high empowerment (vs. control) manipulation and

⁹ From the total 1067 participants, 57 did not complete the focal measures, leaving n=1010 (46.41% female, 52.89% male, 0.60% nonbinary, 0.10 did not identify with these gender options; $M_{\rm age}=40.1$, ages 18–80).

responded to the four help-giving orientation items used in study 3, modified for this context: "Lauren needs comfort," "Lauren needs others' help," "Lauren's situation needs to be improved," and "Lauren's situation needs to be changed" ($\alpha=0.89$). As expected, the high (vs. control) empowerment condition reduced participants' help-giving orientation ($M_{\rm high}=3.43$, SD=1.35 vs. $M_{\rm control}=3.83$, SD=1.31; F(1,501)=11.46, p=.0008; $\eta_{\rm p}^2=0.02$). See full details in web appendix C.

Results and Discussion

Product Endorsement Fit. We conducted a 2 (target: nondisabled vs. disabled, between) \times 2 (empowerment: high vs. control, between) × 3 (pairing: footwear, evewear, travel accessory, within) mixed ANOVA on endorsement fit, with pairing as a replicate. As noted, we recoded the pairings: higher numbers indicated better fit endorsing the utilitarian product. There was a main effect of target (F(1,1006) = 75.17, p < .0001; $\eta_p^2 = 0.07$): participants rated the utilitarian product a better fit when Spencer was depicted as disabled (vs. nondisabled, $M_{\text{disabled}} = 3.35$, $SD = 1.19 \text{ vs. } M_{\text{nondisabled}} = 2.72, SD = 1.09).$ There was a main effect of empowerment, too (F(1, 1006) = 6.09, p =.014; $\eta_p^2 = 0.01$): participants rated the utilitarian product a worse fit when empowerment was high (vs. control; $M_{\text{high}} = 2.95$, SD = 1.21 vs. $M_{\text{control}} = 3.12$, SD = 1.15). These effects were qualified by a significant interaction (F (1, 1006) = 4.43, p = .036; η_p^2 = 0.004, figure 6).

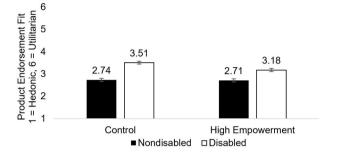
Planned contrasts revealed that in the control condition, when Spencer was portrayed as disabled (vs. nondisabled), participants rated the utilitarian products as a better fit $(M_{\text{disabled}} = 2.74, \text{ SD} = 1.08 \text{ vs. } M_{\text{nondisabled}} = 3.51, \text{ SD} = 1.08; F(1, 1006) = 58.20, p < .0001; <math>\eta_p^2 = 0.05$), conceptually replicating studies 1–3. In the high empowerment conditions, however, this effect was attenuated by half $(M_{\text{disabled}} = 3.18, \text{ SD} = 1.26 \text{ vs. } M_{\text{nondisabled}} = 2.71, \text{ SD} = 1.10; F(1, 1006) = 21.50, p < .0001; <math>\eta_p^2 = 0.02$). Further, comparing the two disabled portrayal conditions, participants rated the utilitarian options as a poorer fit in the high empowerment (vs. control) conditions $(F(1, 1006) = 10.50, p = .001; \eta_p^2 = 0.01)$. In the nondisabled conditions, there was no difference in the high empowerment (vs. control) conditions (F(1, 1006) = 0.07, p = .797).

We also found a significant within-subjects effect of product choice, a product choice \times target condition interaction, and a three-way interaction (all interactions p < .027). The three-way interaction appeared driven by a weaker difference in the eyewear choice. See full analysis details in web appendix C and individual pairing means for all studies in web appendix E.

Discussion. These results show the pervasive nature of the disability preference stereotype by replicating our effects in the context of social media influencers. Importantly, however, we also observe an attenuation of

FIGURE 6

PRODUCT ENDORSEMENT FIT (STUDY 4)



the stereotype via empowered disability media representation. At baseline (i.e., in the control condition) when considering what products would be a good fit for a real fashion influencer to endorse, observers view utilitarian products as a better fit when she is portrayed as disabled relative to nondisabled. However, when Spencer was additionally represented in the article as identifying with an empowered, audacious, and bold character-someone not in need of help—we find evidence of attenuation, supporting our proposed help-giving process. This result is consistent with tenets of the social model of disability suggesting the environment, including media, can empower disabled people through increased counterstereotypical representation. Notably, this empowered representation does not portray Spencer in a way intended to be inspirational but instead shows her identifying with a confident, risk-taking college student. This distinction is crucial given that disabled individuals have long combatted being viewed as objects intended to inspire (Grue 2016).

Whereas study 4 examined choices between utilitarian and hedonic products, in study 5, we focus on ratings of hedonic products alone for two reasons. First, because our prior studies presented both hedonic and utilitarian options, it is possible that having a utilitarian (i.e., "more helpful") option available caused participants to rate the hedonic options as less appropriate. As such, the hedonic suppression could be considered an artifact of the options present, as opposed to a true overlooking of hedonic preferences. Despite significant frustrations from within the disability community that hedonic interests are being overlooked (Brown 2020), we have not explicitly tested this question thus far. Second, because there is a clear need for increased utilitarian support for people with disabilities, much of disability policy is already focused on this dimension (e.g., making buses accessible to people using mobility aids, providing sign language interpreters at hospitals; see additional examples in Baker and Kaufman-Scarborough 2001). Thus, in study 5, we exclusively examine hedonic products and misfortune appraisal with the goal of reducing misfortune perceptions through a different form of representation. Specifically, instead of centering a public figure, we describe a member of the general public enjoying various pleasurable activities in a highly accessible environment.

STUDY 5: ATTENUATION OF THE MISFORTUNE APPRAISAL RESPONSE

In study 5 (preregistered: https://aspredicted.org/HGO 3WY), we again employ a process by moderation approach (Spencer et al. 2005) and test our model by manipulating misfortune appraisal, the construct that mediates reduced inferred preferences in hedonic products for disabled, relative to nondisabled, consumers (study 3). A key tenet of the social model is that accessible environments allow for greater inclusion in society (Oliver 2012). We further propose that showing disabled people partaking in enjoyable activities mitigates the misfortune appraisal dimension of pity because it shows the "small positives" (O'Brien et al. 2018) of a disabled person's life, defocusing observers from the baseline beliefs of significant struggles and a lack of pleasure. Defocusing manipulations have been used to mitigate pity perceptions by reducing beliefs that the pitied target's life is homogenously devoid of pleasure (O'Brien et al. 2018). Notably, a fundamental dimension that enables people with disabilities to take part in daily pleasurable experiences (and reduce daily struggles) is environmental accessibility (Baker, Stephens, and Hill 2001). By showing disabled people partaking in enjoyable experiences more easily via increased access, we aim to reduce the belief that disabled people's lives are unfortunate, increasing their inferred desire for hedonic products.

To test this idea, we manipulate information about a disabled consumer's "day-in-the-life" to show that at baseline, in an inaccessible environment where the challenges of being physically disabled are salient, misfortune appraisal is high, and we replicate the disability preference stereotype. However, when we represent the various "small positives" of a disabled consumer's daily life facilitated by accessibility, we reduce misfortune perceptions, attenuating the suppression of inferred hedonic preferences.

Method

North American undergraduates ($n = 580^{10}$) were randomly assigned to one of three between-participants conditions: disabled, nondisabled, or disabled + access. In both disabled and nondisabled conditions, participants saw the same environment that was inaccessible to disabled people (e.g., stairs, inoperable elevators, high curbs that could not

be traversed using a wheelchair). Although inaccessible environments are the norm worldwide—in the U.S. alone, 65% of curbs and 48% of sidewalks are inaccessible for people with mobility disabilities (Berg 2020)—these environments are unremarkable to nondisabled individuals and do not impact their ability to enjoy the world around them. In the disabled + access condition, the environment was similar, but easily navigated by the target due to high accessibility (e.g., ramps, working elevators, curb cuts), facilitating access to positive experiences. In this manner, our manipulation varied participants' awareness of disabled people's enjoyment and pleasure across different levels of accessible environments, shifting their inferences about hedonic preferences.

Participants first read that they would be learning about a consumer's typical day and were introduced to Samantha, someone who lived in a medium-sized city and worked as an in-house attorney at a startup. In the disability conditions, participants learned she was born with a physical disability and used a power wheelchair. They then read an indepth description of her day: she took the subway to her office, visited the park at lunch, and went on a date in the evening. Each stage of the day included text paired with a photo depicting the environment, yet varied by condition to highlight the high accessibility (vs. the inaccessibility) of the environment that would allow for greater (or lesser) enjoyment. For example, participants in the nondisabled condition in the less accessible environment read that Samantha visited a nearby park to listen to live music and that the park had a lot of stairs, giving her a brisk workout. Participants in the disabled condition with a less accessible environment also read that Samantha occasionally visited the park to listen to music, yet due to the stairs, she had to travel an additional distance to enter at the sidewalk level, making it hard to enjoy its amenities. Participants in the disabled condition with an accessible environment read the park had ramps at all entrances in addition to stairs, making it easy to enjoy its amenities. We expected that highlighting the greater access to pleasurable activities would reduce the focus on misfortune.

Inferred Purchase Interest. After reading about her day, participants rated the extent to which they thought Samantha would be interested in purchasing three hedonic products and services: a scented candle, a fashion television streaming channel subscription, and a wine-of-themonth subscription (presented in a random order; 1 = not at all, 7 = very much so).

Manipulation Checks. Participants completed a misfortune manipulation check on the degree to which they felt pity for, and sorry for, Samantha (r=0.81). As we note in detail in web appendix D, the manipulation was successful such that participants felt less pity and less sorry for Samantha in the disabled + access condition (vs. baseline disabled; p<.0001). Participants also completed checks

From the total 601 participants, 21 were under 18, leaving 580 (52.1% female, 47.8% male, 0.17% did not identify with these gender options; $M_{\rm age}=19.1$, ages 18–34).

on whether Samantha was using a wheelchair, whether her environment supported her ability to live a meaningful life, and how hedonic/utilitarian each product was (web appendix D). Because our focus was on hedonic product ratings, we did not ask about help-giving orientation in this study.

Results and Discussion

Inferred Purchase Interest. A one-way, three condition (condition: disabled, nondisabled, disabled + access, between) mixed ANOVA with hedonic product rating as a replicate on product purchase interest showed a significant effect of condition $(F(2, 577) = 13.28, p < .0001; \eta_p^2 =$ 0.04). Replicating prior results, planned contrasts showed that inferred interest in the hedonic products was lower in the baseline disabled condition ($M_{\text{disabled}} = 3.73$, SD = 1.28) compared to the nondisabled condition $(M_{\text{nondisabled}} = 4.30, \text{ SD} = 0.95; F(1, 577) = 26.48, p <$.0001, $\eta_p^2 = 0.04$). Yet, in line with our predictions and the social model of disability, in the disability + access condition, inferred interest in hedonic items was significantly higher compared to the baseline disabled condition $(M_{\rm disabled + access} = 4.04, SD = 0.99; F(1, 577) = 7.94, p = .005, \eta_p^2 = 0.01)$. Although inferred interest in the hedonic products in the disabled + access condition was still significantly lower than in the nondisabled condition (F(1, 577))= 5.45, p = .020, $\eta_p^2 = 0.01$), consistent with work documenting the "stickiness" of pity perceptions (O'Brien et al. 2018), the ease of taking part in pleasure in accessible environments nonetheless reduces bias toward physically disabled individuals. There was also within-subjects main effect of product $(F(2, 1154) = 56.99, p < .0001; \eta_p^2 =$ 0.09), reflecting differing products being seen as of more or less interest regardless of disability status, and a product choice \times condition interaction (F(4, 1154) = 7.42, p <.0001; $\eta_p^2 = 0.03$), explained by an unexpected nonsignificant difference in our focal effect for the fashion streaming channel (disabled vs. nondisabled; p = .341).

Discussion. Study 5 employs a process by moderation approach to show that manipulating representation of a disabled person enjoying increased access to life's daily pleasures (i.e., experiencing various "small positives") can influence misfortune appraisal and, in turn, inferred hedonic preferences. Although the lower inferred preference for hedonic items emerges in the less accessible environment, when a disabled individual is seen as able to enjoy accessible pleasures such as a concert in the park or a first date, that person is seen as having higher hedonic preferences relative to when there is little environmental accessibility that facilitates this enjoyment. More broadly, this finding can inform policy on the importance of accessibility in hedonic environments (e.g., parks, restaurants) and educate marketers on the value of depicting accessible pleasures for disabled individuals. Such interventions can help people with disabilities navigate their day-to-day physical environment as well as attenuate societal stereotypes about their preferences.

Notably, we moderate the misfortune appraisal response in another preregistered study (web appendix I; https://aspredicted.org/1GY_T9S) through exposure to disability representation in a popular toy. We find that showing a disabled Barbie doll using a wheelchair results in participants inferring that a disabled target in an ostensibly second study is marginally more interested in hedonic products than at baseline (p = .061), underscoring how representation in well-known product options may attenuate the disability preference stereotype.

GENERAL DISCUSSION

In six primary and four supplemental studies, we systematically demonstrate the existence and pervasiveness of the disability preference stereotype whereby society expects that disabled consumers are more interested in utilitarian products and less interested in hedonic products relative to nondisabled consumers. In the pilot study, we show that the Amazon A9 Algorithm generates more utilitarian products in its search results for gifts for people with mobility disabilities compared to people who are pregnant or lefthanded. Because the algorithm reflects the types of products people typically purchase, given the keywords, these results represent a real-world proxy for people's perceptions about purchasing gifts for individuals with disabilities. Study 1 shows that when participants choose a gift for a real person who is shown using forearm crutches, they are less likely to choose hedonic (vs. utilitarian) options relative to when that person does not use the crutches. We replicate this effect in study 2 and, importantly, find that the reported hedonic preferences of physically disabled consumers are the same as those of nondisabled consumers, highlighting that participants' study 2 expectations are indeed miscalibrated. In study 3, we examine the direct effect of physical disability on inferred preferences for utilitarian and hedonic products separately to clarify its directionality, finding that participants rated a disabled (vs. nondisabled) target as less interested in hedonic products and more interested in utilitarian products. Additionally, we find that the disability preference stereotype is driven by personal discomfort and help-giving orientation in series for inferred utilitarian preferences, and personal discomfort and misfortune perceptions in series for inferred hedonic preferences. Study 4 shows that the stereotype also emerges with the products a lifestyle influencer would be expected to endorse, and provides process support through moderation by reducing the help-giving orientation via media representation of an empowered disabled person. Finally, study 5 shows moderation, such that when participants are presented with a disabled target enjoying accessible pleasurable activities, misfortune perceptions decrease,

and participants increase their perceptions of the target's hedonic preferences.

Across our studies, we focus on a variety of products where physical disability should not inform explicit preferences (e.g., interest in a scented candle or in a documentary streaming channel), yet the disability preference stereotype persists. It occurs across product categories, the disabled person's race and gender, signals of disability (i.e., wheelchair, forearm crutches), manner of learning about the disability (i.e., disclosed, observed in a photo, observed in a video), when pitting hedonic and utilitarian product choices against one another, and when evaluating hedonic and utilitarian items separately. Moreover, the endurance of this stereotype, even when a target's hedonic interests are explicitly described, highlights that many observers are inclined to see disabled people through the lens of focalism, where pity suppresses perceived interest in pleasure (O'Brien et al. 2018), a form of implicit ableism.

Theoretical Contributions

By identifying the disability preference stereotype and unpacking its underlying psychological process, this work makes multiple contributions to theory. First, we are the first to link the impact of disability framed as body-asimpaired (medical model) versus environment-asimpairing (social model) to unique consumption expectations and outcomes. By showing that disabled consumers are consistently perceived as less interested in hedonic products and more interested in utilitarian products, we show how this stereotype can limit the expectations of the tastes and interests of individuals with disabilities.

Second, although all consumers seek hedonic pursuits as part of their well-being (Kahneman et al. 1999; Ryan and Deci 2001), and in clear contrast with findings that consumers prefer to give hedonic (vs. utilitarian) gifts to others (Galak et al. 2016; Lu et al. 2016), we show that nondisabled consumers, marketers, and marketplace artificial intelligence algorithms expect that disabled individuals prefer hedonic products less and utilitarian products more relative to nondisabled consumers. Thus, we theoretically qualify prior gift-giving work by identifying a context and segment for which hedonic preferences are reversed.

Third, we believe our work is the first to demonstrate how interventions of representation based on the social model, such as increased empowerment and environmental accessibility, can mitigate stereotyped preferences. In this manner, our work puts the tenets of the social model of disability (Abberley 1987; Oliver 2012) into practice by showing that increasing visibility, empowerment, and access to pleasurable environments also reduce stereotyped inferences and hence some of the ableism people with disabilities commonly experience. Much work in disability studies (Abberley 1987; LoBianco and Sheppard-Jones 2007) describes the medical and social models as non-

overlapping, where an individual, organization, or society can view the body as impaired (medical model) or the environment as impairing (social model). Our research shows how representation, an intervention highlighted by the social model, can ameliorate how the medical model informs preferences, bridging these perspectives.

Substantive Contributions

We believe that this work also makes multiple substantive and social contributions. First, although we show that the disability preference stereotype is prevalent and pervasive, studies 4 and 5 point to potential for actionable, marketer- and policy-driven interventions of increased representation via visibility and accessibility. For example, increased disability representation in media, particularly in counterstereotypical roles, reduces the help-giving orientation. Similarly, accessibility initiatives provide functional benefits to the disability community and the many who benefit from such accessibility. Finally, showing people with disabilities experiencing easy access to pleasurable activities reduces perceived misfortune.

This research also builds on the DARE framework for inclusive design outlined by Patrick and Hollenbeck (2021), where consumers appraise an environmental design based on how inclusive it is, and in turn, respond emotionally, which shapes their experiences with the brand. By showing the potential to reduce stereotyping through accessible environments in study 5, we highlight that the benefits of accessibility go beyond providing better products or experiences with a given brand to broadening the perspective of nondisabled consumers and encouraging inclusion by reducing stereotyping of others' preferences. As noted at the beginning of this article, such interventions also avoid alienating the large segment of disabled consumers whose preferences often get overlooked.

We hope that this research encourages marketers and brands to actively include consumers with disabilities in product design and strategy. The results of study 4, which used an influencer context, reveal a societal perception that utilitarian products are a better "fit" than hedonic products for people with disabilities. The disability preference stereotype may lead to limited product offerings if designers and marketers assume people with disabilities have lower interest in hedonic products. Disability advocates consistently report that many disabled people feel ignored by brands and that the repertoire of accessible products is extremely restricted and lacks style (e.g., utilitarian/ medical-focus, Brown 2020). Including disabled individuals of different backgrounds at the decision-making table, whether in product design or brand communications, is likely to reduce this feeling of being ignored, and lead to a wider range of better products. For example, QVC includes disabled people in the team responsible for their extensive "Accessible & Adaptive" product category, which provides

options for adaptive clothing styles and sleek accessible home design accessories (QVC 2023). This research underscores the importance of marketers understanding this stereotype. Finally, by focusing on consumers with disabilities, this research contributes to a long overdue increase in disability visibility in academic and consumer research spheres and in society more broadly (Heumann 2020; Wong 2020).

Limitations and Opportunities for Future Research

Some limitations of our research present opportunities for future investigation. First, we focus on visible, physical disabilities because these cues (i.e., wheelchairs, forearm crutches) are highly salient in daily life and elicit inferences distinct from less visible disabilities. People with less visible disabilities or disabilities with fluctuating visibility face unique and impactful challenges, such as whether disclosing their disability will result in discriminatory treatment (Ragins 2008), or whether disclosure of their disability will even be believed (LoBianco and Sheppard-Jones 2007). These challenges are likely impacted by the marketplace and others' judgments in unique ways. We did include a condition in which physical disability was disclosed but not seen (study 2). However, future research into less visible and invisible disabilities, such as chronic illness, cognitive disability, or mental health concerns, is crucial to expanding our understanding of disability in the marketplace. Indeed, disabled consumers are not monolithic in their preferences (Baker et al. 2001).

Additionally, across studies, we described people thriving personally and professionally, varying only in whether they have a physical disability. We did so to increase control and to ensure the inferences people make result from simply the presence of a physical disability. However, we acknowledge that such a depiction fails to recognize the reality for many individuals with disabilities who, on average, have lower incomes and face steeper challenges to full participation in society (CDC 2023). This pattern occurs in part due to underemployment based on discrimination, physical limitations, or inaccessibility of employment opportunities (Santuzzi and Waltz 2016). It also occurs due to policies that limit access to basic accessibility accommodations, insurance, and resources for daily living if one's income is too high, or if one is married. The "marriage penalty" describes how otherwise eligible disabled people often risk changes in-or complete loss of-important Social Security benefits when they marry (Luterman 2023). Much has been written about the structures seen as disincentivizing employment and marriage for disabled people (Luterman 2023; Mathur 2016). Future work should investigate how these perceptions interact with inferences about disability more broadly.

Relatedly, we examine inferences of disabled consumers who identify as men, women, Black, and White. Importantly, issues of ableism are compounded by sexism, racism, and homophobia (heteronormativity) (Ford Foundation 2020; Kres-Nash 2016). Although we examined a stereotype that appeared to emerge consistently across various demographic groups, there may be differences for people who hold multiple identities that we do not capture here.

Additionally, future research may further unpack the underlying psychological mechanism we theorize and empirically document. For example, although we find that participants feel more discomfort (i.e., anxiety, discomfort, anguish, despair) when they think of a disabled (vs. nondisabled) target in study 3, research building on this finding may further examine the nature of this discomfort. Does it emerge from a lack of familiarity with disability, guilt about having a different life experience, an aversion to thinking of what it might be like to be disabled, or something else entirely? Understanding the discomfort reaction may reveal further interventions to limit stereotyping of disabled people and instead foster belonging.

Similarly, we argue for two separate pathways of a helpgiving orientation and a misfortune appraisal stemming from perceived discomfort, and in study 4 showed that representation of disabled empowerment can reduce the helpgiving orientation without affecting misfortune appraisal. Further, study 5 focuses on how increasing awareness of enjoyable experiences through accessibility can reduce misfortune appraisal. However, future work could identify interventions that reduce initial discomfort and attenuate effects on both paths, curbing the hedonic and utilitarian outcomes of the disability preference stereotype simultaneously.

Finally, although we make strides toward revealing disabled consumers' actual preferences by showcasing them in study 2, we hope future research will explore this area more deeply. Very few participants identified as disabled in our samples, underscoring the need to improve the accessibility of many data collection methods. Moreover, it is not clear how having a disability might impact perceptions of another person's disability. Ableism, like other types of prejudice and discrimination, is societal, and thus may often be exhibited by people outside and inside the focal marginalized group (Reeve 2006). Notably, when looking at participants who were close with someone who has a disability, we found the disability preference stereotype also emerged. When examining our effects among only participants who stated that they were close to someone with a physical disability, they also inferred lower interest in hedonic products and higher interest in utilitarian products for a physically disabled (vs. nondisabled) target (study 1: p = .021; study 2: p < .0001; study 3: p_{hedonic} = .021, $p_{\text{utilitarian}}$ = .0003; study 4: p = .054; study 5: p = .069). See web appendix B for the numbers of people who have a physical disability and who are close with someone with a physical disability across studies. Future work may explore how identification with disability shapes inferred and actual preferences.

In sum, our work begins to examine the consumptionspecific societal perceptions of disability. We provide evidence of the disability preference stereotype: the inference that disabled people will prefer utilitarian items more and hedonic items less. Importantly, we document the potential to mitigate this bias through increased representation of disabled empowerment and access to daily life pleasures. By shining a light on the perceptions of disabled consumers in the marketplace, we hope this work will encourage more research in this area, and people outside the disability community will recognize the important role and responsibility consumer research must play in advancing inclusion.

DATA COLLECTION STATEMENT

The first and second authors managed the collection of data on TurkPrime for the pilot study (January 2021) and supplementary study 1 (May 2020), and with Arizona State University undergraduate participants with the assistance of the course instructor for study 1 (April 2023). The third author managed collection of data for study 2 (December 2019), study 2's disabled sample comparison study (December 2020), study 4's post-test (January 2024), and supplementary study 4 (September 2023) on Prolific Academic. The third author supervised the data collection by research assistants for study 3 (February-March 2020), study 5 (September 2023), supplementary study 2 (March 2021), and supplementary study 3 (November–December 2022) with Ivey Business School participants. The first author managed collection of data for study 4 (August 2023) on CloudResearch Connect. The Ivey Behavioural Lab Manager Study assisted with implementation logistics in study 3, study 5, supplementary study 2, and supplementary study 3. The Robert B. Cialdini Behavioral Research Lab Manager assisted with implementation logistics for the pilot study and supplementary study 1. The first and second authors downloaded and collected all data and individually analyzed all data. All data files and study materials are currently stored in an electronic repository on the Open Science Framework and are available at https://osf.io/cj957.

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