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Ableism differs by disability, gender and social context: Evidence from vignette experiments

by

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Abstract

Existing research on ableism has conceptualised it as a general attitude, rather than one that can manifest differently depending on the nature of the disability, the disabled person's gender and the social context. Our aim was to investigate variation in attitudes to disability depending on these factors. A nationally representative sample of 2,000 adults read a series of vignettes about issues faced by disabled people, relating to education, employment, de-institutionalisation, relationships and welfare payments. Vignettes varied by presence and type of disability and the protagonist's gender. Some vignettes asked participants whether it was acceptable to treat a disabled person in a specific way (e.g., not hire them for a job) and others asked whether it was acceptable for a disabled person to act in a certain way (e.g., to engage in a romantic relationship). The study was pre-registered and has open materials, data and analysis code. Judgements about how a disabled person was treated showed clear evidence of ableism towards some disabilities (e.g., autism, mental health issues) but not others (e.g., a spine disorder). Judgements about the actions of a disabled person were more nuanced. A disability-gender intersectionality effect was observed for judgements about romantic relationships, with physically disabled women penalised compared to men but no such difference observed for intellectual disability. No intersectionality or ableism was observed on a vignette about refusing poorly paid work. Having a close relationship with someone who has a disability predicted more positive attitudes across social contexts. We find clear evidence that ableism manifests differently depending on the nature of the individual's disability, their gender and the social context, questioning the previous conceptualisation of ableism as a general attitude. There is considerable scope for further research investigating the forms ableism can take and the conditions that elicit it.

Keywords: ableism; disability; mental health; stigma; discrimination; gender; experiment; stereotype content model

1. Introduction

Despite the right to full social inclusion being enshrined in national and international law, people with disabilities¹ face multiple everyday challenges. These challenges result not only from managing an impairment and navigating inaccessible infrastructure but also from stigma, prejudice and discrimination towards disabled people (i.e., “ableism”; Bogart & Dunn, 2019; Krahn, 2011). In order to tackle ableism, it is first important to understand the conditions under which it occurs. There are multiple factors to consider, not least the nature of the disability, other characteristics of the individual and the social context (e.g., hiring decisions, personal relationships, seeking accommodation, in educational settings). Yet existing research on ableism has conceptualised it as a general attitude, rather than one that can manifest differently depending on these variables. Our aim was to test whether attitudes towards people with disabilities vary by type of disability, and the gender of the disabled person, in a range of social contexts. Choice of which disabilities and contexts to include in the study was informed by discussions with a national disability authority and an advisory board comprised of representatives from multiple Disabled Persons Organisations.

Our contribution to the literature is threefold. Our first contribution is theoretical in nature. Previous research has conceptualised ableism as a general attitude, for example as negative stereotypes of individuals with disability. We expand this conceptualisation to include not only general attitudes towards disability itself, but also judgements of how disabled individuals are treated by others and to judgements of disabled individuals’ actions. We could locate no other studies that have investigated the manifestation of ableism in these ways,

¹ In our use of language, we follow recommendations from the NDA’s (2022) *Advice Paper on Disability Language and Terminology*, whereby a flexible approach to both identity-first (e.g. ‘disabled person’) and person-first (e.g. ‘person with a disability’) is recommended, except with reference to people with intellectual disabilities or mental health conditions where person-first language is preferred. See also Dunn and Andrews (2015).

allowing for us to provide novel tests of predictions from theories of stigma, such as the Social Cognitive Model and Intergroup Contact Theory. We review these theories below.

Our second contribution relates to the study materials and methods used. Others have noted that most research investigating attitudes towards disability use broad terms and focus on physical *or* mental disability (e.g., Chaudoir, Earnshaw & Andel, 2013; Kowalski, Morgan & Taylor, 2016). In contrast, we compare attitudes to physical and mental disabilities, including mental health problems, with a non-disability control. The limited number of studies that have compared attitudes to physical and mental disabilities tend to show more negative attitudes towards mental disabilities (e.g., Furnham & Pendred, 1983; Kowalski & Peipert, 2019; NDA, 2017). However, these studies rely almost exclusively on survey scales, with over 40 such scales purporting to measure attitudes to disability (Antonak & Livneh, 2000). While standard survey questions are appealing and can be administered quickly, they lack the richness of contextual detail that could affect judgements of disability in real world settings. To overcome this limitation, we employ a series of vignettes, which allow for disability issues to be embedded in a concrete, realistic example while retaining experimental control over the stimuli (Steiner, Atzmüller & Su, 2016).

Third, we also investigate intersectionality in ableist judgements. Specifically, we test whether judgements of the treatment and actions of disabled people vary by the gender of the disabled person. By testing multiple social situations and disability types we provide a more robust test of disability-gender intersectionality than in previous literature.

The remainder of this paper is structured as follows. In the next section, we review relevant literature on ableism. We then describe the study's method, including how we selected the disabilities and social contexts to include in the study. Next, we describe the results.

Although we present the study as one experiment, it could be considered as a series of

experiments each investigating a different social context relevant for people with disabilities. The different social contexts can be considered tests of the generalisability of the differences between attitudes towards physical and psychological/mental disability. We conclude with the implications of the findings and note limitations of the study before presenting possibilities for future research.

2. Relevant Literature and Hypotheses

2.1 Theories of Stigma

For many people with disabilities, much of their negative experiences can be explained by how they are perceived and treated by others rather than by functional loss or limitations resulting from their disability (Susman, 1994). Hence there has been considerable focus in the social sciences on stigma and theories that seek to explain its origins. Social Identity Theory posits that people derive their sense of self from the groups to which they belong (Tajfel & Turner, 1979; Turner, Hogg, Reicher & Wetherell, 1987). The theory proposes that people engage in a social comparative process in order to distinguish their identity from outgroups, usually in a way to elevate their own status. Applied to ableism, non-disabled people may reinforce their own self-esteem by creating and holding negative beliefs of those with disabilities (Dirth & Branscombe, 2019). This in turn may lead to social stigma, prejudice or discriminatory behaviour towards disabled people. A key premise of stigma is that it can only be enacted or 'made real' through social relations; individuals experience stigma through social interaction with others (Goffman, 1963).

While Social Identity Theory describes potential underlying motivations for ableism, the nature of ableist attitudes is of concern for our study. The Stereotype Content Model is perhaps the most widely cited theoretical account of the nature of prejudicial beliefs (Cuddy,

Fiske & Glick, 2008). The model claims that social perceptions are driven by evaluations of others along two dimensions: warmth and competence. Stereotypes of groups contain a mixture of warmth and competence attributes, and this combination of content gives rise to particular emotions. Stereotypes that are low on at least one of these dimensions are proposed to lead to stigmatisation (Fiske, 1998). Previous studies show that physically disabled people are often judged to be high in warmth but low in competence, whereas individuals with psychological disorders are judged low on both dimensions (e.g., Boysen, Chicosky & Delmore, 2020; Rohmer & Louvet, 2012). Recent research shows that stereotypes of disabilities vary even within these broad categories. For example, individuals with intellectual disability are perceived as warmer than individuals with autism (Canton, Hedley & Spoor, 2022). These findings lead to the prediction that people with certain disorders – primarily mental health disorders and autism – are likely to be stigmatised to a greater extent than physically disabled people. Thus, the Stereotype Content Model may explain how negatives beliefs of people with disabilities can form and be used to establish between-group differences as described in Social Identity theory. The nature of the stigma they might face, however, and how it manifests, is currently an open question.

2.2 Manifestations of Ableism

The above theories have led to research on the causes of ableism that focus on how disability is conceptualised, by members of the public, teachers, public health professionals, family members of disabled people and people with disabilities themselves (e.g. Dirth & Branscombe, 2019; Friedman & Owen, 2017; Green et al., 2005; Lalvani, 2015; Watson & Larson, 2006). Within this large body of research, however, few studies have investigated how ableism is expressed and experienced. One exception, by Nario-Redmond, Kemerling

and Silverman (2019), classified open-text responses from adults with disabilities into different forms of ableism. The findings showed that individuals with visible (and often physical) disabilities report high levels of paternalistic forms of ableism, such as unwanted help and infantilisation, whereas invalidation and accusations of fraud are more commonly experienced among those with less visible disabilities.

To complement understanding of how ableism may be expressed, our aim was to investigate how members of the public make judgements of people with disabilities in different social settings. The kinds of paternalistic and hostile forms of ableism identified by Nario-Redmond et al. (2019) target the individual's disability, but ableism could also manifest as judgements of the appropriateness of how disabled people are treated by others, particularly where there is ambiguity that could be exploited to justify discrimination. For example, if a disabled job candidate is unsuccessful at interview, it might be difficult to identify with certainty that ableism is the cause of their rejection. Ableism could be identified, however, if experimental methods are employed and judgements of a rejected non-disabled "control" candidate in the same situation are shown to differ from those of the disabled candidate.

Ableist beliefs may also relate to disabled individuals' behaviour. For example, non-disabled people may hold judgements that it is less acceptable for people with disabilities to act the same way as their non-disabled counterparts, such as refusing poorly paid work or engaging in sexual relationships. We set out not only to test whether judgements like these differ depending on the presence of a disability but also the nature of the disability.

We employed a series of vignettes to measure these types of judgements, given the need for incorporating rich detail into the study materials. An added benefit of these vignettes is that they permit interactions between protagonist characteristics to be tested. We were specifically interested in the intersection between disability and gender (Coleman, Brunell & Haugen,

2015). The evidence for intersectionality effects is equivocal. The “double jeopardy hypothesis” proposes that people experience higher levels of discrimination with each additional stigmatised identity they hold (Berdahl & Moore, 2006). This suggests that judgments of disabled women are likely to be more negative than those of disabled men and the difference should be larger for psychological than physical disabilities. However, some studies show instead that one identity can emerge as the “primary stigmatised identity” (Levin, Sinclair, Veniegas & Taylor, 2002). With respect to disability and gender intersectionality, there is even some evidence that people with disabilities are viewed as less “gendered” (Nario-Redmond, 2010). Wang, Walker, Pietri and Ashburn-Nardo (2019) provide the only experimental test of intersectionality in ableist attitudes we could locate. They show that judgements of a blind person reacting negatively to unsolicited aid did not vary if they were described as a man or a woman. However, a second study, which did not test gender effects, showed that judgements of a wheelchair-user differed from those of a blind person in the same situation. This finding, that people with different disabilities can be judged differently for the same behaviour, suggests that a null finding for a gender interaction with one disability may not replicate with another disability. Hence we provide a more robust test of disability-gender intersectionality by varying gender across multiple disability types and social settings.

In addition to identifying the above conditions under which ableism may be expressed, we also sought to test individual-level variation in ableism as a way to further inform ways to overcome it. The next section discusses relevant theoretical and empirical literature.

2.3 Overcoming Ableism

While understanding the nature of stigma can be helpful for developing ways to prevent and combat it, perhaps the most influential theory for overcoming stigma is the Intergroup Contact Theory (Allport, Clark & Pettigrew, 1954; Pettigrew, 1998). Intergroup Contact Theory proposes that social contact between groups can reduce prejudice and discrimination, especially when it involves cooperative activities. It suggests that increasing the frequency of positive interactions between stigmatized and non-stigmatized individuals can reduce stigma and promote equality by fostering an experienced understanding of other social groups and reducing reliance on stereotypes (Goffman, 1963). As Pescosolido and Martin (2015) note, stigmas are also shaped and reshaped in different social contexts.

The positive effect of intergroup contact on prejudice reduction has been observed with multiple social groups, including disability. Data from over 300,000 US adults over a 14-year time period has shown that contact with disabled people is one of the most consistent predictors of lower explicit and implicit prejudice, along with greater feelings of warmth (Harder, Keller & Chopik, 2019). Improvement in attitudes to disabled people from contact occurs both generally and in specific settings, including schools and the workplace (e.g., Armstrong et al., 2017; Novak & Rogan, 2010; Paluck, Green & Green, 2018). While frequency of contact is important, the nature of the relationship also matters. Merely “knowing someone” is not sufficient; relationships with reduced social distance, such as family and close friends, are associated with further reductions in prejudice (Pescosolido & Manago, 2018). Connections to valued ties (i.e., friends and family) with highly stigmatised disorders such as mental illness improves recognition of symptoms and reduces endorsement of stereotypes (Pullen et al., 2022). Contact with individuals with mental illness can also shape perceptions about the controllability of circumstances and attribution to personal responsibility (*ibid.*). Hence we sought to extend existing research by testing whether the core prediction from Intergroup Contact Theory extends to our novel conceptualisation of

ableism. If so, individuals closer to someone with a disability should display greater acceptance of disabled people behaving in ways that are judged accepted for non-disabled people, and less acceptance of potential discrimination, compared to people who don't know anyone with a disability, across a range of social contexts.

2.4 Hypotheses

From the above, we made the following broad predictions:

Attitudes towards everyday issues faced by people with disabilities will...

H1: ... differ depending on their disability, with more negative attitudes to psychological disabilities (e.g. mental health disorders) than physical ones.

H2: ... differ from attitudes towards people without disability facing the same issue.

H3: ... differ depending on the disabled person's gender.

H4: ... be more positive among those closer to someone with a disability.

We test these predictions in a series of vignettes, each describing different disabilities and social settings. The social contexts we selected, which were informed by discussions with a disability advisory board comprised of members of disabled persons organisations, related to education, employment, institutionalisation, relationships and social welfare payments. The settings chosen aimed to cover a range of salient life domains and are described in more detail in the next section.

3. Method

The study was conducted in line with institutional ethics policy. The vignette experiment reported here formed part of a larger study on attitudes to disability policy, with other stages reported in Timmons, Carroll and McGinnity (2023). The study was hosted online using Gorilla (Anwyl-Irvine, Massonnié, Flitton, Kirkham & Evershed, 2020).

Although our aim was to investigate attitudes towards disability, we embedded the items of interest into a more general study about policy issues. Hence, the ostensible nature of the study was not solely about disability, which helps to reduce noise, social desirability bias and other respondent reactivity concerns in responses (Antonak & Livneh, 2000). Participants read no more than two vignettes that mentioned disability, with at least a further two that did not refer to disability. We could locate no study of disability attitudes that has reduced experimenter demand in this way (Zizzo, 2010).

2.1 Participants

Participants ($N = 2,000$) were recruited from a leading polling company's online panel² to be nationally representative of the adult population in Ireland. The online panel is populated through advertisements to the general public and through probability sampling. The sample approximates the population estimates to within 2%-points (Table 2.1). Participants were paid €3 for undertaking the study, which took 10 minutes on average.

Table 2.1 Socio-Demographic Characteristics of Participants

		n	%	Population ^a %
Gender	Men	961	48.1	48.9
	Women	1029	51.5	51.1
	Non-Binary ^b /Other	10	0.5	-

² <https://redcresearch.ie/techniques/online-research/>

Age	18-39 years	786	39.3	40.4
	40-59 years	696	34.8	35.1
	60+	518	25.9	24.5
Educational Attainment	Below Degree	1175	58.8	58.0
	Degree or above	825	41.3	42.0
Employment	In Labour Force	1339	67.0	65.2
	(Of Which, Employed)	(1276)	(95.3)	(95.2)
	(Of Which, Unemployed)	(63)	(4.7)	(4.8)
	Not in Labour Force	661	33.1	34.8
Living Area	Urban	1274	63.7	63.3
	Rural	726	36.3	36.7

Note: ^a Population estimates are based on 2021 Central Statistics Office (CSO) data where possible and 2016 Census data otherwise, except for Employment which is based on Q2 2022 data from the EU Labour Force Survey.

^b There are currently no population estimates for non-binary individuals.

2.2 Statistical Power

The total sample size was determined based on the experimental task that required the most power (a list experiment reported in Timmons et al., 2023). The vignettes experiment was designed such that each version of the vignettes would be shown to at least 250 participants, chosen at random. This target of 250 responses per vignette version was decided because there is little additional reduction in standard error beyond groups of this size (e.g., Harding, Tremblay & Cousineau, 2014). We also opted for 7-point rating scales, because of well-established research on internal psychological scales and the drop in reliability with increasing scale length (Miller, 1956; Preston & Colman, 2000). Hence 7-point scales should allow for sufficient variation in responses to detect differences without risking additional noise. As a further noise reduction measure, participants had to answer an instructed response attention-check question correctly in order to complete the study. The attention check was failed by 39 additional participants. Attrition during the vignettes (a further $n = 23$) and other stages reported elsewhere (additional $n = 26$) was low and consistent across experimental groups.

2.3 Public and Patient Involvement (PPI)

The study materials were informed by discussions with officers from a government disability advisory body³ and an advisory group comprised of members from disability advocacy organisations.⁴ Members of the advisory group emphasised the heterogeneity of disabled people and highlighted nuances with how issues should be described for accuracy. These insights informed which disabilities featured on the vignettes and allowed for scenarios to be constructed to better reflect the everyday issues faced by disabled people. For example, the education vignette, described below, was altered from its original version to reflect the punitive use of restricted timetables in schools, whereby children can be prohibited from going to school outside of specific hours despite the importance of social cohesion for neurodiverse children (Jones et al., 2023). We are especially grateful to the advisory group for their input.

2.3 Vignettes

We report here five vignettes about issues relevant for people with disabilities: restricted timetables in schools (hereafter “education”), the need for workplace adaptations (“employment”), social housing instead of institutionalisation (“De-institutionalisation”), family and sexual relations (“relationships”) and social welfare payments (“welfare”). For each vignette, we constructed different versions according to a 3 (disability status) x 2 (gender) factorial design. The first factor was the disability status of the main character: in two versions, the vignette specified that the main character in the vignette had a disability and the third was a non-disability control. We aimed for one mental health or intellectual

³ www.nda.ie

⁴ These organisations are run by and for disabled people. Participants in the advisory board included As I Am – Ireland’s National Autism Advocacy Organisation, Disabled Women Ireland (DWI), and Voice of Vision Impairment (VVI).

disability and one physical or sensory disability for the disability versions of the vignettes, but the disabilities chosen were ultimately determined through discussions with officers from the disability authority and the project advisory board. The disability versions of the vignettes are presented in Tables 2.2a and 2.2b. An additional vignette about transport issues was included in the study out of interest to the board and funder but was less relevant for tests of theory.⁵ The control versions of each vignette featured a non-disabled person who required similar levels of accommodation. For example, the schoolchild had English as a second language and the prospective employee needed flexibility due to caring arrangements. Hence, any differences can be attributed to the individual having a disability rather than the individual simply requiring any form of accommodation. The second factor was the gender of the main character (male or female) which was implied through use of names and pronouns. Some issues raised by the advisory group and policy officers concerned how disabled people are treated in society. For three of the vignettes (education, institution, and employment), the vignette described potential prejudicial treatment of the disabled person. These are presented in Table 2.2a. Why the person was treated how they were was left purposefully ambiguous, to allow participants to infer themselves whether there was potential mistreatment. The aim was to test whether participants justified potential prejudicial treatment more so if the character had a disability and if there were differences depending on the type of disability. Participants rated how acceptable it was for the individuals to be treated in the way they were on the vignette on a rating scale from 1 (not at all acceptable) to 7 (completely acceptable).

⁵ The transport vignette was as follows:

Paul is waiting at a bus stop for a bus. Paul is a wheelchair user. When the bus arrives the bus driver says the wheelchair spot is being used by a buggy so Paul cannot board. Paul asks whether the buggy can be folded up but the driver says no because it would take too long and the bus is already running late. The driver says it is unfair to the other passengers. Paul has to wait for the next bus.

How acceptable do you think the bus driver's behaviour is?

Alternate versions described the individual as blind or as a parent with a child in a buggy. As with the other vignettes, there was a male (Paul) and female (Paula) version for each disability status vignette.

Other issues raised reflected how disabled individuals themselves may be held to different standards of behaviour. For the relationships and social welfare vignettes, participants were asked to judge the behaviour of the disabled person on a rating scale from 1 (not at all acceptable) to 7 (completely acceptable) (see Table 2.2b).

The study also included an additional four non-disability vignettes, which related to immigration, the environment, further education and parental leave. The immigration, environment and further education vignettes varied according to a 3 x 2 design, similar to above, while there were just two versions of the parental leave vignette. These vignettes functioned primarily to conceal the study's focus on disability. The logic here was that if participants suspected the main focus was on disability, they may be more likely to alter their responses from their true beliefs (Lüke & Grosche, 2018). Instead, the study was presented to participants as relating to "their opinion of different policy issues." For the purpose of this paper, we report only the disability vignettes.

Hence there was a total of 56 vignettes (36 disability ones plus 20 fillers) and each participant read four. Vignettes for each participant were pseudo-randomly selected by the computer software, with the constraints that at least one and at most two of the four they read referred to a person with a disability.⁶ Disability vignettes were always separated by at least one non-disability vignette. Again, the logic here was to limit the likelihood participants would suspect the disability-focus of the study and alter their responses. The software also ensured participants did not read more than one version of any vignette. We pre-registered a randomisation procedure that would result in at least 250 responses per version of the disability vignettes.

⁶ A further constraint was that no participant read both the immigration and institution vignettes, as they had a high degree of contextual overlap.

2.4 Transparency and Openness

We report how we determined our sample size and include all complete responses. We report all manipulations and all measures in the study (noting that some are reported elsewhere; Timmons et al., 2023). The study's design, hypotheses and analysis were pre-registered. The preregistration, all data, analysis code and research materials are available at https://osf.io/9dchy/?view_only=ed4d7c315c044d18808a17ea36e8b1ab.

Table 2.2a Vignettes: Treatment of disabled people versus others

	Disability 1	Disability 2	Control
Education	<p>Ian is in 3rd class in primary school. He is autistic. The teacher finds him very difficult to manage in class. The teacher has tried a number of strategies to improve Ian's engagement with minimal improvements. The principal, with the teacher, decides that Ian should go on a reduced timetable. This means that he would only come to school for 2 hours per day.</p> <p>How acceptable do you think it is for the school to place Ian on a reduced timetable?</p>	<p>Anne is in 3rd class in primary school. She has a speech and language disorder. The teacher finds her very difficult to manage in class. The teacher has tried a number of strategies to improve Anne's engagement with minimal improvements. The principal, with the teacher, decides that Anne should go on a reduced timetable. This means that she would only come to school for 2 hours per day.</p> <p>How acceptable do you think it is for the school to place Anne on a reduced timetable?</p>	<p>Ian is in 3rd class. He recently moved to Ireland and doesn't speak much English. The teacher finds him very difficult to manage in class. The teacher has tried a number of strategies to improve his engagement with minimal improvements. The principal, with the teacher, decides that Ian should go on a reduced timetable. This means that he would only come to school for 2 hours per day.</p> <p>How acceptable do you think it is for the school to place Ian on a reduced timetable?</p>
Employment	<p>Michael is 40 years old and has applied for a job working in an office. He meets the requirements for the role and feels like the interview process went well. Michael mentioned at the end of the interview that he also has a disorder relating to his spine, meaning that he would need flexible working arrangements.</p> <p>The employer decides not to offer Michael the job and doesn't provide a reason.</p> <p>How acceptable do you think it is for the employer not to offer Michael the job?</p>	<p>Michelle is 40 years old and has applied for a job working in an office. She meets the requirements for the role and feels like the interview process went well. Michelle mentioned at the end of the interview that she also has an anxiety disorder, meaning that she would need flexible working arrangements.</p> <p>The employer decides not to offer Michelle the job and doesn't provide a reason.</p> <p>How acceptable do you think it is for the employer not to offer Michelle the job?</p>	<p>Michael is 40 years old and has applied for a job working in an office. He meets the requirements for the role and feels like the interview process went well. Michael mentioned at the end of the interview that he also provides care for his mother, meaning that he would need flexible working arrangements.</p> <p>The employer decides not to offer Michael the job and doesn't provide a reason.</p> <p>How acceptable do you think it is for the employer not to offer Michael the job?</p>
De-institutionalisation	<p>Deirdre lives near an institution for people with intellectual disabilities that is closing down. One of the houses in Deirdre's estate is to be allocated to three former patients, who have intellectual disabilities and will live there together.</p>	<p>David lives near an institution for people with mental health issues that is closing down. One of the houses in David's estate is to be allocated to three former patients, who have mental illnesses and will live there together. They will receive</p>	<p>Deirdre lives near an institution for Ukrainian refugees that is closing down. One of the houses in Deirdre's estate is to be allocated to three refugees who will live there together. They will receive support during the day but not at night.</p>

	They will receive support during the day but not at night. Deirdre and some other neighbours are worried that there will be problems. They decide to write to their local Councillor to request the individuals be housed elsewhere. How acceptable do you think Deirdre and the other neighbours' behaviour is?	support during the day but not at night. David and some other neighbours are worried that there will be problems. They decide to write to their local Councillor to request the individuals be housed elsewhere. How acceptable do you think David and the other neighbours' behaviour is?	Deirdre and some other neighbours are worried that there will be problems. They decide to write to their local Councillor to request the individuals be housed elsewhere. How acceptable do you think Deirdre and the other neighbours' behaviour is?
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Note: All vignettes were constructed with both male and female versions. One version of each vignette is shown here for illustrative purposes.

Table 2.2b Vignettes: Behaviour of disabled people versus others

Relationships	Sarah is 30 years old and has a physical disability which means she needs to use a wheelchair to get around. She needs some support from family and the State to live independently. She has been dating someone for the past two years and they are planning to move in together and want to start a family straight away. How acceptable do you think it is for Sarah to move in with her partner and have children?	Sam is 30 years old and has an intellectual disability. He needs some support from family and the State to live independently. He has been dating someone for the past two years and they are planning to move in together and want to start a family straight away. How acceptable do you think it is for Sam to move in with his partner and have children?	Sarah is 30 years old and is a single parent with one child. She needs some supports from family and the State to live independently. She has been dating someone for the past two years and they are planning to move in together soon. They want to start a family straight away. How acceptable do you think it is for Sarah to move in with her partner and have children?
Social Welfare	Gary has been looking for work for several years. He is currently receiving disability allowance. He cannot work more than 20 hours a week as his energy levels are impacted by a chronic physical condition. Through contact with his social welfare office, Gary has found a job. He is overqualified and it would not pay much more than the current social welfare support he is receiving. Gary turns down the job to wait for a position that would use his training qualification and pay better.	Laura has been looking for work for several years. She is currently receiving disability allowance. She cannot work more than 20 hours a week as her energy levels are impacted by a chronic mental health condition. Through contact with her social welfare office, Laura has found a job. She is overqualified and it would not pay much more than the current social welfare support she is receiving. Laura turns down the job	Gary has been looking for work for several years. He is currently receiving jobseeker's allowance. He cannot work more than 20 hours a week because of childcare responsibilities. Through contact with his social welfare office, Gary has found a job. He is overqualified and it would not pay much more than the current social welfare support he is receiving. Gary turns down the job to wait for a position that would use his training qualification and pay better.

How acceptable do you think it is for Gary to turn down the job offer?

to wait for a position that would make use of her training qualifications and pay better.
How acceptable do you think it is for Laura to turn down the job offer?

How acceptable do you think it is for Gary to turn down the job offer?

3. Results

In this section, we take each of the vignettes in turn and use ordinal logistic regression models to test for differences between versions of the vignettes, with controls for socio-demographic characteristics. Where distributions showed strong skew, we transformed responses but retained the ordinal nature of the scale (see Appendix for details).

Transformation decisions were made prior to any inferential analyses. Significance levels do not change with other transformation decisions or using the raw responses. All models reported here pass the assumption of proportional odds (see Table A2 in the Appendix).

3.1 Ambiguous Discrimination Vignettes

3.1.1 Education

On average, participants judged placing a child on a restricted timetable to be unacceptable ($M = 2.42$, $SD = 1.72$). Responses were strongly skewed, with 45.7% of participants rating it as “not at all acceptable” and just 14.4% giving a response above the midpoint of the scale (Figure A2). The regression model in Table 3.1 shows an ordinal logistic regression model predicting acceptability ratings. The model shows that, for male children, participants were significantly less accepting of reduced timetables for the boy with the speech and language disorder and the boy with no disability than they were of the boy with autism (Figure 3.1), despite all other information about the child being equal. A test of coefficients showed no evidence for a difference between judgments of the boy with a speech and language disorder and the non-disabled boy ($\chi^2 = 0.32$, $p = .574$). For female children, tests of coefficients revealed a similar pattern. Participants were less accepting of placing the girl with a speech and language disorder and the girl with no disability on a reduced timetable than the girl with autism ($\chi^2 = 6.38$, $p = .012$; $\chi^2 = 3.49$, $p = .062$, respectively), and again no evidence for a

difference between speech and language disorders and no disability ($\chi^2 = 0.45, p = .505$).

Comparing male and female children within each disability type, there was no evidence for differences in judgements of autism (Table 3.1), speech and language disorder ($\chi^2 = 0.96, p = .327$) or non-disability ($\chi^2 = 0.33, p = .565$).

Table 3.1

Ordinal Logistic Regression Model Predicting Judgements of Treatment in the Education Vignette

	<u>Education^a</u>	
	Coef.	<i>p</i>
Disability Status and Sex		
(Ref: Autism and Male)		
Speech Disorder and Male	-0.45*	.027
	[-0.85, -0.05]	
No Disability and Male	-0.34 [†]	.095
	[-0.73, 0.06]	
Autism and Female	-0.04	.850
	[-0.48, 0.40]	
Speech Disorder and Female	-0.68**	.004
	[-1.13, -0.22]	
No Disability and Female	-0.21	.359
	[-0.65, 0.24]	
Socio-Demographic Controls	Yes	
<hr/>		
N	831	

Note: [†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$. Includes controls for respondent gender, age, educational attainment, labour force participation and urban rural residence. Higher scores indicate how the protagonist was treated is more acceptable.

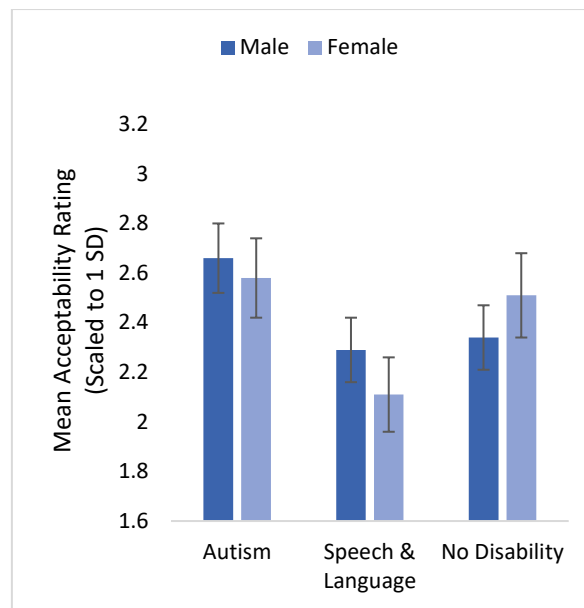


Figure 3.1. Average acceptability ratings for placing a child on a reduced timetable, by disability type and gender. Error bars are the standard error of the mean. The y-axis is scaled to one standard deviation to illustrate effect sizes.

3.1.2 Employment

Participants gave a mean acceptability rating of 3.07 ($SD = 1.89$) on the employment vignette (see Table 2.2a for wording). The majority (68.1%) gave responses below the midpoint of the scale (i.e., neither acceptable nor unacceptable) when judging how acceptable it was for the individual not to be offered the job (Figure A3). The ordinal regression model shows that participants judged it to be more acceptable not to offer the man with an anxiety disorder the job than the non-disabled man (who had caring responsibilities) (Table 3.2; Figure 3.2). A test of co-efficient showed the same was true for the man with a spinal disorder, although the effect was weaker ($\chi^2 = 4.30, p = .038$). There was no evidence for a difference between judgements of the disabled men (Table 3.2). Turning to the women, participants judged it more acceptable not to hire the woman with the anxiety disorder than

the women with the spinal disorder ($\chi^2 = 9.74, p = .002$) and the non-disabled woman ($\chi^2 = 6.51, p = .011$), but there was no evidence for a difference between the woman with the spinal disorder and the non-disabled woman ($\chi^2 = 0.28, p = .599$). Comparing between genders, there was no evidence for a difference on anxiety disorder judgements (Table 3.2), spinal disorder judgments ($\chi^2 = 2.54, p = .111$) or non-disability judgements ($\chi^2 = 0.25, p = .619$), according to whether the characters in the vignettes were male or female.

Table 3.2

Ordinal Logistic Regression Model Predicting Judgements of Treatment in the Employment Vignette

	<u>Employment^a</u>	
	Coef.	<i>p</i>
Disability Status and Sex (Ref: Anxiety and Male)		
Spine Disorder and Male	-0.26 [-0.81, 0.29]	.353
No Disability and Male	-0.59* [-1.15, -0.03]	.038
Anxiety and Female	0.06 [-0.48, 0.60]	.838
Spine Disorder and Female	-0.61* [-1.13, -0.22]	.043
No Disability and Female	-0.48 [-1.07, 0.11]	.109
Socio-Demographic Controls	Yes	
N	832	

Note: †*p* < .10; **p* < .05; ***p* < .01; ****p* < .001. Includes controls for respondent gender, age, educational attainment, labour force participation and urban rural residence. Higher scores indicate how the protagonist was treated is more acceptable.

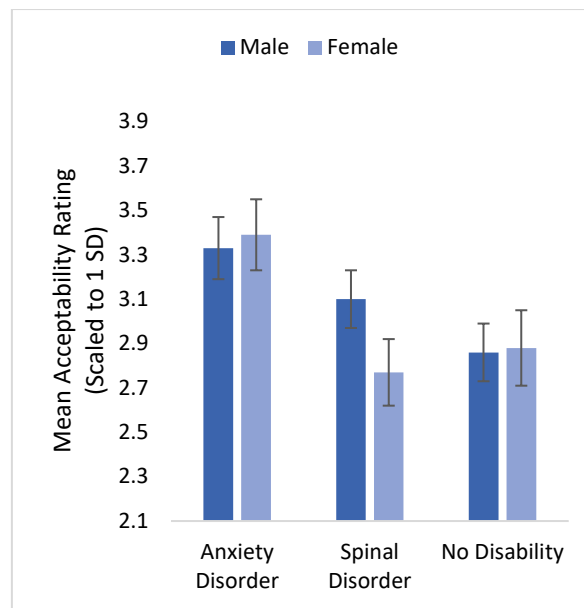


Figure 3.2. Average acceptability ratings for not hiring the candidate, by disability type and gender. Error bars are the standard error of the mean. The y-axis is scaled to one standard deviation to illustrate effect sizes.

3.1.3 De-institutionalisation

When judging how acceptable it was for a community to protest disabled persons being housed in their neighbourhood (see Table 2.2a), twice as many participants gave a response below the midpoint (not acceptable) than above (acceptable) (56.5% vs. 26.4%; Figure A4). The mean response was 3.21 out of 7 ($SD = 1.95$). For this analysis, the disability target was a group and not an individual; the gender of the protester varied and hence we do not test for the gender interaction. The ordinal logistic regression model in Table 3.3 shows that participants judged it to be more acceptable to complain about people with mental health issues being housed in their neighbourhood than people with intellectual disabilities and the non-disabled control (Ukrainian refugees) (Figure 3.3). There was no evidence for a difference in judgements about those with intellectual disabilities and the no-disability control condition, $\chi^2 = 0.04, p = .839$.

Table 3.3

Ordinal Logistic Regression Model Predicting Judgements of Treatment in the De-institutionalisation Vignette

	<u>De-institutionalisation^a</u>	
	Coef.	<i>p</i>
Disability Status		
(Ref: Mental Health)		
Intellectual Disability	-0.65*** [-0.95, -0.34]	<.001
No Disability	-0.68*** [-0.98, 0.37]	<.001
Character Female (Ref: Male)	-0.04 [-0.09, -0.37]	.745
Socio-Demographic Controls	Yes	
N	831	

Note: †*p* < .10; **p* < .05; ***p* < .01; ****p* < .001. Includes controls for respondent gender, age, educational attainment, labour force participation and urban rural residence. Higher scores indicate how the protagonist was treated is more acceptable.

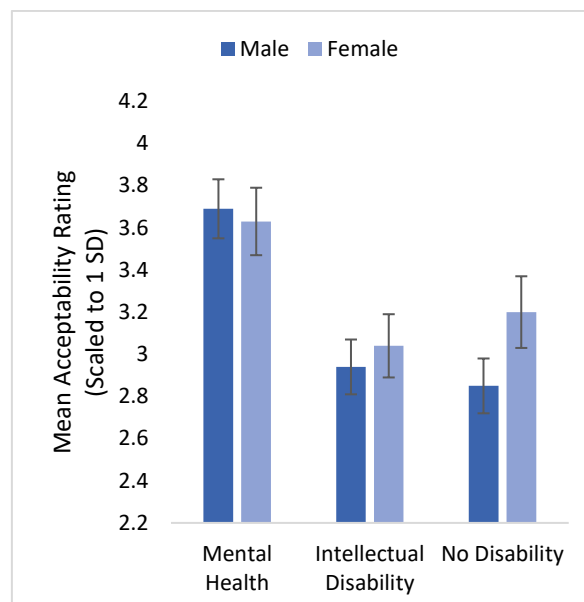


Figure 3.3. Average acceptability ratings for protesting neighbourhood de-institutionalisation, by disability type and (protester) gender. Error bars are the standard error of the mean. The y-axis is scaled to one standard deviation to illustrate effect sizes.

3.1.4 Discussion

Results from these three vignettes provide the first evidence for ableist beliefs being expressed as justifications for potential discrimination. The pattern from the results support the Stereotype Content Model, such that disabilities that tend to be evaluated more negatively on the warmth dimension (e.g., autism and mental health disorders; Canton et al., 2022) were judged more harshly. In the vignettes on reduced school timetables, participants inferred stronger justification when the child had autism than a speech and language disorder or English as a second language. Participants also inferred greater acceptability in not hiring a person with an anxiety disorder than someone with a physical disability or no disability. They also inferred greater justification in protesting the de-institutionalisation of patients with mental health diagnoses than with intellectual disabilities. There is little evidence, however, in support for the “double jeopardy hypothesis” that women with disabilities would be judged more harshly than men with the same disability, at least in these domains. Moreover, judgements of some disabilities (e.g., speech and language disorder, a spinal disorder) did not differ from the non-disability controls.

3.1.5 Transport Vignette

Responses to the transport vignette were highly skewed (Figure A1). For analysis, the scale was recoded into a four-point scale, with 3s and 4s pooled and 5s, 6s and 7s pooled. The ordinal logistic regression model (Table 3.4) showed no evidence for a difference in

judgement between the blind person and the wheelchair user vignettes, but the bus driver's behaviour was judged as less acceptable when the passenger had any disability compared to the parent with a buggy (Figure 3.4; test of coefficients comparing the blind passenger to the parent: $\chi^2 = 50.78, p < .001$). There was no difference in judgements between participants with and without a disability ($M = 1.77, SD = 1.45$ vs. $M = 1.86, SD = 1.48$).

Table 3.4

Ordinal Logistic Regression Model Predicting Judgements of Treatment in the De-institutionalisation Vignette

	De-institutionalisation ^a	
	Coef.	<i>p</i>
Disability Status (Ref: Wheelchair User)		
Blind person	-0.03 [-0.42, -0.36]	.889
No Disability	1.26*** [0.90, 1.62]	<.001
Character Female (Ref: Male)	-0.21 [-0.51, 0.09]	.745
Socio-Demographic Controls	Yes	
N	837	

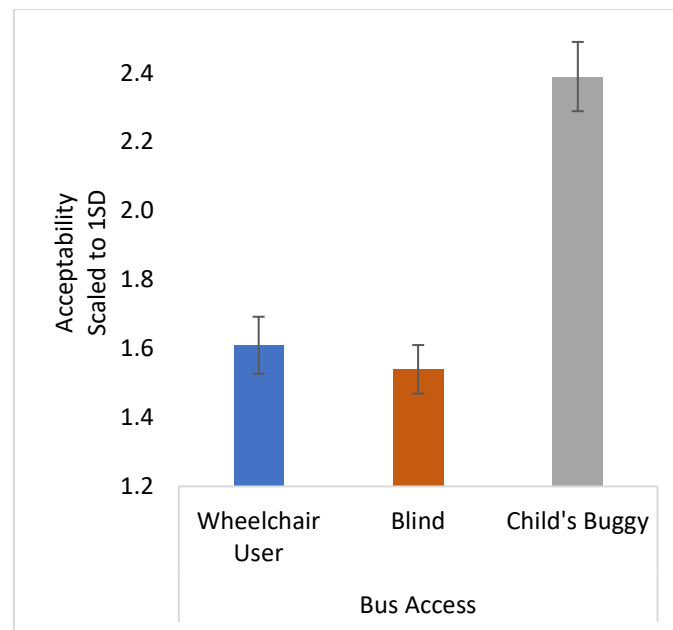


Figure 3.4. Average judgements to the transport vignette. Error bars are the standard error of the mean.

3.2 Behaviour Judgement Vignettes

On the remaining vignettes, participants were asked about the behaviour of the disabled person rather than how they were treated.

3.2.1 Relationships

On the relationships vignette (see Table 2.2b), participants on average judged it to be acceptable for the individual to move in with their partner and start a family ($M = 5.42$, $SD = 1.76$). A large minority (41.6%) judged it to be completely acceptable and very few (15.2%) gave a response below the midpoint of the scale (Figure A5). Table 3.5 shows that starting a family was judged as more acceptable for the physically disabled man than all others, including the physically disabled woman (Figure 3.5). Tests of coefficients show no evidence for a difference between judgements of the man with an intellectual disability and the non-

disabled control (a single father), $\chi^2 = 0.01, p = .933$. There was no evidence for a difference in how any of the women were judged: the physically disabled woman was judged similarly to the woman with an intellectual disability, $\chi^2 = 2.84, p = .092$, and the single mother, $\chi^2 = 0.94, p = .332$, as was the woman with an intellectual disability compared to the single mother, $\chi^2 = 0.68, p = .411$. There was also no difference between the man or woman with an intellectual disability, $\chi^2 = 1.33, p = .249$.⁷ The effect size for the difference in judgements for a physically disabled man to start a family compared to a physically disabled woman is particularly striking (Figure 3.5).

Table 3.5

Ordinal Logistic Regression Model Predicting Judgements of Behaviour in the Relationships Vignette

	<u>Relationships</u>	
	Coef.	<i>p</i>
<hr/>		
Disability Status and Sex		
(Ref: Physical Disability and Male)		
Intellectual Disability and Male	-1.45*** [-1.92, -0.97]	<.001
No Disability and Male	-1.45*** [-1.97, -0.93]	<.001
Physical Disability and Female	-0.84** [-1.33, -0.35]	.001
Intellectual Disability and Female	-1.22*** [-1.74, -0.70]	<.001
No Disability and Female	-1.00*** [-1.49, -0.52]	<.001
<hr/>		
Socio-Demographic Controls	Yes	
<hr/>		
N	830	
<hr/>		

⁷ The single father, however, was judged marginally more harshly than the single mother, $\chi^2 = 3.54, p = .060$.

Note: † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$. Includes controls for respondent gender, age, educational attainment, labour force participation and urban rural residence. Higher scores indicate the protagonist's behaviour is more acceptable.

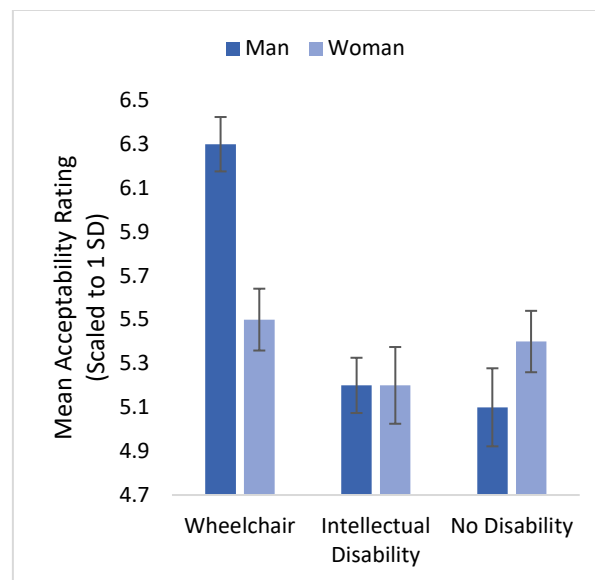


Figure 3.5. Average acceptability ratings for starting a family, by disability type and gender.

Error bars are the standard error of the mean. The y-axis is scaled to one standard deviation to illustrate effect sizes.

3.2.2 Social Welfare

Responses were more widely distributed across the scale that it was acceptable for the individual to remain on welfare payments, with half (50.6%) responding above the midpoint and a third (32.3%) responding below (Figure A6). The average response was slightly above the midpoint (i.e. acceptable) ($M = 4.47$, $SD = 1.95$). Table 3.5 shows that the non-disabled male was judged more harshly than the physically disabled male and a test of coefficients showed the same effect for the male with the mental health issue, $\chi^2 = 3.94$, $p = .047$, but

there was no difference between judgements of the physically disabled male and the male with a mental health issue (Figure 3.6). There was no evidence for differences in judgements of any of the women: physical disability vs. mental health, $\chi^2 = 1.62$, $p = .203$; physical disability vs. no disability, $\chi^2 = 1.00$, $p = .318$; mental health vs. no disability, $\chi^2 = 0.15$, $p = .702$. There was also no evidence for a difference between physically disabled man or woman (Table 3.6) or the man and woman with the anxiety disorder, $\chi^2 = 0.09$, $p = .760$. In this vignette it is in the control group that we observe intersectionality: the man with caring responsibilities was judged more harshly than woman with caring responsibilities, $\chi^2 = 4.28$, $p = .039$.

Table 3.6

Ordinal Logistic Regression Model Predicting Judgements of Behaviour in the Social Welfare Vignette

	<u>Social Welfare</u>	
	Coef.	<i>p</i>
<hr/>		
Disability Status and Sex		
(Ref: Physical Disability and Male)		
Mental Health and Male	-0.16 [-0.58, 0.26]	.467
No Disability and Male	-0.65** [-1.12, -0.18]	.007
Physical Disability and Female	0.02 [-0.39, 0.44]	.909
Mental Health and Female	-0.26 [-0.72, 0.20]	.271
No Disability and Female	-0.15 [-0.56, 0.27]	.486
Socio-Demographic Controls		Yes
<hr/>		
N		839
<hr/>		

Note: † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$. Includes controls for respondent gender, age, educational attainment, labour force participation and urban rural residence. Higher scores indicate the protagonist's behaviour is more acceptable.

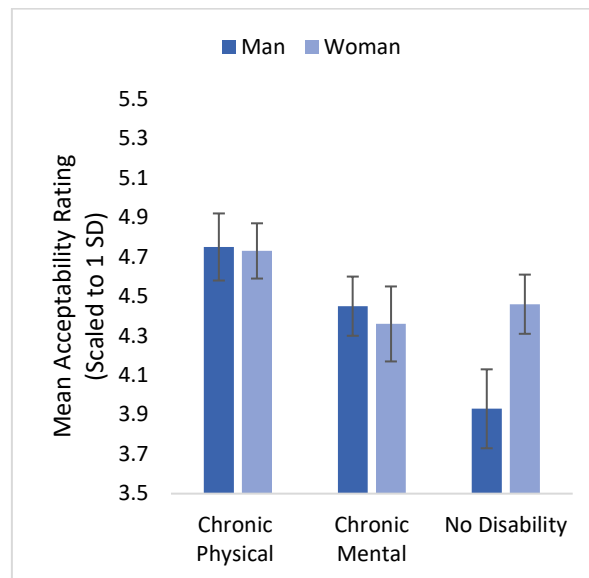


Figure 3.6. Average acceptability ratings for refusing poorly paid work, by disability type and gender. Error bars are the standard error of the mean. The y-axis is scaled to one standard deviation to illustrate effect sizes.

3.2.3 Discussion of Behaviour Judgement Vignettes

Both vignettes on judgements of the actions of disabled people highlight nuances in ableism not previously observed in studies that consider it as a general attitude. Importantly, the relationships vignette is the first experimental demonstration of disability-gender intersectionality effects: the male wheelchair user was judged far more positively than the woman with the same disability, whereas there were no gender differences in judgements of intellectual disability. The social welfare vignette presents a situation where no enhanced stigma towards disabled groups was observed, with the non-disabled man who had caring responsibilities judged more negatively than any others, perhaps reflecting sexist attitudes

towards men reducing paid work hours to care for children (Russell, O'Connell & McGinnity, 2008).

3.4 Familiarity with Disability

We pre-registered exploratory analyses of the association between knowing someone with a disability and judgements to the vignettes. We added to the models reported in Tables 3.1 to 3.5 an ordinal variable for familiarity with a person with a disability or long lasting condition (Table 3.7).⁸ Participants were coded according to whether they themselves have a disability ($n = 377$, 18.9%); their spouse/partner, child or parent has a disability ($n = 280$, 14.0%); another relative has a disability ($n = 126$, 6.3%); a friend, neighbour or colleague has a disability ($n = 71$, 3.6%); or no one they know has a disability ($n = 1,146$; 57.3%). For participants who reported knowing multiple groups of people with a disability, they are coded according to their “most familiar” (e.g. if an individual reported their child and a work colleague has a disability, they are categorised into the first “most familiar” group only). We report here differences between those who know no one with a disability, whose partner, child or parent has a disability or who themselves have a disability, due to low cell sizes in the other groups.

The models in Table 3.7 show a general pattern whereby those more familiar with disability issues were less accepting of potential prejudicial treatment and more accepting of decisions made by disabled people. All coefficients on the treatment vignettes (education, de-institutionalisation, employment) have negative signs and those who have a disability themselves show significant differences on all vignettes compared to those who no know one (Figure 3.7). Coefficients on the behaviour vignettes (relationships, social welfare) are positive, and significantly so for those who have a disability. Tests of coefficients show no

⁸ The question was: Do any of the following people you know have a disability or long-lasting condition that affects their ability to carry out day-to-day activities? Participants were presented with checkboxes for: Spouse/Partner, Child, Parent, Brother/Sister/Other Relative, Friend, Neighbour, Colleague/Work contact, Not sure/don't know, None

evidence for a difference between those with a disability themselves and those whose partner, child or parent has a disability.⁹

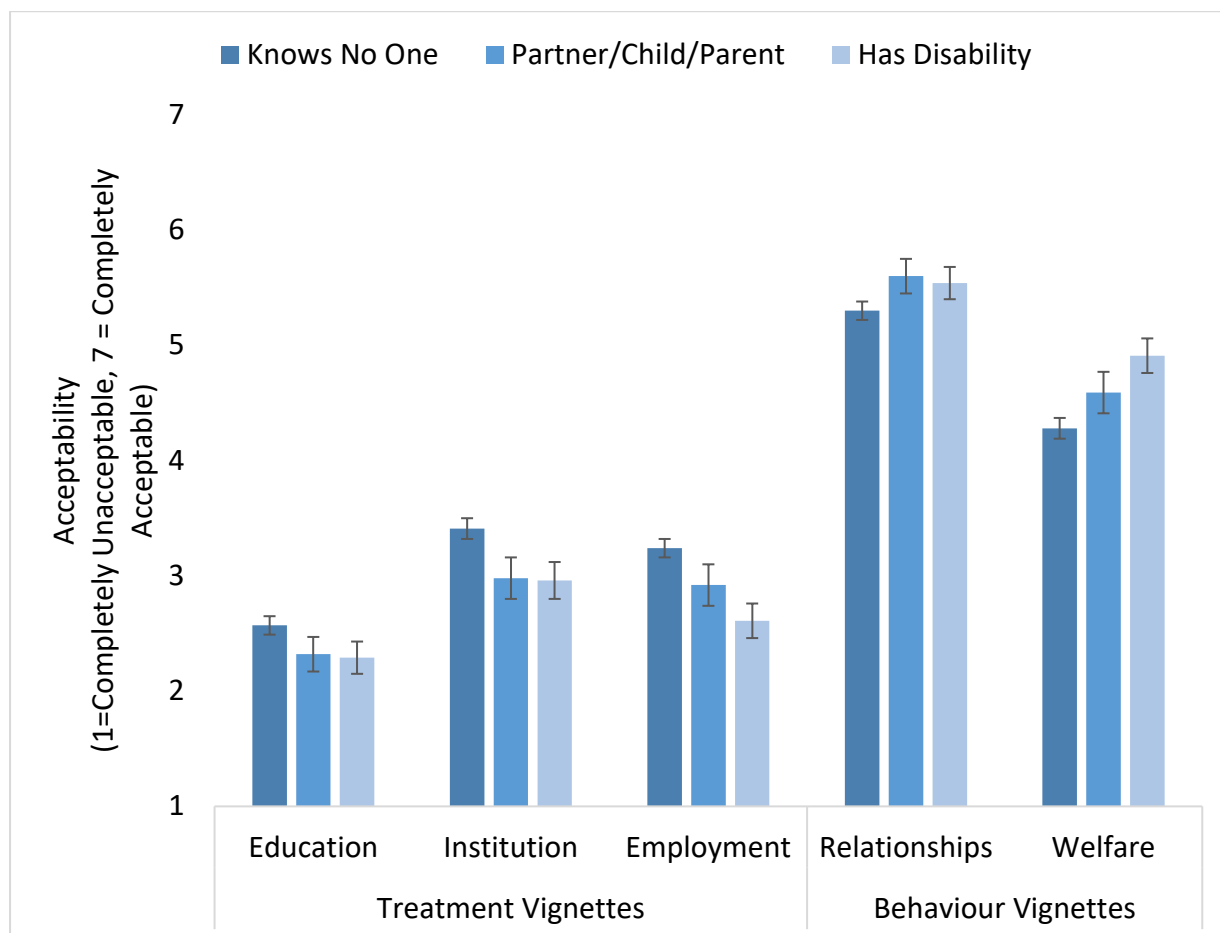


Figure 3.7 Average acceptability ratings to vignettes by familiarity with disability. Error bars are the standard error of the mean. The chart excludes those who know only a brother, sister or other relative ($n = 126$) or a friend, neighbour or colleague ($n = 71$) with a disability.

⁹ Education: $\chi^2 = 1.21, p = .271$; De-institutionalisation: $\chi^2 = 0.06, p = .810$; Employment: $\chi^2 = 1.13, p = .288$; Relationships $\chi^2 = 0.02, p = .896$; Welfare: $\chi^2 = 1.98, p = .160$

Table 3.7. Ordinal Logistic Regression Models Testing for Familiarity Effects

	<u>Education</u>		<u>Behaviour Vignettes</u>		<u>Employment</u>		<u>Treatment Vignettes</u>			
	Coef.	<i>p</i>	<u>De-institutionalisation</u>		Coef.	<i>p</i>	<u>Relationships</u>		<u>Welfare</u>	
			Coef.	<i>p</i>			Coef.	<i>p</i>	Coef.	<i>p</i>
Familiarity with Disability (Ref: Knows No One)										
Friend/Neighbour/Colleague	-0.40	.139	-0.56*	.025	0.25	.298	0.18	.532	0.27	.293
	[-0.92, 0.13]		[-1.04, -0.07]		[-0.26, 0.75]		[-0.39, 0.75]		[-0.23, 0.77]	
Brother/Sister/Other Relative	-0.43 [†]	.070	-0.29	.265	-0.19	.430	0.23	.380	-0.01	.959
	[-0.90, 0.04]		[-1.04, -0.07]		[-0.79, 0.41]		[-0.29, 0.75]		[-0.49, 0.47]	
Spouse/Partner/Child/Parent	-0.19	.312	-0.45*	.016	-0.33	.077 [†]	0.38 [†]	.054	0.29	.150
	[-0.57, 0.18]		[-0.82, -0.08]		[-0.69, 0.03]		[-0.01, 0.76]		[-0.10, 0.67]	
Has a Disability	-0.44*	.014	-0.51**	.004	-0.57**	.001	0.41*	.024	0.60***	<.001
	[-0.80, -0.09]		[-0.85, -0.16]		[-0.92, -0.22]		[0.05, 0.76]		[-0.28, 0.92]	
Socio-Demographic Controls	Yes		Yes		Yes		Yes		Yes	
Vignette Version Controls	Yes		Yes		Yes		Yes		Yes	
N	831		831		832		830		839	

Note: [†]*p* < .10; **p* < .05; ***p* < .01; ****p* < .001. Includes controls for respondent gender, age, educational attainment, labour force participation and urban rural residence.

4. Discussion

Our aim was to investigate variation in ableism depending on the individual's disability, their gender and the social context. The vignettes tested judgements of how people with disabilities are treated and how they act. The results show a strikingly consistent justification of potential prejudice towards certain disabilities. Participants judged it to be more acceptable to place a child with autism on a restricted timetable than a child with a speech and language disorder, to not hire a candidate with an anxiety disorder than a candidate with a spinal disorder and to protest against de-institutionalising mental health patients than patients with intellectual disabilities. In each of these cases, disabilities perceived in previous research to be less warm (Canton et al., 2022) elicited stronger justifications of potential prejudice, despite all other information being equal. The findings support H1 and imply that people rely on negative stereotypes of some disabilities to justify differential treatment.

Interestingly, comparisons against the non-disabled control conditions were not significant for all disabilities. There was no evidence for a difference between the control and the child with a speech and language disorder nor the control and the patients with intellectual disabilities. Hence support for H2, that attitudes towards people with disability differ from those without disability, is mixed. Instead this finding points to the importance of not treating people with disabilities as a homogenous group; the likelihood for detecting ableist beliefs varies depending on the disability. It was worth noting, however, that for plausibility the control conditions for each vignette required some additional accommodation (e.g., workplace flexibility for caring responsibilities) and hence the results may underestimate negative attitudes relative to non-disabled people with no such additional needs.

Although we observed clear evidence for ableism towards certain disabilities when judging how disabled people are treated by others, the evidence for ableist beliefs towards the actions

of disabled people is more nuanced. When reading about a disabled person engaging in a romantic relationship, participants' judgements depended on the gender of the disabled person as well as their disability. Participants judged it to be far more acceptable for a male wheelchair user to engage in the relationship than the female wheelchair user, providing some evidence for the double jeopardy hypothesis (Berdahl & Moore, 2006). However, there was no gender difference among individuals with intellectual disability. This finding is the first empirical evidence of gender-disability intersectionality in ableist beliefs (cf. Wang, 2019) and lends some support for H3, that attitudes towards issues faced by people with disabilities differ depending on the disabled person's gender. Conversely, despite a gender difference in judgements of the control candidates refusing poorly paid work, there were no gender differences in judgements of the disabled candidates. Hence the evidence for H3 is mixed. These findings instead support previous research that people with disabilities are sometimes perceived as less gendered (Nario-Redmond, 2010), although sexism inherent in judgements of caring responsibilities may underly judgements to the control vignette.

Despite evidence of ableist beliefs, a highlight from the study is the positive baseline judgements across all vignettes. Participants, in general, judged potential prejudice to be unacceptable and were in support of free choices by people with disabilities. These positive attitudes were particularly strong among those closer to an individual with a disability, supporting H4 and adding to existing research on the importance of intergroup contact on reducing stigma and prejudice (e.g., Allport et al., 1954).

4.1 Implications

Together, the findings have clear implications for stigma theory and for future research on ableism. The evidence that potential prejudice was more strongly justified when the target

group were those perceived as less warm lends strong support to the Stereotype Content Model of stigma (Cuddy et al., 2008). Note that this is the first instance of predictions from the Stereotype Content Model being applied to ableism as conceptualised here. Further research that maps perceptions of individual disabilities against the dimensions recommended by the Stereotype Content Model could help to better predict when and against whom ableist beliefs may be more likely (e.g., Canton et al., 2022).

The findings also provide strong support for the Intergroup Contact Theory of stigma. Whereas other research has shown the importance of frequency of contact (e.g., Harder et al., 2019), we show that relationships with lower degrees of social distance also lead to more positive attitudes in a variety of life domains (e.g., Pescosolido & Manago, 2018). The implication here is that efforts to promote the inclusion of people with various disabilities in the daily lives of non-disabled people, particularly in ways that foster relationships, is likely to have multiple benefits, including reduced prejudicial judgements and justification of such by others. This implication was also drawn from other phases of this work, reported in Timmons et al. (2023).

An overarching implication is the importance of a broader conceptualisation of how ableist beliefs can manifest in the daily lives of people with disabilities. With few exceptions, most previous research investigating ableism has limited itself to general attitudes, and often towards just one type of disability. We show instead that the detecting ableism depends not only on the presence or absence of disability, but on multiple factors: the type of disability, the gender of the disabled person, the social context, whether the judgement is of the disabled person themselves or of how they are treated by others. There are likely to be other factors not included here. This study is merely a first step towards understanding this broader conceptualisation of ableism. Future research using contextually rich materials covering a

range of issues relevant for people with disabilities is vital for better understanding – and understanding how to combat – ableism.

4.2 Limitations

This study has a number of limitations that present opportunities for future research (Table 4.1). First, one clear finding is the need to consider multiple factors when investigating ableism, including different types of disabilities and social contexts. Time constraints in our study meant that we were limited in the number of different situations we could include. The ones we selected were ones identified through discussions with a government advisory and with an advisory board comprised of representatives from different Disability Person's Organisations. Hence we can be reasonably confident of their importance to the daily lives of people with disabilities. That said, there is further scope for similar studies to investigate attitudes to other disabilities and in other social contexts.

Second, there is a considerable gap in quantitative evidence of the day-to-day experiences of people with disabilities. We could locate no study other than Nario-Redmond et al. (2019) that investigated the different forms ableism can take. Future studies would benefit from further systematic research on the most pervasive and damaging forms of ableism experienced by people with disabilities. Note, however, that a combination of research on non-disabled and disabled populations would be essential, as some forms of ableism may be hidden from those with disabilities. For example, discrimination in hiring processes may be difficult for people with disability to confidently attribute, since they do not have access to information on other candidates. Experimental research on hiring manager populations would be essential to establish the prevalence of discrimination here. In addition, research into ableist attitudes among high-status decision makers is desirable for two reasons. The

decisions made by this group will affect disabled people, sometimes as part of the wider public and sometimes specifically as disabled people. Ableist attitudes among this group may then directly translate into negative experiences in employment, education, healthcare and other important areas.

Third, while one of our aims was to test predictions from Intergroup Contact Theory, our data were limited by a simple categorisation of whether the respondent knew someone with a disability and their social distance (e.g., a partner or child versus a colleague or neighbour). A stronger test of intergroup contact's ability to reduce prejudice and ableism would be to investigate the link between knowing someone with a specific type of disability and whether this relationship has domain-specific implications for ableism, with benefits limited only to the known disability, or domain-general benefits for disabilities more generally. Our evidence suggests the latter, given the strength of the effect across different disabilities in different social contexts, but further research is required.

Table 4.1

Study Limitations

Limitation	Description	Opportunity
Disability coverage	Time and resources constraints limited the number of types of disabilities and social contexts that could be included.	Future research could consider including a wider range of disability types and social contexts.
Forms of ableism	We investigated just two manifestations of ableism, on judgements of how disabled people are treated and judgements of their actions.	Further research to identify other forms ableism can take is needed.
Data granularity	Our test of intergroup contact theory was limited to respondent	Future research could consider social distance to various types of disabilities to test the

Population	closeness to someone with any type of disability. Our study was run in one country (Ireland).	generalisability of Intergroup Contact Theory. Future research could replicate this study in other populations (e.g., other countries).
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4.3 Conclusion

Despite being widely conceptualised as a general attitude, we provide the first empirical evidence of ableism manifesting differently depending on the nature of the individual's disability, their gender and the social context in question. This evidence may go some way to explaining the often large discrepancy between positive survey attitudes towards disability and the lived experiences of those with disability; people may report holding positive attitudes towards disability without conscious awareness of how their attitude may be sensitive to multiple factors in real world settings. There is considerable scope for further research investigating the forms ableism can take and the conditions that elicit it.

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CRediT Author Statement

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Appendix

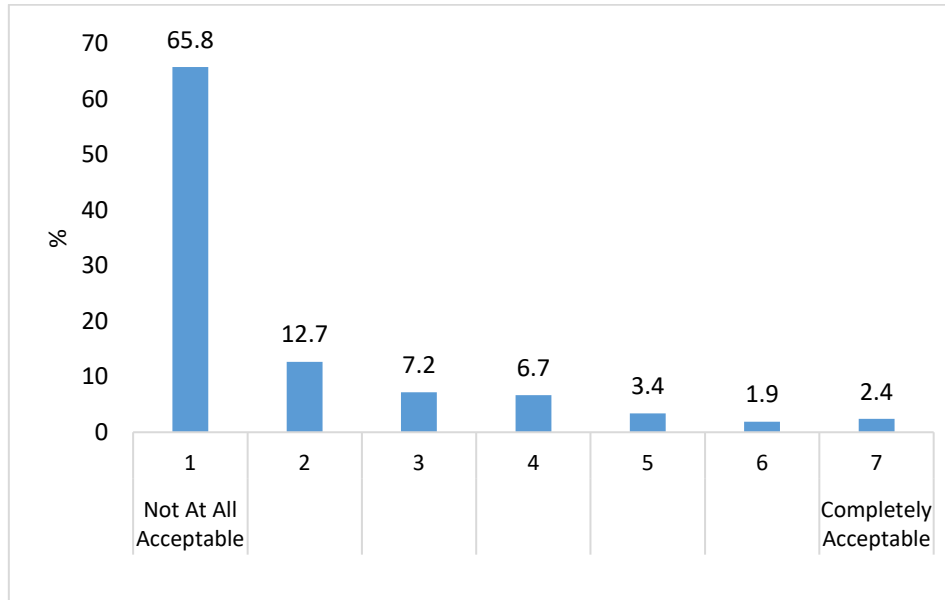
A1. Response Distributions

Figure A1. Response distribution to the transport vignette.

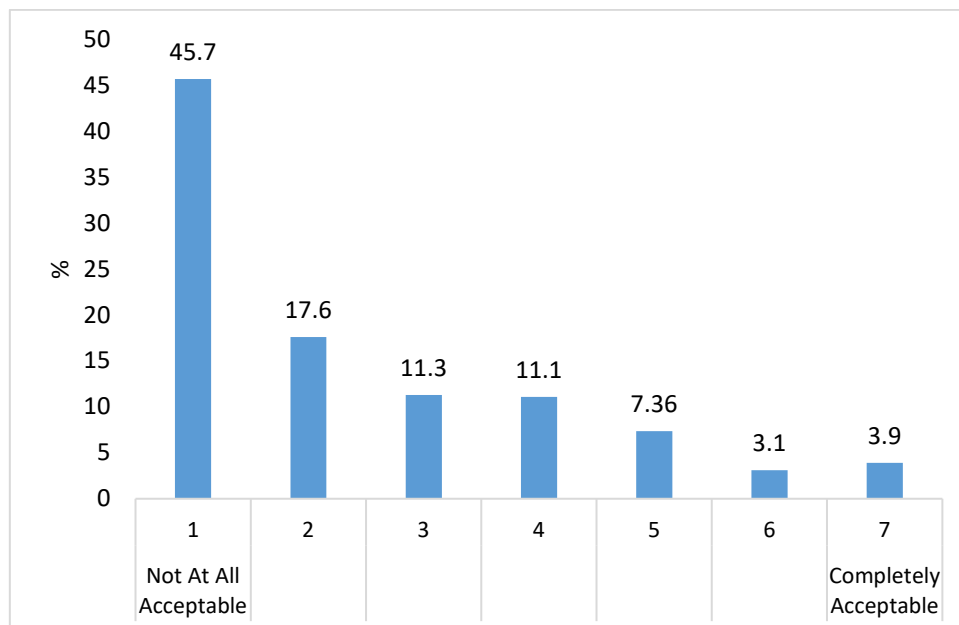


Figure A2. Response distribution to the education vignette. For analysis, responses above 4 were recoded as 5+.

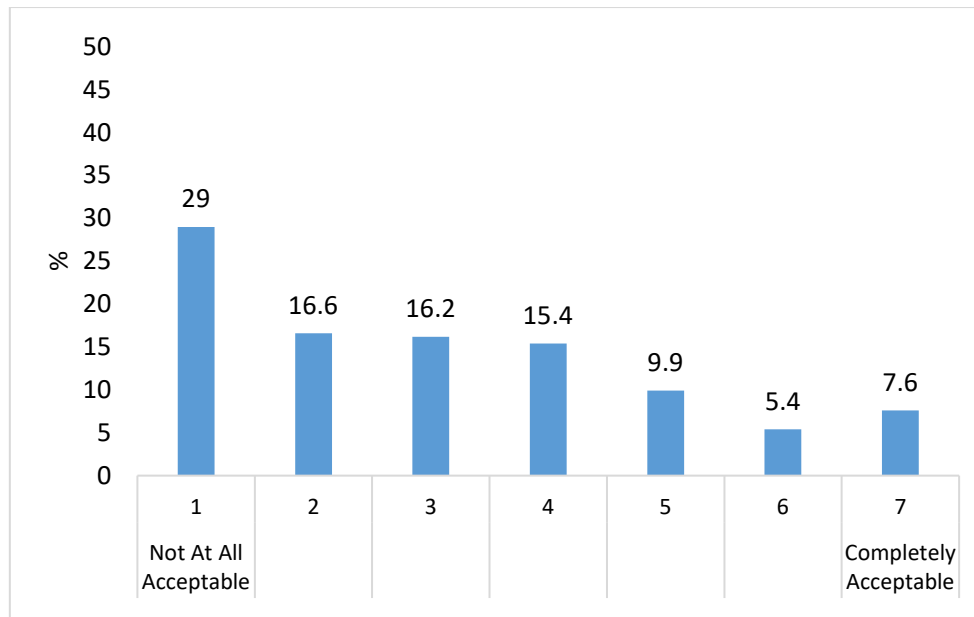


Figure A3. Response distribution to the employment vignette. For analysis, responses above 4 were recoded as 5+.

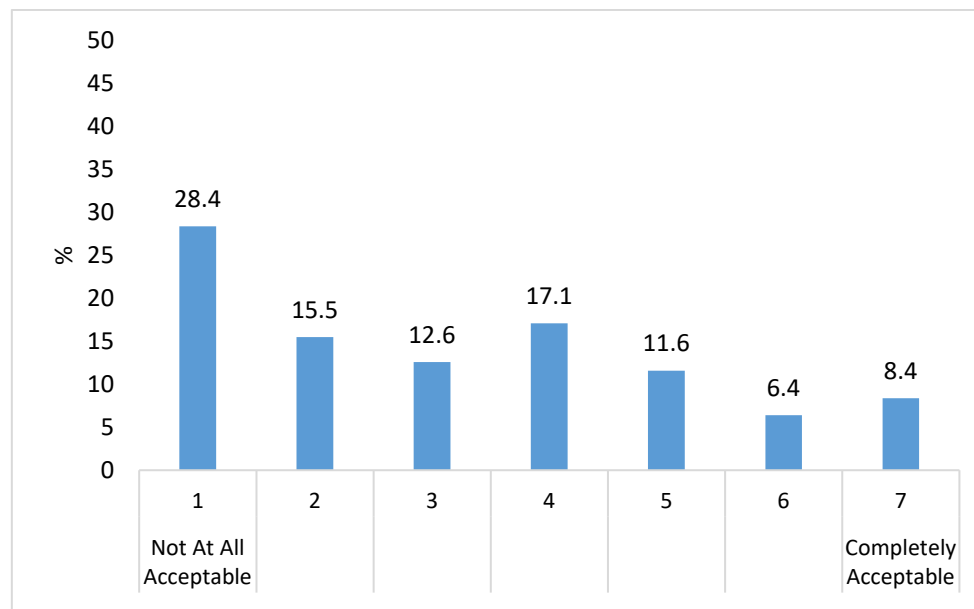


Figure A4. Response distribution to the De-institutionalisation vignette. For analysis, responses above 4 were recoded as 5+.

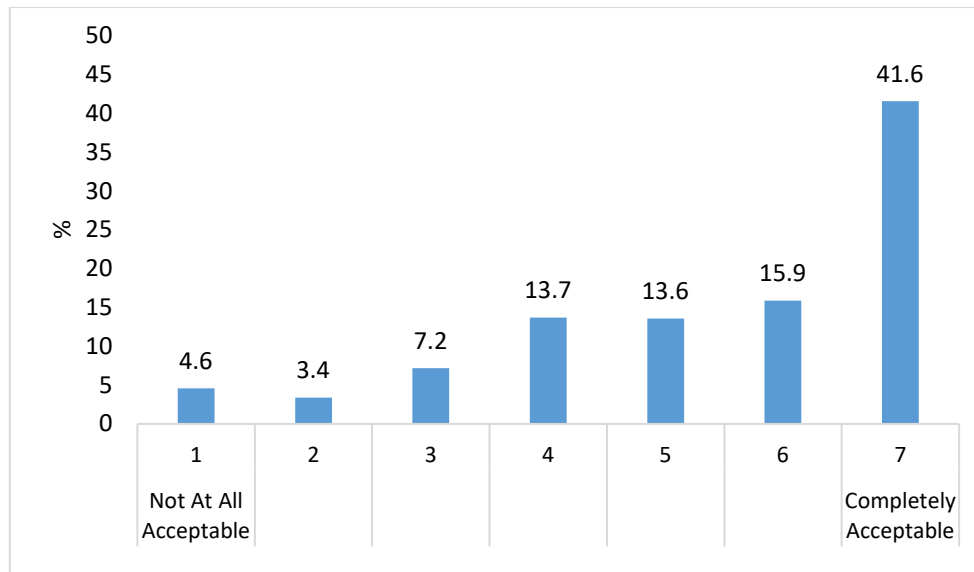


Figure A5. Response distribution to the relationships vignette. For analysis, responses below 3 were recoded as <3.

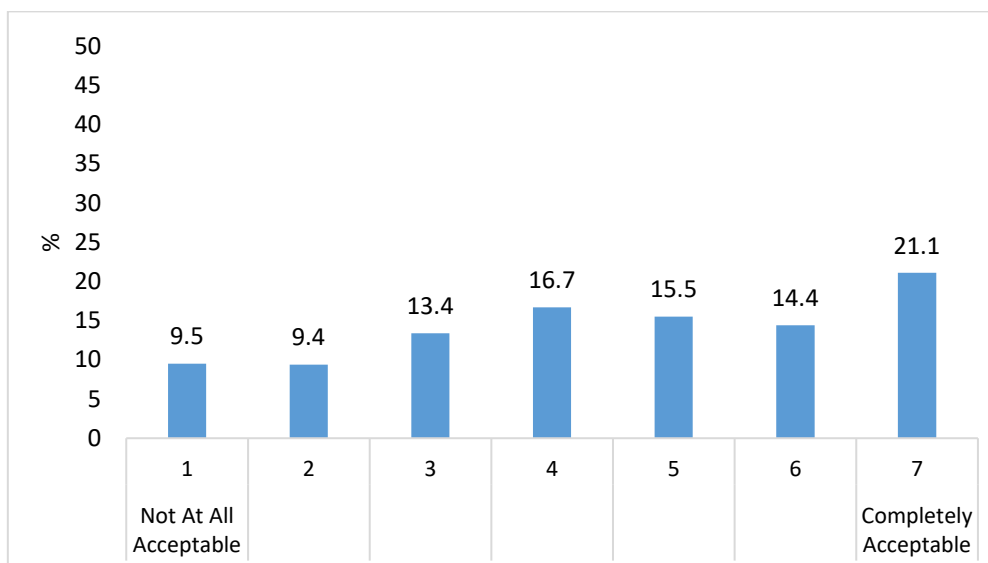


Figure A6. Response distribution to the welfare vignette. Raw responses were used for analysis.

A2. Proportional Odds Tests

Table A2. Tests of Proportional Odds for Ordinal Logistic Regression Models

	Original Model χ^2	Familiarity Test Model χ^2
Education	34.49	30.18
De-institutionalisation	27.92	23.98
Employment	34.07	43.35
Relationships	34.62	19.12
Social Welfare	49.71	49.71

Note: *p < .05; **p < .01; ***p < .001.