

# Responsibility for Impairment Shapes the Perceived Deservingness of Welfare Claimants with Disabilities

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## Abstract

In this article, we test the extent to which the perceived deservingness of people with disabilities (PWD) for state support is conditional. To do so, we use two novel survey experiments asking respondents to assess the deservingness of a fictitious subject. We manipulate two characteristics of the subject: how they acquired their impairment, and an ethnic in-group/out-group cue. We find that PWD perceived as even somewhat responsible for their impairments are considered substantially less deserving of government assistance than those perceived not responsible, even when their needs are identical. Further, we find that all else equal, migrant and ethnic minority PWD are seen as less deserving of assistance than ethnic majority and native-born PWD. The results challenge the existing orthodoxy of the universality of support for PWD and highlights the shortcomings of research that treats PWD as a homogenous group.

**Keywords:** Disability, welfare, political psychology, survey experiment

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# 1 Introduction

Disability impacts the lives of millions of British citizens. In Great Britain, roughly 20% of the population identifies as disabled, and around one third of British households include one or more persons with a disability (Heslop and Gordon, 2014; Reher, 2021a). Disability has far-reaching implications for the social and material well-being of individuals. People with disabilities (PWD)<sup>1</sup> are disproportionately unemployed and underemployed (Kruse and Schur, 2003; Powell, 2021), face discrimination in the labor market (Ameri et al., 2018; Kruse et al., 2018), are far more likely to live in poverty and food insecurity (Brucker, 2016; Coleman-Jensen and Nord, 2013), and report significantly higher rates of loneliness, social isolation, and discrimination than their non-disabled peers (Emerson et al., 2021; Mattila and Papageorgiou, 2017). Many of these inequalities are compounded by intersecting sources of marginalization, such as membership in ethnic or cultural minority groups, or geographic distance from government resources and services (Krahn et al., 2015).

However, while the evidence for disability as a source of socioeconomic disadvantage is overwhelming, public attitudes toward government assistance for PWD are conflicted. On the one hand, a large literature in welfare attitudes finds that PWD are widely stereotyped as the “deserving poor” (Van Oorschot, 2000, 2006). Across diverse cultures and welfare regimes, no social group besides the elderly is considered more deserving of government assistance than PWD (Larsen, 2008; Van Oorschot, 2000, 2008; Van Oorschot and Roosma, 2017). The regularity of this finding has led scholars to label it the “universal dimension of support” (Van Oorschot, 2006) - PWD, along with the sick and the elderly, are perceived to be in need through no fault of their own, and should therefore be first in line to receive help. Consequently, disability welfare programs have tended to be more widespread, more generous, and less stigmatized than many other forms of government assistance (Baumberg Geiger, 2017).

On the other hand, the perceived deservingness of PWD is often not reflected in the lived experience of disabled welfare claimants. Disability welfare programs are among the most costly and politically contested features of the UK social safety net, accounting for over 1% of GDP (Banks et al., 2012). In the UK and abroad, anxiety over the fiscal burden

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<sup>1</sup>As (Reher, 2021b) notes, the appropriate terminology around disability varies with cultural context and individual preference. In the United States, a preference for “person-first” language - i.e. “person with a disability” - reflects a desire to avoid defining disabled individuals by their impairments. In the UK, where this study is based, “disabled person” is more common, reflecting a commitment to the social model of disability (Oliver, 1996; Shakespeare et al., 2006). In this paper we use both interchangeably, reflecting the language used in discussed literature.

of disability welfare has led to widespread retrenchment, and the imposition of increasingly strict forms of conditionality aimed at policing the legitimacy of claimants and weeding out those considered lazy or malingering rather than “truly incapacitated” (David and Duggan, 2006; Banks et al., 2012; Baumberg Geiger, 2017; Weston, 2012). Other recent findings suggest such measures may reflect broader societal fears of the “disability con” - the possibility that PWD might fake or exaggerate their disabilities in order to take advantage of rights and accommodations (Dorfman, 2019). Thus, while PWD are broadly stereotyped as deserving, these sources suggest attitudes may vary substantially with the characteristics of individual disabled claimants.

Despite the prevalence of conditionality in disability welfare regimes, research examining welfare attitudes has largely overlooked disability. At present, we know very little about how the characteristics of PWD welfare recipients shape their perceived deservingness of assistance, or how attitudes toward PWD vary among people of different political orientations and predispositions. This paper addresses this gap. We examine the impact of two common sources of intra-group heterogeneity among PWD - perceived responsibility for impairment, and intersecting marginal identities - on the perceived deservingness of PWD to government assistance. Drawing on literature in social cognition and welfare attitudes, we derive two broad hypotheses. Firstly, we predict that PWD perceived as responsible for their impairment will be seen as less deserving than those who are perceived as having no responsibility for their impairment, even when their needs for assistance are identical. Secondly, we predict that migrant and ethnic minority PWD will be seen as less deserving, all else equal, than white and native-born PWD.

We test these hypotheses in two pre-registered survey experiments using nationally diverse samples of voting-age adults in Scotland (N=1,707) and Wales (N=3,393). We find that PWD perceived as even somewhat responsible for the acquisition of their impairments are considered substantially less deserving of government assistance than those perceived as having no responsibility for their impairments, even when their needs for assistance are identical. Further, we find that migrant and ethnic minority PWD are perceived as substantially less deserving than white and native-born PWD, though results vary with perceived responsibility for impairment. Finally, we show that these disparities are particularly pronounced among political conservatives, and those holding to more authoritarian social values.

These findings make several contributions to the literature on welfare attitudes. Firstly, research examining the perceived deservingness of social groups is at the core of the welfare attitudes literature (Petersen et al., 2012; Van Oorschot, 2000). However, studies

examining within-group variation in perceived deservingness have typically focused on attitudes toward members of stereotypically low-deserving groups, such as immigrants (Van Der Waal et al., 2013; Van Oorschot and Uunk, 2007), the unemployed (Petersen, 2012; Aarøe and Petersen, 2014), and ethnic minorities (Gilens, 1996, 2009; Ford, 2016). Fewer studies have examined variation in perceived deservingness within relatively high-deserving groups, such as the elderly<sup>2</sup>, or PWD. Whereas the baseline of support for disability welfare is relatively high (Van Oorschot, 2006), we find that deservingness attitudes vary dramatically with relatively small changes in the characteristics of individual disabled claimants. These findings have clear implications for the framing of redistributive policy (Schneider and Ingram, 1993). We show that support for redistribution toward even relatively high-deserving groups may be undermined when discursive frames cast doubt on claimants’ perceived responsibility for their impairment, or the extent of their membership in a shared political community.

We also contribute to a growing literature on disability in political behavior. While a large literature finds PWD in the UK and abroad differ from their non-disabled peers across a range of political orientations (Reher, 2018; Schur and Adya, 2013), the political psychology of disability has been almost entirely unexamined. Consequently, we know very little about how the characteristics of disabled citizens shape political attitudes toward them, or how attitudes toward PWD vary among citizens with different political values and orientations<sup>3</sup>. The relative paucity of work examining political attitudes toward PWD is startling given the prevalence of disability-based discrimination and prejudice (Nario-Redmond, 2019), and the implications of such attitudes and behaviors for the social and material well-being of PWD (Fiske et al., 2002; Nario-Redmond, 2010, 2019). Our findings demonstrate that while PWD are stereotyped as deserving (Cuddy et al., 2009), attitudes toward disabled welfare claimants are substantially more conditional than has been previously acknowledged.

## 2 The Deserving Disabled?

Attitudes toward social welfare for people with disabilities are conflicting. On the one hand, PWD are stereotypically thought to epitomize the “deserving poor” (Hampton, 2016; Van Oorschot, 2006). Numerous studies in welfare attitudes finds that across developed

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<sup>2</sup>Huddy et al. (2001) examines support for benefits for the elderly in the United States, but does not examine how attitudes shift with changes in claimant characteristics.

<sup>3</sup>A notable exception is Reher (2021b), who examines the social perception of disabled candidates for political office.

democracies, no social group besides the elderly is considered more deserving of assistance from the government than people with disabilities (Larsen, 2008; Van Oorschot, 2000, 2006; Van Oorschot and Roosma, 2017). Further, this finding replicates across states with diverse welfare regimes, differential levels of welfare spending, and cultural attitudes toward welfare recipients (Alesina et al., 2004; Esping-Andersen, 1990; Larsen, 2008). As Carpenter (2012) notes, whereas advanced societies differ dramatically in their willingness to redistribute resources to ameliorate inequalities in material conditions or education, there is relative consensus that social insurance for the sick and PWD ought to be readily available, supported by subsidization and redistribution.

The regularity of support for disability welfare is explained in part by the content of disability stereotypes. In the absence of specific information, people tend to rely on cognitively accessible stereotypes when making deservingness judgments about members of social groups (Aarøe and Petersen, 2014; Jensen and Petersen, 2017). Studies that rely on undifferentiated group cues are therefore more likely to elicit responses that reflect the content of common group stereotypes. Despite the diversity of PWD, an extensive literature in social psychology finds PWD in general are ambivalently stereotyped as high in warmth and low in competence (Fiske et al., 2002, 2007; Fiske, 2018; Cuddy et al., 2007)). In other words, while PWD are broadly perceived as friendly, cooperative, and trustworthy (warmth), they are stigmatized as low in personal efficacy, skill, and social status (competence) (Fiske et al., 2007). At the core of this stereotype is the perception that PWD lack responsibility and agency for their circumstances, which frequently elicits pity, compassion, and a willingness to help<sup>4</sup>(Cuddy et al., 2007; Goetz et al., 2010; Nario-Redmond, 2019; Petersen et al., 2012). This basic stereotype profile is applied across impairment groups (Fiske, 2015; Nario-Redmond, 2019); is found across diverse cultures (Cuddy et al., 2007); and is reflected in both implicit and explicit attitudes toward PWD (Rohmer and Louvet, 2011).

However, disability stereotypes are likely to be unstable predictors of attitudes toward disabled welfare claimants in many everyday political contexts. Whereas stereotypes may powerfully shape attitudes and behavior when information is scarce, people are less likely to rely on stereotypes when specific information is available about the motivations and intentions of particular individuals (Aarøe and Petersen, 2014). Thus, while people may express support for disability welfare in response to a category cue, support is likely to vary substantially in the face of more fine-grained information about specific claimants

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<sup>4</sup>Such stereotypes may also elicit more directly harmful behaviors, such as condescension, exclusion, and neglect (Dirth and Branscombe, 2019; Nario-Redmond, 2019)

(Jensen and Petersen, 2017). Indeed, there is substantial evidence of variability in perceived deservingness *within* the social category of disability. We might therefore expect that a dissonance exists between perceptions of deservingness to differ between PWD as an abstract collective and evaluations of individuals with disabilities. This is exemplified in the conditional nature of disability welfare programs. In Great Britain and abroad, eligibility for disability welfare benefits depends greatly on, among other things, the type and severity of an individual’s impairment, the functional limitations they experience, and the availability of other forms of clinical or therapeutic mitigation (Baumberg Geiger, 2017; Dwyer, 2019). Thus, disability welfare reform typically focuses on reducing benefit enrolments by tightening incapacity requirements and creating higher clinical barriers to entry (David and Duggan, 2006; Banks et al., 2012). While such reforms can help ensure access to appropriate resources for individuals with particularly acute needs, they also leave many people with disabling health conditions vulnerable to arbitrary exclusion from support. This is particularly the case for those with mental illness, intellectual disability, those with fluctuating chronic conditions, or less visible impairments (Dwyer, 2019; Dwyer et al., 2020). However, despite the ubiquity of conditionality in disability welfare regimes, we still have very little understanding of how disabled welfare claimants are perceived by the mass public. While existing research has found that social attitudes toward PWD vary somewhat with impairment type (Nario-Redmond, 2010, 2020; Fiske et al., 2002, 2007) the field remains largely under-examined. Specifically, researchers have yet to empirically examine how deservingness attitudes vary in response to the health or demographic characteristics of disabled welfare claimants.

### 3 Who Deserves Help?

What factors are likely to shape the perceived deservingness of disabled welfare claimants? An extensive literature finds deservingness attitudes vary substantially with the characteristics of welfare claimants (Van Oorschot, 2000). Specifically, welfare recipients are more likely to be considered deserving when they satisfy several key deservingness criteria (Meuleman et al., 2020; Van Oorschot, 2000, 2006). Namely, when they are seen to have a particularly acute or pressing need (Delton et al., 2018), when they are perceived as lacking responsibility for their circumstances (Petersen et al., 2012; Petersen, 2012), when they are seen as pleasant, grateful, and docile (Cook, 1979; Swaan, 1988), when they are perceived as having contributed to society in the past or likely to contribute in future (Huddy et al., 2001), and when they are perceived as more proximate in identity terms (e.g. ethnicity, cit-

izenship) to dominant social groups<sup>5</sup> (Ford, 2016; Gilens, 1996; Larsen, 2008; Van Oorschot and Roosma, 2017). As previously noted, PWD are widely stereotyped as satisfying many of these criteria (Cuddy et al., 2009; Meuleman et al., 2020). People with disabilities are stereotypically perceived as being in substantial need through no fault of their own, and are typically viewed as friendly and cooperative (Cuddy et al., 2007; Fiske et al., 2002, 2007). However, in reality, PWD vary substantially along many of these dimensions in ways which may shape their perceived deservingness of assistance.

Disability is a broad social category that encapsulates individuals with vastly different demographic and health characteristics (Bogart et al., 2017; Schur and Adya, 2013). People with disabilities vary dramatically as to the type and intensity of their impairments, their experience of impairment acquisition, and the extent of functional limitation they experience (Krahn et al., 2015; Nario-Redmond, 2019). Intensity of functional limitation varies significantly both within and between impairment groups, and in concert with other health conditions, structural and institutional barriers, and the availability of mitigating treatments or technologies (Krahn et al., 2015). Whereas some PWD have impairments that preclude mainstream workforce participation, other PWD may require only minor accommodations to enable them to participate on full and equal terms with their non-disabled peers (Banks et al., 2012). Likewise, disability readily intersects with other demographic characteristics relevant for perceived deservingness, such as gender, sexuality, migrant status, and membership in ethnic minority groups (Bogart et al., 2017; Nario-Redmond and Oleson, 2016; Schur and Adya, 2013). All of these factors may plausibly shape the extent to which any given individual with a disability is seen as deserving of government assistance, however researchers have yet to test this prediction empirically.

We predict that two common sources of intra-group heterogeneity among PWD - experience of impairment acquisition, and intersecting marginal identities - should shape the perceived deservingness of PWD to government assistance. Specifically, drawing on the literature in welfare attitudes, we argue that the degree of perceived responsibility will vary according to different experiences of impairment acquisition, which will in turn shape their perceived deservingness (Petersen et al., 2012; Jensen and Petersen, 2017). Further, we argue that when PWD are migrants or belong to ethnic minority groups, they are more likely to be perceived as outsiders rather than members of a shared political and cultural community, which will further erode their perceived deservingness relative to white and ethnic majority PWD (Meuleman et al., 2020).

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<sup>5</sup>These criteria are commonly summarized under the acronym CARIN - Care, Attitude, Reciprocity, Identity, and Need (Meuleman et al., 2020; Van Oorschot and Roosma, 2017)



### 3.1 Disability and Responsibility

An extensive literature in welfare attitudes finds that the degree of perceived responsibility a recipient has for their circumstances powerfully shapes deservingness judgments (Aarøe and Petersen, 2014; Alesina et al., 2004; Gilens, 2009; Petersen, 2012; Van Oorschot, 2000). Across diverse cultures and welfare regimes, people oppose benefits for those who appear to be in need through what is perceived to be their own laziness or neglect; but support them for those who are perceived to be in need through no fault of their own (Jensen and Petersen, 2017; Petersen, 2012; Petersen et al., 2012). This finding operates both between and within recipient groups. Stereotypically low-responsibility groups (e.g. the elderly, PWD) are considered more deserving than high-responsibility groups (e.g. the unemployed) (Van Oorschot, 2000, 2006)); but deservingness attitudes also vary substantially within groups in response to cues about the level of responsibility of individual group members (Aarøe and Petersen, 2014; Jensen and Petersen, 2017; Petersen, 2012; Petersen et al., 2012). Several studies find that members of the same recipient group (e.g. the unemployed) receive vastly different deservingness evaluations when framed as, for example, “a cheater” vs. “a reciprocator”, or as “lazy” vs. “motivated” (Petersen, 2012).

Whereas these studies examine responses to relatively explicit, intentional responsibility cues, other studies suggest respondents are also attuned to more implicit responsibility cues, where the attitude or intention of the recipient is unclear. Jensen and Petersen (2017) find that due to a widespread, implicit assumption that illness is randomly distributed, people are inclined to see the sick as more deserving than the unemployed. However, not all sick people are considered equally deserving of assistance. Respondents are less inclined to support benefits for those whose health conditions appear more related to behavior (e.g. obesity) than disease (e.g. cancer). As these findings suggest, cues that signal even the possibility of responsibility for one’s circumstances may substantially diminish perceived deservingness.

We predict that respondents will respond similarly to differences in impairment acquisition among PWD. While some impairments are congenital, most are acquired, and the acquisition of particular impairments is often related to individual behavior and experience. Workplace and stress-related injuries are common (Hampton, 2016; Heffernan, 2020; Turner and Blackie, 2018); as are those acquired through misadventure, risk-taking, disease, or natural processes of ageing and bodily decay (Krahn et al., 2015). In 2005, the most common cause of disability in the United States was arthritis, followed by back and spinal pain, and heart conditions (Stern and Brault, 2005). Whereas some impairments may be more directly linked to individual behavior than others, a relatively small propor-



tion of PWD possess impairments that are likely to be perceived as randomly distributed. Rather, many impairments will be seen as related to the behavior and lived experience of disabled individuals, and will imply varying degrees of personal responsibility. For example, [Weiner et al. \(1988\)](#) finds that whereas most disabling impairments (such as blindness, HIV/AIDS, paralysis) are considered equally permanent and unalterable, respondents are more supportive of job training for individuals with mobility or visual impairments than for those with HIV/AIDS. As the authors argue, HIV/AIDS is more commonly attributed to individual behaviors, and is therefore seen as less deserving of support. We argue that given the immense diversity of circumstances in which a disabling impairment might be acquired, perceived responsibility for impairment is likely to vary substantially between individual disabled claimants. Further, given the strong inverse relationship between perceived responsibility and perceived deservingness, we expect that PWD perceived as more responsible for their impairments will be seen as less deserving of assistance from the government. These expectations inform our first hypothesis<sup>6</sup>:

- **H1:** Evaluations of deservingness will diminish as perceived responsibility for impairment increases.

## 3.2 Disability and Group Proximity

A second factor shaping deservingness attitudes is the perceived proximity of recipients to dominant social majorities ([Gilens, 1996, 2009](#); [Larsen, 2008](#); [Van Oorschot and Roosma, 2017](#)). Disability is a human universal that readily intersects with other social and demographic categories ([Krahn et al., 2015](#); [Nario-Redmond, 2019](#)). In many instances, an individual’s disability will be one of many dimensions of their social identity relevant to their perceived deservingness of welfare. As [Krahn et al. \(2015\)](#) note, there is evidence that the functional limitations and socioeconomic disadvantage experienced by PWD may be intensified by membership in other marginal social groups. For example, in the United States, Black and Hispanic PWD score lower in self-reported health status and are more likely to live in poverty than non-Hispanic white PWD ([for Disease Control et al., 2008](#); [Goodman et al., 2017](#); [Krahn et al., 2015](#)). However, researchers have not yet examined how the interaction of disability and other marginal social identities might shape social perception in general, or attitudes towards welfare deservingness in particular.

As [Fine and Asch \(1988\)](#) argue, disability is often viewed as a “master” status that eclipses other dimensions of an individual’s identity ([Schur et al., 2013](#)). If this is true,

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<sup>6</sup>All hypotheses were pre-registered at [aspredicted.org](http://aspredicted.org)

we may expect attitudes toward PWD to be relatively indifferent to ethnic minority membership, and vary only in response to the perceived responsibility of the claimant for their impairment. On the other hand, a robust finding in the welfare attitudes literature is that people are generally willing to extend assistance to those they consider part of their group or community, but reluctant to offer help to those they consider outsiders (Van Oorschot, 2006; Van Oorschot and Roosma, 2017). These attitudes extend to stigmatized or marginal minority groups within the same political community. Numerous studies find that welfare is racially coded in the public imagination (Gilens, 1996; Goren, 2021); and ethnic minority and migrant recipients are considered less deserving, all else equal, than native-born and ethnic majority recipients (Alesina et al., 2001; Ford, 2016; Gilens, 1996; Kootstra, 2016; Van Oorschot and Roosma, 2017). These attitudes are particularly common in contexts where racial and ethnic minorities are stereotyped as lazy or indigent (Gilens, 1996); or are seen as a competitive threat to the social and material status of dominant majorities (Bobo and Hutchings, 1996). These findings are echoed in stereotype content studies. Migrants and poorer ethnic minorities are typically stereotyped as low in both warmth and competence, which elicits anger, contempt, and a reluctance to provide assistance (Cuddy et al., 2007; Fiske et al., 2002; Petersen et al., 2012). Moreover, there is some evidence that multiple marginal identities have a cumulative impact on deservingness attitudes. For example, Ford (2016) finds that ethnic minority immigrants are considered less deserving on average than white immigrants and ethnic minority citizens.

While existing studies reliably observe an ethnic penalty on perceived deservingness, they tend to examine the effect of ethnic minority membership on attitudes toward stereotypically low-deserving groups, such as the homeless or unemployed, as opposed to stereotypically high-deserving groups such as PWD (Kootstra, 2016). Thus, it is unclear whether the ethnic penalty observed in existing literature will extend to ethnic minority PWD, or how this penalty might vary with other recipient characteristics. By varying both ethnicity and perceived responsibility, our studies allow us to examine whether perceived responsibility for impairment mediates the impact of minority ethnicity on deservingness attitudes toward disabled welfare claimants. Given the persistence of the ethnic and migrant penalties observed elsewhere in the welfare attitudes literature, we expect that migrant and ethnic minority PWD will be seen as less deserving, all else equal, than ethnic majority and native-born PWD. However, we also expect any ethnic differences to be less determinant of deservingness attitudes than perceived responsibility. These expectations inform our second set of hypotheses:

- **H2a:** Deservingness evaluations will be highest for the low responsibility/ethnic in-

group condition.

- **H2b:** Deservingness evaluations will be lowest for the high responsibility/ethnic out-group condition.

## 4 Research Design

We test these hypotheses in two nationally representative pre-registered survey experiments in Wales ( $N = 3,393$ ) and Scotland ( $N = 1,707$ )<sup>7</sup>. The experiments were carried out as part of the Welsh Election Study (WES), and the Scottish Election Study (SES), fielded by YouGov in April-May, 2021. The rarity of disability measures in national election studies means these surveys are a uniquely rich data source for researchers interested in the political behavior of PWD. In both studies, YouGov recruited large samples of Welsh and Scottish voters from their online panel of over 1 million British adults. YouGov uses a sampling frame to approximate the demographic composition of the Welsh and Scottish population, and provides poststratification weights so that model estimates can be interpreted as nationally representative<sup>8</sup>. Deservingness attitudes exhibit substantial cross-national variation depending on the structure of national welfare institutions (Esping-Andersen, 1990; Larsen, 2008) and cultural values toward welfare recipients (Aarøe and Petersen, 2014; Alesina et al., 2001; Van Oorschot, 2006). To maintain the comparability of our samples, we examine two countries with near-identical demographic compositions and welfare regimes<sup>9</sup>.

### 4.1 Experimental Design

The experiments share most major design features. Both experiments use a 3x2 factorial design, in which we randomly assign respondents to narrative vignettes describing a fictitious male subject who is unable to work due to an acquired brain injury. To directly

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<sup>7</sup>Survey experiments have been found to replicate successfully using samples recruited during the COVID-19 pandemic. Peyton et al. (2021) find that replications of studies published pre-pandemic yield substantively similar results, though effects are somewhat smaller in magnitude. Thus, we can be confident in the generalizability of our findings to other times and contexts.

<sup>8</sup>All analyses are weighted. Unweighted analyses yield highly similar and substantively identical results, and are available in the appendices.

<sup>9</sup>While the Scottish Government has some limited Welfare powers, the vast majority of welfare powers remain reserved to the centralised UK Government.

Injury type	Treatment Wording
Birth	<p><i>David</i> is 28 years old and lives in Cardiff. <i>David</i> sustained a brain injury as a baby due to complications during childbirth. As a result, he has a cognitive impairment and is unable to work.</p> <p><i>Khalid</i> is 28 years old and emigrated to Wales from Yemen with his family when he was five. <i>Khalid</i> sustained a brain injury as a baby due to complications during childbirth. As a result, he has a cognitive impairment and is unable to work.</p>
Motorbike	<p><i>David</i> is 28 years old and lives in Cardiff. In 2014, <i>David</i> sustained a brain injury in a high-speed motorcycle accident. As a result, he has a cognitive impairment and is unable to work.</p> <p><i>Khalid</i> is 28 years old and emigrated to Wales from Yemen with his family when he was five. In 2014, <i>Khalid</i> sustained a brain injury in a high-speed motorcycle accident. As a result, he has a cognitive impairment and is unable to work.</p>
Drugs	<p><i>David</i> is 28 years old and lives in Cardiff. In 2014, <i>David</i> sustained a brain injury after using illicit drugs. As a result, he has a cognitive impairment and is unable to work.</p> <p><i>Khalid</i> is 28 years old and emigrated to Wales from Yemen with his family when he was five. In 2014, <i>Khalid</i> sustained a brain injury after using illicit drugs. As a result, he has a cognitive impairment and is unable to work.</p>

Table 1: Experimental manipulation

test our hypotheses, the vignettes vary the group identity of the subject<sup>10</sup>, and the manner in which they acquired their impairment. This allows us to manipulate the perceived social proximity of the subject to the respondent, and the degree of perceived responsibility the subject has for their impairment. The design yields three impairment responsibility conditions, and two group identity conditions. Finally, we hold degree of perceived need for assistance (Delton et al., 2018) constant across conditions by specifying the functional limitation associated with the subject’s impairment (inability to work).

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<sup>10</sup>Study 1 varies both migrant status and ethnicity, whereas Study 2 varies only the latter. We describe this in greater detail in subsequent sections.

## 4.2 Measures

Both studies use identical measures of all variables. We estimate the effect of our treatments on two dependent variables, each measured using a single survey item on a seven-point likert scale. The first asks, “To what extent do you think [name] was responsible for their injury?” (not at all - to a very large extent). This item provides an intuitive test of our manipulation, and allows us to directly observe the correspondence between perceived responsibility and perceived deservingness. The second item directly taps the subject’s perceived deservingness: “To what extent do you think [name] deserves some financial assistance from the government?” (not at all - to a very large extent). We also collected measures of relevant demographics including gender, age, education, income, disability status, and relational proximity to a PWD. To control for ideological heterogeneity, we included two four-item scales of a respondent’s left-right and liberal authoritarian values. Item wording for these scales was taken from the British Election Study (BES) (Fieldhouse et al., 2020). Question wording is available in Appendix E.

## 4.3 Empirical Strategy

Our empirical strategy is identical for both studies. We estimate the main effects of our treatments using ordinary least squares (OLS) regression. We first model the bivariate relationship between each dependent variable and a categorical variable for the treatment:

$$\text{Deserve}_i = \alpha + \beta_1 \text{Treat}_i + \epsilon$$

Following this, we estimate the relationship between perceived responsibility and perceived deservingness within each experimental group by interacting perceived responsibility scores with the treatment:

$$\text{Deserve}_i = \alpha + \beta_1 \text{Treat}_i + \beta_2 \text{Responsibility}_i + \beta_3 (\text{Treat} \times \text{Responsibility})_i + \epsilon$$

# 5 Study 1: Migrant Cue

## 5.1 Study 1: Procedure

Study 1 was carried out as part of the 2021 Welsh Election Study (WES) (N = 3,393), fielded by YouGov from March 19 to April 6, 2021 <sup>11</sup>. Participants were randomly assigned

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<sup>11</sup>Study one was pre-registered at AsPredicted.org: <https://aspredicted.org/blind.php?x=iz9iv8>

to one of six narrative vignettes<sup>12</sup>, the full text of which is available in Table 1. As previously discussed, the vignettes vary the group identity of the subject, and the manner in which they acquired their impairment.

The out-group condition describes a man named Khalid who emigrated from Yemen<sup>13</sup> to Wales with his family when he was five years old. Thus, while Khalid is depicted as foreign-born, he was raised in Wales and was not plausibly responsible for his family’s decision to emigrate. The in-group condition describes a man called David, and makes no mention of birthplace or ethnicity.<sup>14</sup> In each condition, we specify that the subject is 28 years old to avoid differential perceptions of old age, which would likely impact perceived deservingness (Huddy et al., 2001). In the first impairment condition, the subject acquired their injury due to complications during childbirth (no responsibility); in the second impairment condition, the subject acquired their injury in a high-speed motorcycle accident (moderate responsibility); in the third impairment condition, the subject acquired their injury after using illicit drugs (high responsibility).

Finally, we include an open-ended hard manipulation check at the end of the survey asking respondents to recall how [David/Khalid] sustained their injury. The vast majority of respondents were able to accurately recall the relevant information from the vignettes. Respondents who failed the manipulation check were dropped from the analysis, but the results are substantively unchanged when these respondents are included. Complete results from the manipulation check are available in Figure 10 in the appendix.

## 5.2 Study 1: Results

We first examine the effect of our manipulations on perceived responsibility for impairment. As illustrated in Figure 1, our impairment manipulation performed as expected. While the majority of respondents assign no responsibility to the subject in the birth condition, perceived responsibility increases steadily across impairment conditions, and mean differences between impairment groups are both substantively large and statistically significant. Perceived responsibility increases by more than 3 scale points (on a 7-point scale) in the Motorbike condition, and by more than 4 scale points in the Drugs condition, relative

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<sup>12</sup>Random assignment is successfully demonstrated in Table F1 in the supplementary appendix

<sup>13</sup>Wales has one of the largest and oldest Yemeni communities in the UK.

<sup>14</sup>Names were randomly selected from the 10 most common UK and Yemeni names according to [forebears.io](https://forebears.io), a site that geographically maps the distribution of forenames and surnames across the world. In 2019, 94.8% of the Welsh population identified as white, and 1.8% identified as Muslim (see <https://gov.wales/equality-and-diversity-statistics-2017-2019>). In the absence of a clear ethnicity cue, respondents should perceive “David” (a common Welsh name) - as Welsh-born and white.

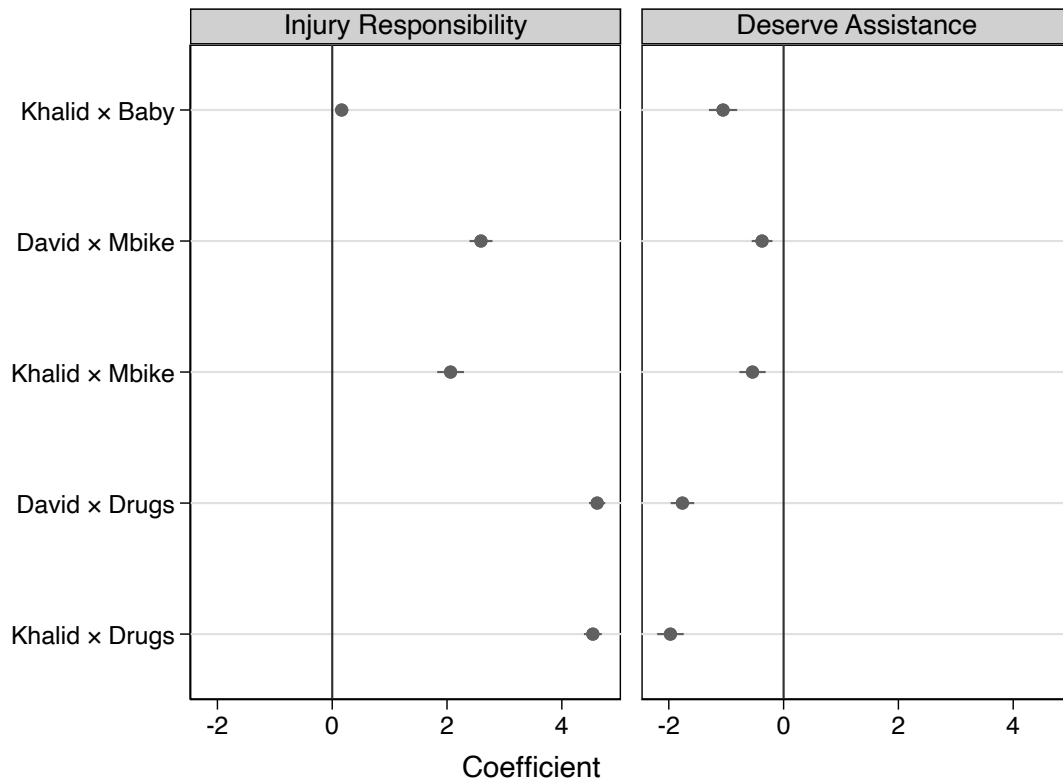


Figure 1: Coefficient plot of Study 1 main effects. Full results provided in Table 6. All estimates are relative to reference category (David x Baby)



to the Birth condition. We also observe some mean differences in perceived responsibility between David and Khalid. As illustrated in Table 6 (Appendix) Khalid is seen as significantly more responsible than David in the birth condition, but slightly less responsible in the motorbike and drugs conditions.

Having established the success of our manipulations, we examine their effect on perceived deservingness. In H1, we predicted that perceived deservingness would diminish as perceived responsibility increased. Results in the in-group condition conform to this prediction. As shown in Figure 1, David’s perceived deservingness decreases steadily across impairment conditions. This was not the case in the out-group condition (Khalid). Contrary to expectations, Khalid (Birth) is seen as significantly less deserving than both David (Birth) and Khalid (Mbike). Further, while we observe a large disparity in perceived deservingness between David and Khalid in the birth condition, we observe no statistically significant differences in perceived deservingness in the motorbike or drugs conditions. Thus, while Khalid is seen as somewhat less responsible for his injury than David in these conditions, he is not seen as any more or less deserving.

To get a clearer estimate of the relationship between responsibility and deservingness, we model the direct effect of responsibility on deservingness within each treatment group. As detailed in Table 2, perceived responsibility has a substantively large negative effect on perceived deservingness within each treatment group. However, only in the Khalid (Birth) condition does the treatment indicator remain negative, suggesting considerations beyond perceived responsibility for impairment may be driving deservingness attitudes in this condition. One possibility is that respondents believe Khalid’s family to be guilty of “benefit tourism” (Verschuere, 2015). If respondents believe that Khalid’s family, after learning of his disability, chose to emigrate to the UK because of greater availability of disability welfare, they may be inclined to see Khalid’s claim to government assistance as opportunistic or exploitative. In this view, the seemingly punitive reaction to Khalid may be understood as a displaced judgment on the actions of his family, rather than a direct evaluation of his deservingness of assistance.

On the other hand, given the punitive response to Khalid in the Birth condition, it is puzzling that we do not observe no migrant penalty in the Motorbike or Drugs conditions. Another possibility is that these results partly reflect the psychological dominance of behavioral cues in deservingness judgments (Petersen et al., 2011; Petersen, 2012; Petersen et al., 2012). The motorbike and drugs conditions differ from the birth condition in that Khalid is depicted as having non-zero agency in the acquisition of his impairment. Given that the out-group penalty observed in the birth condition appears not to extend to these

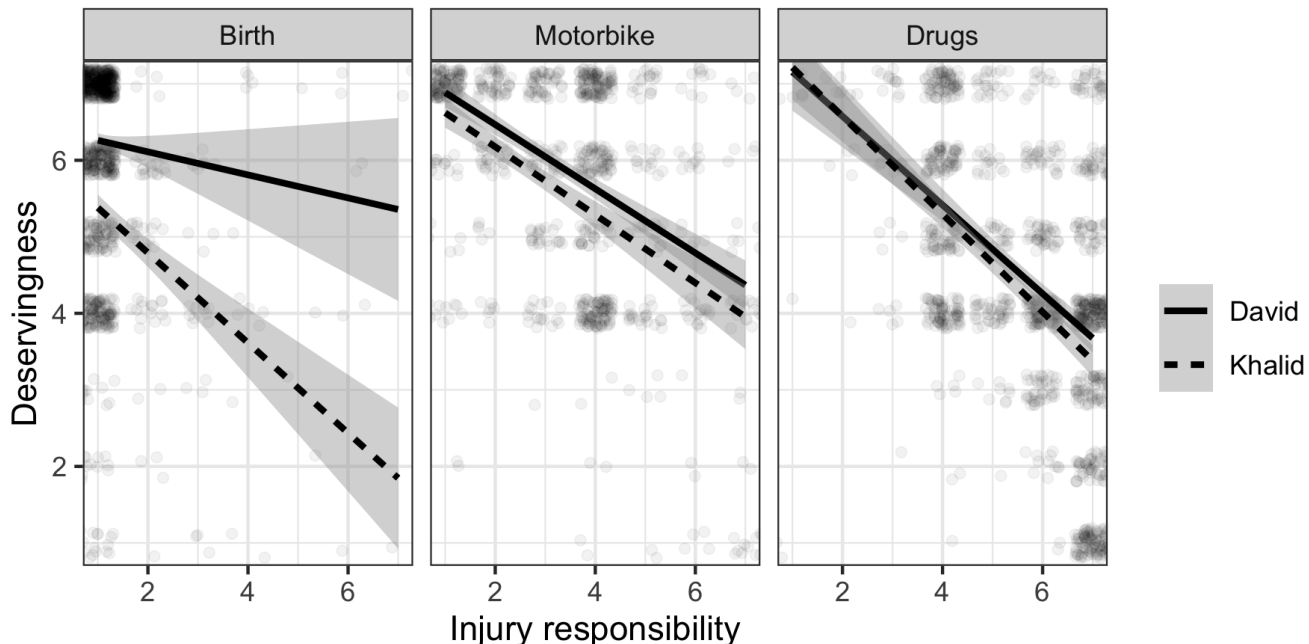


Figure 2: **Study 1:** Within-impairment group effects of perceived responsibility for injury on perceived deservingness of government assistance. Full results provided in Table 2.

conditions, we can assume that respondents are focused on evaluating the relationship between Khalid’s own behavior and his deservingness of assistance. In the absence of a behavioral cue (as in the birth condition), respondents may place more weight on other considerations relevant to deservingness, such as minority group membership (Meuleman et al., 2020). These results point to an important design limitation in Study 1. Given that we vary both ethnicity and migrant status in the out-group condition, we are unable to make clean inferences about the independent causal effect of either. We address these limitations in Study 2.

## 6 Study Two: Name-Only Cue

### 6.1 Study 2: Procedure

Study 2 was carried out as part of the post-election wave of the Scottish Election Study (SES), fielded by YouGov in May 2021. A large, nationally diverse sample of Scottish adults was recruited by YouGov to participate in SES ( $N = 3,442$ ), around half of whom were randomly assigned to our experiment ( $N = 1,707$ ). Random assignment is successfully demonstrated in Table 23 in the supplementary appendix.

	<b>1</b>	<b>2</b>	<b>3</b>
David (Baby)	<i>(Reference)</i>	<i>(Reference)</i>	<i>(Reference)</i>
Khalid (Baby)	-1.05*** (0.13)	-0.94*** (0.13)	-0.46 (0.24)
David (Mbike)	-0.38*** (0.09)	0.93*** (0.13)	0.89*** (0.20)
Khalid (Mbike)	-0.54*** (0.12)	0.51*** (0.13)	0.83** (0.26)
David (Drugs)	-1.76*** (0.10)	0.63*** (0.17)	1.51*** (0.45)
Khalid (Drugs)	-1.97*** (0.12)	0.35* (0.17)	1.75*** (0.35)
Injury responsibility		-0.52*** (0.03)	-0.15 (0.12)
David (Baby) $\times$ Injury responsibility			<i>(Reference)</i>
Khalid (Baby) $\times$ Injury responsibility			-0.40* (0.16)
David (Mbike) $\times$ Injury responsibility			-0.24 (0.13)
Khalid (Mbike) $\times$ Injury responsibility			-0.34* (0.14)
David (Drugs) $\times$ Injury responsibility			-0.45** (0.14)
Khalid (Drugs) $\times$ Injury responsibility			-0.54*** (0.14)
Constant	6.08*** (0.06)	6.70*** (0.07)	6.27*** (0.15)
Observations	3301	2876	2876
R2	0.17	0.33	0.34

Table 2: **Study 1:** Effect of treatment, injury responsibility, and treatment interacted with injury responsibility on perceived deservingness. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

In Study 1, we deployed a two-dimensional out-group cue that elicited very different responses across impairment conditions. Thus, while we were able to observe how deservingness attitudes shifted with changes in perceived responsibility for impairment, we were unable to get a clear read on how the interaction of disability and out-group ethnicity might shape perceived deservingness. To provide a neater test of our hypotheses, we conducted a direct replication of Study 1 with a more precise out-group cue. Specifically, we removed any reference to migrant status and varied only the name of the subject [David/Khalid]<sup>15</sup>. In doing so, we aimed to observe how deservingness attitudes vary at the intersection of disability and ethnicity in particular, and the extent to which these are mediated by perceived responsibility for impairment.<sup>16</sup> All hypotheses and measures in Study 2 are identical to Study 1, and we use the same empirical strategy.

## 6.2 Study 2: Results

Figure 3 illustrates the main effects of our treatments on perceived responsibility and deservingness of government assistance. Again, our responsibility manipulation conformed to expectations. Perceived responsibility increases by roughly 2.5 scale points (on a 7-point scale) on average in the Motorbike condition, and 4.5 scale points in the Drugs condition, relative to the Birth condition. Importantly, we observed no significant differences in perceived responsibility by ethnicity, which suggests the migrant cue was likely the source of the observed differences in perceived responsibility for injury between David and Khalid in Study 1.

Each of the treatments had the hypothesized impact on perceived deservingness. Within both ethnicity conditions, we observe statistically large and significant declines in perceived deservingness as perceived responsibility for impairment increases. This relationship is detailed in Table 3. The negative effects of perceived responsibility on perceived deservingness are strong and significant within each treatment group. Consistent with H1, this relationship is most pronounced in the Drugs condition, where a single scale point increase in perceived responsibility is associated with a decrease in perceived deservingness of between 0.48-0.61 scale points.

Unlike Study 1, the effect of the ethnicity manipulation was relatively uniform across

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<sup>15</sup>Name-only cues are commonplace in exposure studies examining race and ethnicity. For a review, see [Sen and Wasow \(2016\)](#). Aside from the name of the subject, the vignettes for each impairment condition in Study 2 read identically. Complete wording is available in the supplementary appendix.

<sup>16</sup>Research by ([Kootstra, 2016](#)) has shown that Europeans' differentiate between native-born ethnic minorities and those born elsewhere when evaluating deservingness of employment welfare.

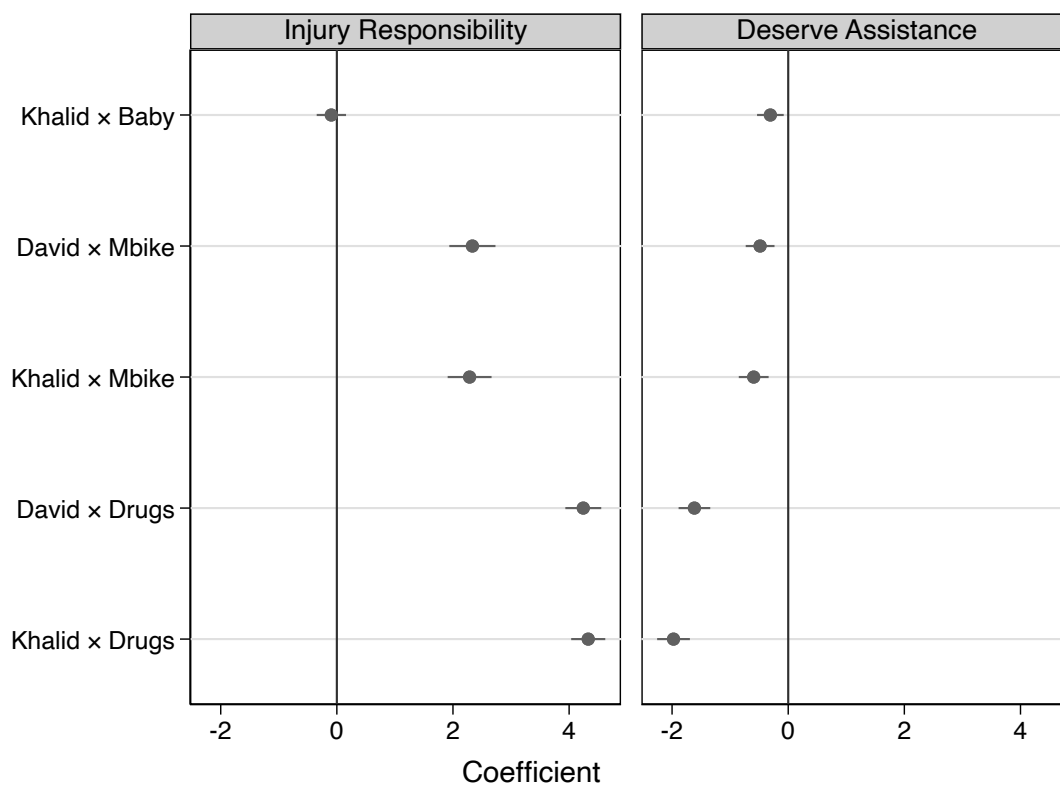


Figure 3: Coefficient plot of Study 2 main effects. Full results provided in Table 9. All estimates are relative to reference category (David birth treatment)

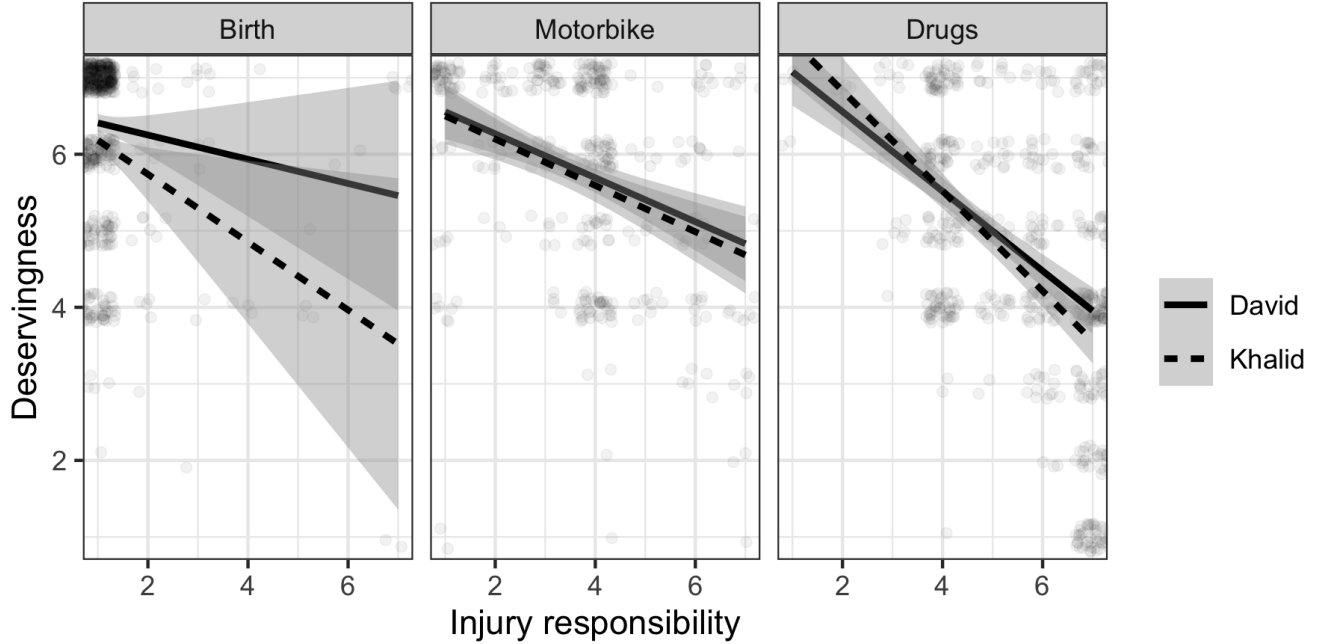


Figure 4: **Study 2:** Within-impairment group effects of perceived responsibility for injury on perceived deservingness of government assistance. Full results provided in Table 3.

conditions. As detailed in Table 11 (appendix), across all impairment conditions Khalid is considered less deserving than David, but these differences are only statistically significant in the birth and drugs conditions. Importantly, as illustrated in Table 10 (appendix) we observe these differences despite Khalid not being seen as any more responsible than David for his impairment, on average, in any of the treatment conditions. This suggests that ethnic minority membership independently exerts, in most cases, a modest but significant negative effect on the perceived deservingness of welfare claimants with disabilities. Further, these results suggest that a substantial ethnic penalty in perceived deservingness may be elicited in response to even a relatively subtle, implicit out-group cue (Sen and Wasow, 2016).

The results from Study 2 allow us to confirm each of our experimental hypotheses. We find strong evidence that claimants with disabilities are seen as less deserving of government assistance when their perceived responsibility for their impairment is greater, and even less deserving when they are depicted as members of ethnic minority groups. Moreover, we observe these penalties despite the claimant's clear and unambiguous need for government assistance.

	<b>1</b>	<b>2</b>	<b>3</b>
David (Baby)	<i>(Reference)</i>	<i>(Reference)</i>	<i>(Reference)</i>
Khalid (Baby)	-0.31** (0.12)	-0.34** (0.13)	0.18 (0.25)
David (Mbike)	-0.48*** (0.13)	0.29 (0.20)	0.38 (0.29)
Khalid (Mbike)	-0.59*** (0.13)	0.18 (0.20)	0.45 (0.26)
David (Drugs)	-1.62*** (0.14)	-0.11 (0.24)	1.16*** (0.32)
Khalid (Drugs)	-1.98*** (0.14)	-0.4 (0.26)	1.60*** (0.44)
Injury responsibility		-0.37*** (0.04)	-0.03 (0.08)
David (Baby) $\times$ Injury responsibility			<i>(Reference)</i>
Khalid (Baby) $\times$ Injury responsibility			-0.40* (0.19)
David (Mbike) $\times$ Injury responsibility			-0.24* (0.11)
Khalid (Mbike) $\times$ Injury responsibility			-0.29** (0.10)
David (Drugs) $\times$ Injury responsibility			-0.48*** (0.10)
Khalid (Drugs) $\times$ Injury responsibility			-0.61*** (0.11)
Constant	6.36*** (0.08)	6.86*** (0.09)	6.41*** (0.12)
Observations	1636	1419	1419
R2	0.20	0.32	0.34

Table 3: **Study 2:** Effect of treatment, injury responsibility, and treatment interacted with injury responsibility on perceived deservingness. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%



## 7 Political Values Mediate Treatment Effects

Thus far we have detailed the main effects of our treatments on David/Khalid’s perceived responsibility for their injury and perceived deservingness of government assistance. Consistent with both our theoretical expectations and prior research in welfare attitudes, we find that perceived responsibility for impairment substantially diminishes claimants’ perceived deservingness of government assistance. Further, we find that both migrant status and out-group ethnicity substantially diminish perceived deservingness, though effects vary substantially across impairment conditions. However, whereas these results demonstrate that deservingness attitudes toward PWD vary with claimant characteristics, welfare attitudes also vary substantially with the political values of respondents (Feldman and Zaller, 1992; Feldman and Steenbergen, 2001; Jensen and Petersen, 2017; Sniderman and Brody, 1977). We examine the extent to which individual-level political orientations mediate the observed treatment effects using two common measures of political values. The first is a five-item measure of left-right political ideology, and the second is a four-item measure of liberal-authoritarian values<sup>17</sup>. Both measures exhibit strong reliability and internal consistency, and have featured prominently in British Election Studies since the 1980s (Evans et al., 1996). Complete question wording for both measures is available in Appendix E.

How might we expect left-right and authoritarian values to shape attributions of responsibility and deservingness toward welfare claimants with disabilities? Firstly, existing studies find that those on the political right tend to have stronger negative emotional responses to welfare claimants framed as responsible for their circumstances, make stronger attributions of personal responsibility, and are more inclined to withhold assistance than liberals (Gilens, 2009; Skitka and Tetlock, 1992, 1993). By contrast, right-wing values appear to have less of an impact on deservingness attitudes when claimants are perceived as lacking responsibility for their circumstances (Jensen and Petersen, 2017). We expect right-wing respondents to attribute higher levels of responsibility to David/Khalid in the Motorbike and Drugs conditions and to view them as less deserving of government assistance, relative to more liberal respondents<sup>18</sup>. However, this relationship should not extend to the birth condition, where David/Khalid is depicted as having no responsibility for their impairment.

Secondly, both political conservatives and those holding to more authoritarian social val-

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<sup>17</sup>The BES measure of political ideology is suitable for the current research in that it focuses largely on attitudes toward socioeconomic hierarchy and preference for redistribution. By contrast, the authoritarian values measure emphasizes rule-following, attitudes toward punishment, and social conformity.

<sup>18</sup>These expectations were not pre-registered.

ues are more inclined than liberals to punish perceived violations of social norms (Adorno, Frenkel-Brunswik, Levinson, and Sanford, Adorno et al.; Skitka and Tetlock, 1993; Stenner, 2005). Thus, we expect both right-wing ideology and authoritarian values to have a particularly deleterious effect on perceived deservingness in the drugs condition, where the subject is depicted as both more responsible, and as having engaged in an ostensibly illegal activity (taking illicit drugs).

## 7.1 Results

We model heterogeneous treatment effects using OLS. For each of our outcome variables - perceived responsibility and perceived deservingness - we estimate the following model within each impairment category:

$$Y_i = \alpha + \beta_1 \text{Ethnicity}_i + \beta_2 \text{PolVal}_i + \beta_3 (\text{Ethnicity} \times \text{PolVal})_i + \epsilon$$

Where  $Y_i$  is perceived responsibility or deservingness, *Ethnicity* denotes whether the subject in respondent  $i$ 's treatment was named David or Khalid (with David the reference category), and *PolVal* is a respondent's left-right ideology or authoritarian values score. We first estimate the interacted effect of our treatments and ideology/authoritarianism on perceived responsibility for impairment, followed by perceived deservingness of government assistance.

### 7.1.1 Left-Right Values

Figure 5 illustrates the relationship between left-right values and perceived responsibility within each treatment group. The impacts of ideology on perceived responsibility varied in magnitude across studies. Consistent with expectations, those higher in right-wing values assigned relatively higher levels of responsibility to the subject in the Motorbike and Drugs conditions in Study 1, whereas conservatism had no impact on perceived deservingness in the Birth condition. In Study 2, right wing values were only associated with higher perceived responsibility in the Drugs condition, however the effect is substantively large and significant. Contrary to expectations, those higher in right wing values did not assign greater responsibility on average to Khalid than David in any impairment condition.

The effect of right wing values on perceived deservingness was more consistent. As depicted in Figure 6, in both studies, respondents higher in right wing values were significantly less likely than left-wing respondents to view the subject as deserving of government assistance. Contrary to expectation, in all impairment conditions effects are substantively large

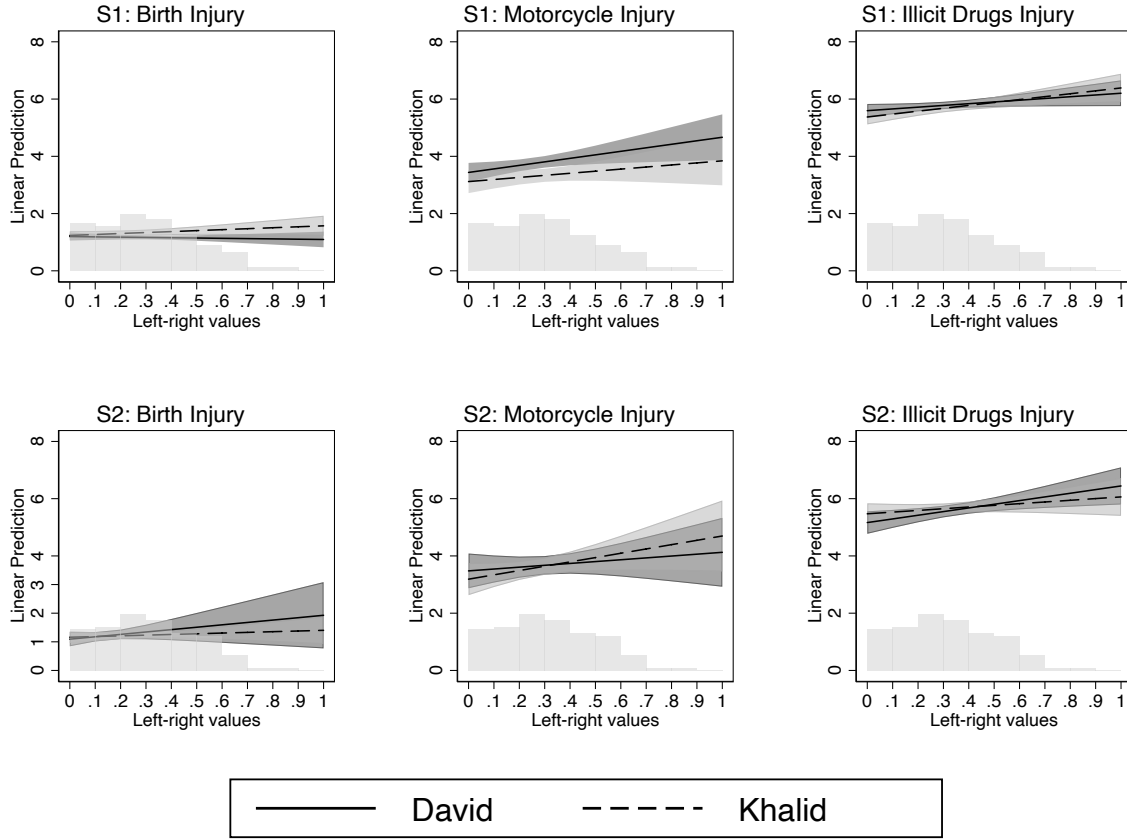


Figure 5: Marginal effect of treatment assignment interacted with left-right values score on perceived responsibility for injury with 95% CIs. Histogram plots density of respondents along left-right scale. All bars plotted with width of 0.1. Note on interpretation: A **positive coefficient** means that those with more right-wing values see subject as **more** responsible for their injury.

and statistically significant, even when the subject is framed as having no responsibility for their impairment and a clear need for assistance.

### 7.1.2 Authoritarian Values

Figure 7 illustrates how perceived responsibility varies with authoritarian values across treatment groups. Contrary to expectations, respondents in Study 1 assigned greater responsibility to the subject across all impairment conditions, not only the conditions in which the subject was framed as having some responsibility for their injury<sup>19</sup>. However, these results did not extend to Study 2, where authoritarianism was associated with a significant increase in perceived responsibility in the Drugs condition alone.

<sup>19</sup>See Table 16 (appendix)

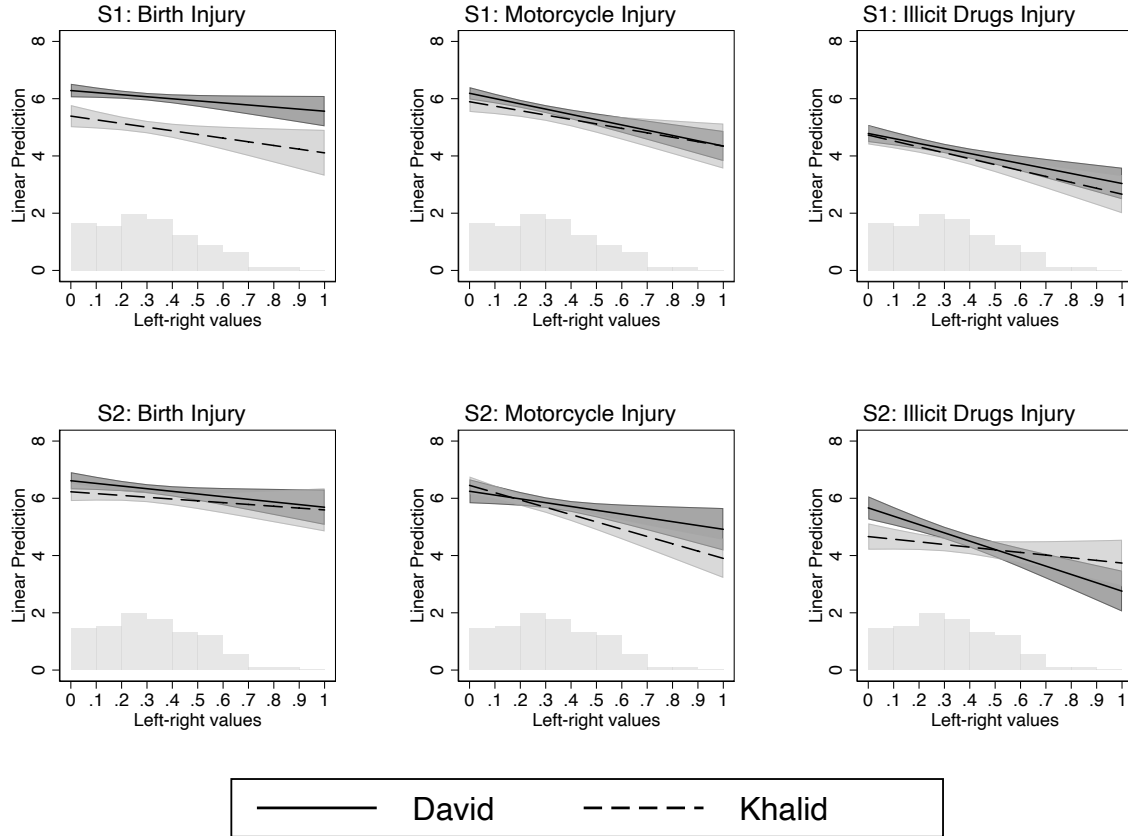


Figure 6: Marginal effect of treatment assignment interacted with left-right values score on perceived deservingness of financial assistance from the government with 95% CIs. Histogram plots density of respondents along left-right scale. All bars plotted with width of 0.1. Note on interpretation: A **negative coefficient** means subject is seen as **less deserving** among those with more right-wing values.

Figure 8 illustrates the relationship between authoritarianism and deservingness across treatment groups. Again, authoritarian values are associated with significantly diminished deservingness across all impairment conditions in both studies. Respondents higher in authoritarian values are relatively less likely to consider the subject deserving of assistance, even when they are framed as having no discernible responsibility for their impairments. As predicted, the negative effect of authoritarianism on perceived deservingness increased substantially across impairment conditions. Effects were most pronounced in the drugs condition, where movement from the bottom to the top of the Authoritarian values scale was associated with a 3.5-4 scale point drop in perceived deservingness (on a seven-point scale).

Authoritarian values also mediated the effect of the ethnicity manipulation, albeit inconsistently. As illustrated in Figure 8<sup>20</sup>, those higher in authoritarian values see Khalid as significantly more responsible for his injury in the motorbike condition, and significantly less deserving than David of government assistance in both the birth and the motorbike conditions in Study 1. However, this effect does not extend to the drugs condition in Study 1, or to any of the conditions in Study 2. Interestingly, despite the sizable differences in perceived deservingness between David and Khalid in the Birth condition in S1, authoritarians do not assign greater responsibility to Khalid than David. Further, we observe no migrant penalty in the Drugs condition in Study 1. Speculatively, the combination of a strong responsibility cue and the preference of authoritarians for rule-following may override the effect of the migrant cue in the Drugs condition.

### 7.1.3 Implications

Two aspects of these results are particularly noteworthy. First, contrary to prior deservingness work, we find that right-wing and authoritarian political values exert a substantial deleterious effect on perceived deservingness, even when the claimant is framed as having no responsibility for their impairments. In other words, while political values are highly responsive to variation in the responsibility of claimants, we also find authoritarian and left-right values continue to shape deservingness attitudes when claimants are not plausibly to blame for their circumstances. This finding is underscored by the fact that those higher in right wing and authoritarian values were not consistently more likely to assign higher levels of responsibility to the subject for their circumstances. Importantly, these results complicate existing accounts of political values as shaping deservingness attitudes only when claimants are plausibly responsible for their circumstances. For example, [Jensen](#)

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<sup>20</sup>See Table 16 and Table 17 in the appendix

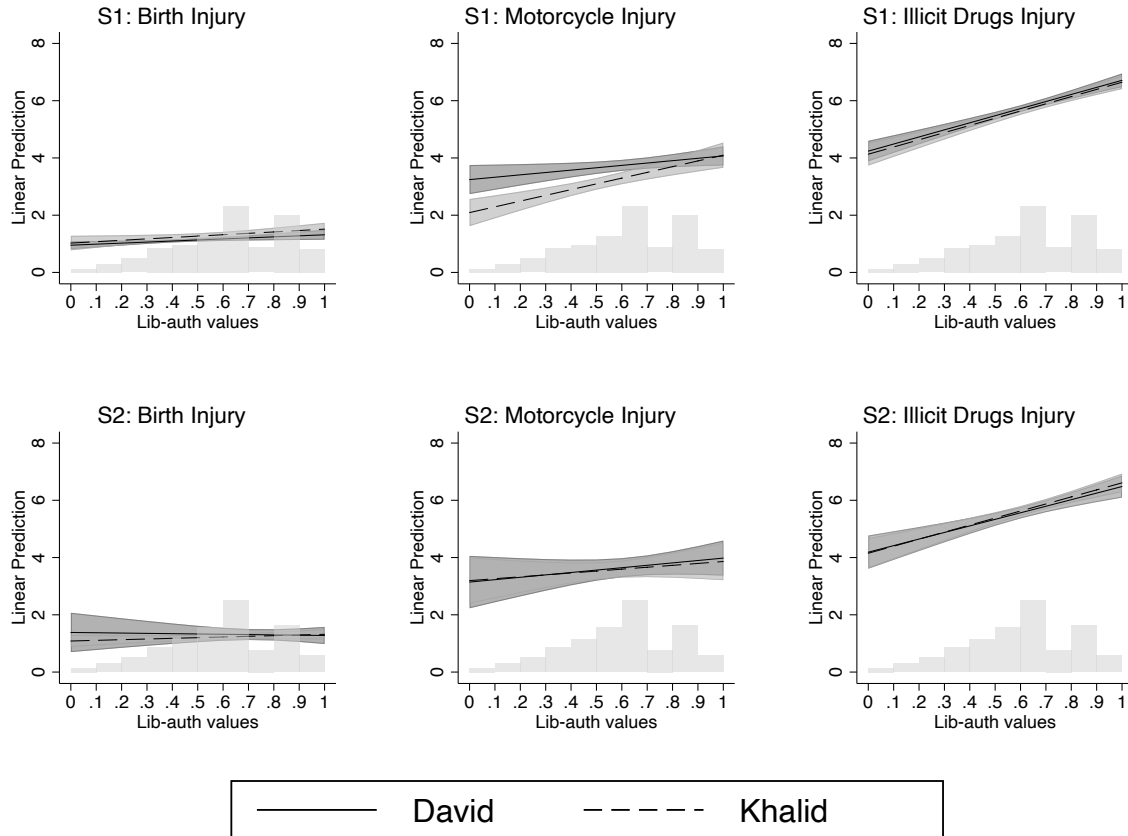


Figure 7: Marginal effect of treatment assignment interacted with liberal-authoritarian values score on perceived responsibility for injury with 95% CIs. Histogram plots density of respondents along liberal-authoritarian scale. All bars plotted with width of 0.1. Note on interpretation: A **positive coefficient** means that those with more authoritarian values see subject as **more** responsible for their injury.

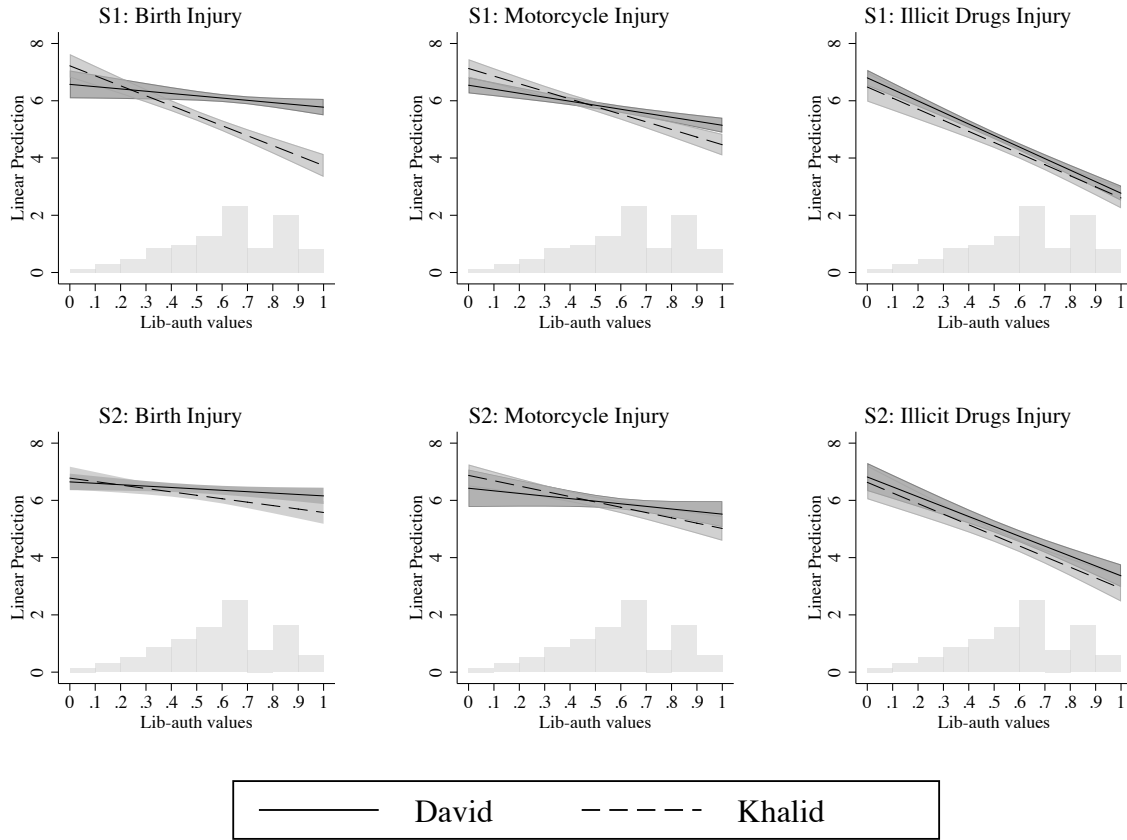


Figure 8: Marginal effect of treatment assignment interacted with liberal-authoritarian values score on perceived deservingness of financial assistance from the government with 95% CIs. Histogram plots density of respondents along liberal-authoritarian scale. All bars plotted with width of 0.1. Note on interpretation: A **negative coefficient** means subject is seen as **less deserving** among those with more authoritarian values.



and Petersen (2017) find that ideology has no impact on the perceived deservingness of the sick, who are implicitly cognitively tagged as victims of random misfortune, and thus not responsible for their circumstances. By contrast, we find that political values continue to shape deservingness attitudes toward disabled welfare claimants, even when they are explicitly framed as lacking responsibility for their circumstances.

On the other hand, the interaction between right-wing and authoritarian values and out-group cues yields far less consistent results. Right wingers and authoritarians tend not to assign higher levels of responsibility to Khalid than David, and are not consistently more punitive toward Khalid than David in their deservingness evaluations. There are some important exceptions. For example, authoritarians are far more punitive toward than Khalid than David in both the Birth and Motorbike conditions in Study 1. However, we observe no significant effects of this kind in Study 2. Thus, while right-wing and authoritarian values exert a consistently negative effect on deservingness evaluations across all treatment conditions, such values are not consistently associated with elevated out-group antipathy.

## 8 Discussion and Conclusion

When do people support social welfare for people with disabilities? While PWD are frequently stereotyped as the "deserving poor" (Van Oorschot, 2000), little is known about how the perceived deservingness of PWD to government assistance might vary in response to the characteristics of individual disabled claimants. This paper has detailed two studies examining the effects of perceived responsibility for impairment, and minority group membership, on the perceived deservingness of disabled welfare claimants in Great Britain. Our results suggest that stereotypical perceptions of PWD as the deserving poor mask a far more conditional, punitive posture toward many disabled welfare claimants. We find that disabled claimants perceived as even somewhat responsible for their impairments are considered significantly less deserving of financial assistance from the government than a claimant who acquired their impairment from birth. Even when the claimant's actual degree of responsibility is ambiguous, perceived responsibility increases and perceived deservingness diminishes substantially relative to when the claimant is depicted as having no responsibility for their impairment. Further, our findings suggest that perceived responsibility for impairment still has a deleterious impact on perceived deservingness, even when the claimant has a relatively clear and unambiguous need for assistance (inability to work).

We also find that respondents adjust their deservingness attitudes when claimants are

depicted as belonging to minority groups. In Study 1, respondents were reluctant to re-distribute to an ethnic minority migrant with a disability, but only when the claimant was not depicted as responsible for their impairment. In conditions where responsibility cues were provided (Motorbike, Drugs), the claimant’s status as an ethnic minority migrant had no effect on their perceived deservingness. On the other hand, we observed a relatively consistent ethnic penalty in response to a name-only ethnicity cue in Study 2, obtaining statistical significance in both high and low responsibility conditions. Thus, our results provide substantial evidence that ethnic minority PWD are in many instances considered less deserving of assistance than ethnic majority PWD, and may therefore be relatively more vulnerable to exclusion from support.

Finally, results exhibited substantial heterogeneity among respondents with different political values. In particular, those higher in right wing and authoritarian values were more punitive than their more liberal peers in their deservingness evaluations, even when the subject lacked responsibility for their circumstances. These findings have significant implications for our understanding of how political values shape deservingness judgments in different social contexts. Our findings suggest that while political values are sensitive to variation in both demographics and perceived responsibility, they also exert substantial effects on deservingness judgments that appear relatively indifferent to the characteristics of individual claimants.

These findings hint at several avenues for future research. Firstly, whereas disabling impairments vary immensely both within and between impairment categories, our design only examines responses to individuals with intellectual disabilities. Prior work finds that social attitudes toward PWD vary somewhat with impairment type (Nario-Redmond, 2010, 2020; Fiske et al., 2002, 2007), and that deservingness attitudes vary with the perceived neediness of the recipient (Delton et al., 2018). Impairments that are more visible or stereotypical are often interpreted as more authentic or legitimate than less obvious impairments (Dorfman, 2019; Nario-Redmond, 2019), and thus may elicit stronger deservingness attitudes. On the other hand, existing research finds that people apply the same basic stereotype profile to a diverse range of impairment categories (physical, intellectual, and sensory) (Fiske et al., 2002, 2007); and such stereotypes tend to elicit a similar willingness to extend assistance (Cuddy et al., 2009). Thus, we expect that while the results presented here may vary in magnitude, they are likely to generalize substantively to other impairment groups.

Secondly, our design examines responses to disabled claimants who are unable to work and therefore have a relatively clear justification for seeking government assistance. More work is needed to determine how deservingness attitudes might shift when the work capacity

of disabled claimants is ambiguous. Similarly, whereas we examine responses to individual claimants, social policy is often framed in terms of target groups (Schneider and Ingram, 1993). Our findings suggest attitudes toward individuals with disabilities are susceptible to framing effects, but further research is needed to determine whether attitudes toward PWD as a group are similarly malleable, or whether attitudes toward disabled individuals might also shape perceptions of the group.

Understanding the political implications of disability is an increasingly urgent task for researchers and policymakers. Whereas improvements in population health have prolonged human life, people are spending a greater proportion of their lives with disability and ill health (Carpenter, 2012). These demographic shifts impact both individual quality of life and the share of government spending dedicated to social insurance and welfare for the sick and PWD. The fiscal implications of these trends are likely to be exacerbated by the COVID-19 pandemic. Physicians estimate 1 in 5 patients hospitalized with COVID-19 is discharged with a new disabling health condition or impairment, and numerous countries have moved to formally classify “long COVID” as a disability (Briggs and Vassall, 2021). With a growing share of the population set to acquire a personal stake in redistributive policies for PWD, disability welfare programs are likely to remain an important locus of political conflict in coming years.

## References

- Aarøe, L. and M. B. Petersen (2014). Crowding out culture: Scandinavians and americans agree on social welfare in the face of deservingness cues. *The Journal of Politics* 76(3), 684–697.
- Adorno, T. W., E. Frenkel-Brunswik, D. J. Levinson, and R. N. Sanford. *The Authoritarian Personality*. Harper and Row.
- Alesina, A., E. Glaeser, and E. L. Glaeser (2004). *Fighting poverty in the US and Europe: A world of difference*. Oxford University Press.
- Alesina, A., E. Glaeser, and B. Sacerdote (2001). Why doesn’t the us have a european-style welfare system? Technical report, National bureau of economic research.
- Ameri, M., L. Schur, M. Adya, F. S. Bentley, P. McKay, and D. Kruse (2018). The disability employment puzzle: A field experiment on employer hiring behavior. *ILR Review* 71(2), 329–364.

- Banks, J., R. Blundell, A. Bozio, C. Emmerson, et al. (2012). Disability, health and retirement in the united kingdom. *Social Security Programs and Retirement around the World: Historical Trends in Mortality and Health, Employment, and Disability Insurance Participation and Reforms*, 41–77.
- Baumberg Geiger, B. (2017). Benefits conditionality for disabled people: Stylized facts from a review of international evidence and practice. *Journal of Poverty and Social Justice* 25(2), 107–128.
- Bobo, L. and V. L. Hutchings (1996). Perceptions of racial group competition: Extending blumer’s theory of group position to a multiracial social context. *American sociological review*, 951–972.
- Bogart, K. R., A. Rottenstein, E. M. Lund, and L. Bouchard (2017). Who self-identifies as disabled? an examination of impairment and contextual predictors. *Rehabilitation Psychology* 62(4), 553.
- Briggs, A. and A. Vassall (2021). Count the cost of disability caused by covid-19.
- Brucker, D. L. (2016). Food security among young adults with disabilities in the united states: Findings from the national health interview survey. *Disability and Health Journal* 9(2), 298–305.
- Carpenter, D. (2012). Is health politics different? *Annual Review of Political Science* 15, 287–311.
- Coleman-Jensen, A. and M. Nord (2013). Food insecurity among households with working-age adults with disabilities. *USDA-ERS Economic Research Report* (144).
- Cook, F. L. (1979). Who should be helped?: Public support for social services.
- Cuddy, A. J., S. T. Fiske, and P. Glick (2007). The bias map: behaviors from intergroup affect and stereotypes. *Journal of personality and social psychology* 92(4), 631.
- Cuddy, A. J., S. T. Fiske, V. S. Kwan, P. Glick, S. Demoulin, J.-P. Leyens, M. H. Bond, J.-C. Croizet, N. Ellemers, E. Sleebos, et al. (2009). Stereotype content model across cultures: Towards universal similarities and some differences. *British Journal of Social Psychology* 48(1), 1–33.
- David, H. and M. G. Duggan (2006). The growth in the social security disability rolls: a fiscal crisis unfolding. *Journal of Economic perspectives* 20(3), 71–96.

- Delton, A. W., M. B. Petersen, P. DeScioli, and T. E. Robertson (2018). Need, compassion, and support for social welfare. *Political Psychology* 39(4), 907–924.
- Dirth, T. P. and N. R. Branscombe (2019). Recognizing ableism: A social identity analysis of disabled people perceiving discrimination as illegitimate. *Journal of Social Issues* 75(3), 786–813.
- Dorfman, D. (2019). Fear of the disability con: perceptions of fraud and special rights discourse. *Law & Society Review* 53(4), 1051–1091.
- Dwyer, P. (2019). *Dealing with welfare conditionality: Implementation and effects*. Policy Press.
- Dwyer, P., L. Scullion, K. Jones, J. McNeill, and A. B. Stewart (2020). Work, welfare, and wellbeing: The impacts of welfare conditionality on people with mental health impairments in the uk. *Social Policy & Administration* 54(2), 311–326.
- Emerson, E., N. Fortune, G. Llewellyn, and R. Stancliffe (2021). Loneliness, social support, social isolation and wellbeing among working age adults with and without disability: Cross-sectional study. *Disability and health journal* 14(1), 100965.
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Princeton University Press.
- Evans, G., A. Heath, and M. Lalljee (1996). Measuring left-right and libertarian-authoritarian values in the british electorate. *British Journal of Sociology*, 93–112.
- Feldman, S. and M. R. Steenbergen (2001). The humanitarian foundation of public support for social welfare. *American Journal of Political Science*, 658–677.
- Feldman, S. and J. Zaller (1992). The political culture of ambivalence: Ideological responses to the welfare state. *American Journal of Political Science*, 268–307.
- Fieldhouse, E., J. Green, G. Evans, H. Schmitt, C. van der Eijk, J. Mellon, and C. Prosser (2020). British Election Study Internet Panel.
- Fine, M. and A. Asch (1988). Disability beyond stigma: Social interaction, discrimination, and activism. *Journal of social issues* 44(1), 3–21.
- Fiske, S. T. (2015). Intergroup biases: A focus on stereotype content. *Current opinion in behavioral sciences* 3, 45–50.

- Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current directions in psychological science* 27(2), 67–73.
- Fiske, S. T., A. J. Cuddy, and P. Glick (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in cognitive sciences* 11(2), 77–83.
- Fiske, S. T., A. J. Cuddy, P. Glick, and J. Xu (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of personality and social psychology* 82(6), 878.
- for Disease Control, C., P. (CDC, et al. (2008). Racial/ethnic disparities in self-rated health status among adults with and without disabilities—united states, 2004–2006. *MMWR. Morbidity and mortality weekly report* 57(39), 1069–1073.
- Ford, R. (2016). Who should we help? an experimental test of discrimination in the british welfare state. *Political Studies* 64(3), 630–650.
- Gilens, M. (1996). ” race coding” and white opposition to welfare. *American Political Science Review*, 593–604.
- Gilens, M. (2009). *Why Americans hate welfare: Race, media, and the politics of antipoverty policy*. University of Chicago Press.
- Goetz, J. L., D. Keltner, and E. Simon-Thomas (2010). Compassion: an evolutionary analysis and empirical review. *Psychological bulletin* 136(3), 351.
- Goodman, N., M. Morris, and K. Boston (2017). Financial inequality: disability, race and poverty in america. *National Disability Institute*.
- Goren, P. (2021). Pliable prejudice: The case of welfare. *American Journal of Political Science*.
- Hampton, J. (2016). *Disability and the welfare state in Britain: Changes in perception and policy 1948–79*. Policy Press.
- Heffernan, A. K. (2020). *Disability: A Democratic Dilemma*. Ph. D. thesis, The University of Chicago.
- Heslop, P. and D. Gordon (2014). Trends in poverty and disadvantage among households with disabled people from 1999–2012: from exclusion to inclusion? *Journal of Poverty and Social Justice* 22(3), 209–226.

- Huddy, L., J. M. Jones, and R. E. Chard (2001). Compassionate politics: Support for old-age programs among the non elderly. *Political Psychology* 22(3), 443–471.
- Jensen, C. and M. B. Petersen (2017). The deservingness heuristic and the politics of health care. *American Journal of Political Science* 61(1), 68–83.
- Kootstra, A. (2016). Deserving and undeserving welfare claimants in britain and the netherlands: Examining the role of ethnicity and migration status using a vignette experiment. *European Sociological Review* 32(3), 325–338.
- Krahn, G. L., D. K. Walker, and R. Correa-De-Araujo (2015). Persons with disabilities as an unrecognized health disparity population. *American journal of public health* 105(S2), S198–S206.
- Kruse, D. and L. Schur (2003). Employment of people with disabilities following the ada. *Industrial Relations: A Journal of Economy and Society* 42(1), 31–66.
- Kruse, D., L. Schur, S. Rogers, and M. Ameri (2018). Why do workers with disabilities earn less? occupational job requirements and disability discrimination. *British Journal of Industrial Relations* 56(4), 798–834.
- Larsen, C. A. (2008). The institutional logic of welfare attitudes: How welfare regimes influence public support. *Comparative political studies* 41(2), 145–168.
- Mattila, M. and A. Papageorgiou (2017). Disability, perceived discrimination and political participation. *International Political Science Review* 38(5), 505–519.
- Meuleman, B., F. Roosma, and K. Abts (2020). Welfare deservingness opinions from heuristic to measurable concept: The carin deservingness principles scale. *Social Science Research* 85, 102352.
- Nario-Redmond, M. (2020). Beyond contact: Promoting social change and disability justice. *Ableism: The Causes and Consequence of Disability Prejudice*, 314–368.
- Nario-Redmond, M. R. (2010). Cultural stereotypes of disabled and non-disabled men and women: Consensus for global category representations and diagnostic domains. *British journal of social psychology* 49(3), 471–488.
- Nario-Redmond, M. R. (2019). *Ableism: The causes and consequences of disability prejudice*. John Wiley & Sons.



- Nario-Redmond, M. R. and K. C. Oleson (2016). Disability group identification and disability-rights advocacy: Contingencies among emerging and other adults. *Emerging Adulthood* 4(3), 207–218.
- Oliver, M. (1996). The social model in context. In *Understanding disability*, pp. 30–42. Springer.
- Petersen, M. B. (2012). Social welfare as small-scale help: evolutionary psychology and the deservingness heuristic. *American Journal of Political Science* 56(1), 1–16.
- Petersen, M. B., R. Slothuus, R. Stubager, and L. Togeby (2011). Deservingness versus values in public opinion on welfare: The automaticity of the deservingness heuristic. *European Journal of Political Research* 50(1), 24–52.
- Petersen, M. B., D. Sznycer, L. Cosmides, and J. Tooby (2012). Who deserves help? evolutionary psychology, social emotions, and public opinion about welfare. *Political psychology* 33(3), 395–418.
- Peyton, K., G. A. Huber, and A. Coppock (2021). The generalizability of online experiments conducted during the covid-19 pandemic. *Journal of Experimental Political Science*, 1–16.
- Powell, A. (2021). Disabled people in employment. Technical report, House of Commons Library.
- Reher, S. (2018). Mind this gap, too: political orientations of people with disabilities in europe. *Political Behavior*, 1–28.
- Reher, S. (2021a). Do disabled candidates represent disabled citizens? *British Journal of Political Science*, 1–15.
- Reher, S. (2021b). How do voters perceive disabled candidates? *Frontiers in Political Science* 2, 23.
- Rohmer, O. and E. Louvet (2011). Stereotype content of disability subgroups-testing predictions of the fundamental dimensions of social judgment. *ANNEE PSYCHOLOGIQUE* 111(1), 69–85.
- Schneider, A. and H. Ingram (1993). Social construction of target populations: Implications for politics and policy. *American political science review* 87(2), 334–347.

- Schur, L. and M. Adya (2013). Sidelined or mainstreamed? political participation and attitudes of people with disabilities in the u nited s tates. *Social Science Quarterly* 94(3), 811–839.
- Schur, L., D. Kruse, and P. Blanck (2013). *People with disabilities: Sidelined or mainstreamed?* Cambridge University Press.
- Sen, M. and O. Wasow (2016). Race as a bundle of sticks: Designs that estimate effects of seemingly immutable characteristics. *Annual Review of Political Science* 19, 499–522.
- Shakespeare, T. et al. (2006). The social model of disability. *The disability studies reader* 2, 197–204.
- Skitka, L. J. and P. E. Tetlock (1992). Allocating scarce resources: A contingency model of distributive justice. *Journal of experimental social psychology* 28(6), 491–522.
- Skitka, L. J. and P. E. Tetlock (1993). Providing public assistance: Cognitive and motivational processes underlying liberal and conservative policy preferences. *Journal of Personality and Social Psychology* 65(6), 1205.
- Sniderman, P. M. and R. A. Brody (1977). Coping: The ethic of self-reliance. *American Journal of Political Science*, 501–521.
- Stenner, K. (2005). *The Authoritarian Dynamic*. Cambridge Studies in Public Opinion and Political Psychology. Cambridge University Press.
- Stern, S. and M. Brault (2005). Disability data from the american community survey: A brief examination of the effects of a question redesign in 2003. *US Census Bureau, Housing and Household Economic Statistics Division Working Paper*.
- Swaan, A. d. (1988). In care of the state: health care, education and welfare in europe and the usa in the modern era.
- Turner, D. M. and D. Blackie (2018). *Disability in the Industrial Revolution: Physical impairment in British coalmining, 1780–1880*. Manchester University Press.
- Van Der Waal, J., W. De Koster, and W. Van Oorschot (2013). Three worlds of welfare chauvinism? how welfare regimes affect support for distributing welfare to immigrants in europe. *Journal of Comparative Policy Analysis: Research and Practice* 15(2), 164–181.

- Van Oorschot, W. (2000). Who should get what, and why? on deservingness criteria and the conditionality of solidarity among the public. *Policy & Politics* 28(1), 33–48.
- Van Oorschot, W. (2006). Making the difference in social europe: deservingness perceptions among citizens of european welfare states. *Journal of European social policy* 16(1), 23–42.
- Van Oorschot, W. (2008). Solidarity towards immigrants in european welfare states. *International Journal of Social Welfare* 17(1), 3–14.
- Van Oorschot, W. and F. Roosma (2017). The social legitimacy of targeted welfare and welfare deservingness. In *The Social Legitimacy of Targeted Welfare*. Edward Elgar Publishing.
- Van Oorschot, W. and W. Uunk (2007). Welfare spending and the public’s concern for immigrants: multilevel evidence for eighteen european countries. *Comparative Politics* 40(1), 63–82.
- Verschueren, H. (2015). Preventing “benefit tourism” in the eu: A narrow or broad interpretation of the possibilities offered by the ecj in dano? *Common Market Law Review* 52(2).
- Weiner, B., R. P. Perry, and J. Magnusson (1988). An attributional analysis of reactions to stigmas. *Journal of personality and social psychology* 55(5), 738.
- Weston, K. (2012). Debating conditionality for disability benefits recipients and welfare reform: Research evidence from pathways to work. *Local economy* 27(5-6), 514–528.

# Appendices

## A Summary statistics

### A.1 Study 1: Summary Statistics

	Min	Mean	SD	Max	Count
Age	18	54.055	16.1	91	2220
Female	0	0.48	0.5	1	2220
Graduate	0	0.323	0.468	1	2220
Household income	0	1.491	1.047	4	2220
Lib-Auth	0	0.613	0.233	1	2220
Left-right	0	0.287	0.202	0.95	2220
Disabled ID	0	0.29	0.454	1	2220
Proximity	0	0.182	0.386	1	2220
Observations	2220				

Table 4: Summary statistics for Study 1

### A.2 Study 2: Summary Statistics

	Min	Mean	SD	Max	Count
Age	16	52.262	16.557	88	1204
Female	0	0.464	0.499	1	1204
Graduate	0	0.316	0.465	1	1204
Household income	0	1.551	1.08	4	1204
Lib-Auth	0	0.591	0.224	1	1204
Left-Right	0	0.288	0.19	1	1204
Disabled ID	0	0.272	0.445	1	1204
Proximity	0	0.139	0.346	1	1204
Observations	1204				

Table 5: Summary statistics for Study 2

## B Model Tables

### B.1 Study 1: Main Effects Tables

	Injury Responsibility	Deservingness
David $\times$ Baby	<i>RC</i>	<i>RC</i>
Khalid $\times$ Baby	0.269** (0.13)	-1.055*** (0.13)
David $\times$ Mbike	3.669*** (0.15)	-0.375*** (0.09)
Khalid $\times$ Mbike	3.131*** (0.16)	-0.542*** (0.12)
David $\times$ Drugs	4.335*** (0.11)	-1.762*** (0.10)
Khalid $\times$ Drugs	4.297*** (0.11)	-1.971*** (0.12)
Constant	1.467*** (0.09)	6.077*** (0.06)
Observations	3393	3301
R-squared	0.454	0.171

Table 6: **Study 1:** Effect of treatment assignment on perceived injury responsibility and deservingness of assistance. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

Note on interpretation: A **positive coefficient** in injury responsibility means that subject is seen as **more** responsible than reference category. A **negative coefficient** for deservingness means subject is seen as **less deserving** than reference category.

	Birth Injury	Motorcycle Injury	Drugs Injury
Name (ref=David)	0.191** (0.08)	-0.276 (0.18)	-0.084 (0.10)
Age	0.004* (0.00)	0.001 (0.01)	0.004 (0.00)
Gender (ref=male)	0.11 (0.08)	0.659*** (0.18)	0.414*** (0.10)
Graduate (ref=no)	-0.144** (0.06)	-0.137 (0.19)	0.014 (0.11)
Income	-0.034 (0.04)	-0.001 (0.09)	0.001 (0.05)
Lib-Auth	0.259 (0.19)	0.879** (0.39)	2.699*** (0.24)
Left-Right	-0.016 (0.21)	0.663 (0.50)	0.263 (0.23)
Disabled ID (ref=no)	0.017 (0.10)	-0.13 (0.18)	-0.036 (0.12)
Proximity (ref=no)	0.146 (0.12)	0.068 (0.21)	0.032 (0.12)
Constant	0.809*** (0.17)	2.706*** (0.43)	3.641*** (0.25)
Observations	660	545	767
R-squared	0.059	0.072	0.253

Table 7: **Study 1:** Effect of David/Khalid name assignment within each injury treatment on perceptions of injury responsibility, with controls. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth Injury	Motorcycle Injury	Drugs Injury
Name (ref=David)	-1.069*** (0.14)	-0.333** (0.14)	-0.217 (0.13)
Age	-0.001 (0.01)	0.006 (0.00)	0.009** (0.00)
Gender (ref=male)	-0.316** (0.14)	-0.491*** (0.15)	-0.492*** (0.13)
Graduate (ref=no)	0.259 (0.17)	0.005 (0.16)	0.011 (0.15)
Income	-0.084 (0.07)	0.045 (0.06)	-0.049 (0.06)
Lib-Auth	-2.037*** (0.35)	-1.855*** (0.29)	-4.242*** (0.31)
Left-Right	-0.912** (0.37)	-1.221*** (0.41)	-1.043*** (0.32)
Disabled ID (ref=no)	0.02 (0.15)	0.172 (0.15)	0.094 (0.15)
Proximity (ref=no)	-0.033 (0.20)	0.111 (0.17)	-0.061 (0.17)
Constant	7.863*** (0.37)	7.024*** (0.31)	7.083*** (0.28)
Observations	681	774	765
R-squared	0.252	0.134	0.328

Table 8: **Study 1:** Effect of David/Khalid name assignment within each injury treatment on perceptions of deservingness, with controls. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

## B.2 Study 2: Main Effects Tables

	Injury Responsibility	Deservingness
	<i>RC</i>	<i>RC</i>
David × Baby		
Khalid × Baby	-0.094 (0.13)	-0.307*** (0.12)
David × Mbike	2.334*** (0.20)	-0.484*** (0.13)
Khalid × Mbike	2.286*** (0.19)	-0.594*** (0.13)
David × Drugs	4.244*** (0.16)	-1.615*** (0.14)
Khalid × Drugs	4.329*** (0.15)	-1.975*** (0.14)
Constant	1.322*** (0.12)	6.359*** (0.08)
Observations	1440	1636
R-squared	0.642	0.198

Table 9: **Study 2:** Effect of treatment assignment on perceived injury responsibility and deservingness of assistance. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

Note on interpretation: A **positive coefficient** in injury responsibility means that subject is seen as **more** responsible than reference category. A **negative coefficient** for deservingness means subject is seen as **less deserving** than reference category.



	Birth Injury	Motorcycle Injury	Drugs Injury
Name (ref=David)	-0.14 (0.13)	-0.036 (0.26)	0.085 (0.16)
Age	-0.011 (0.01)	0.003 (0.01)	0.008 (0.01)
Gender (ref=male)	0.126 (0.15)	0.283 (0.24)	0.453*** (0.16)
Graduate (ref=no)	-0.101 (0.13)	-0.092 (0.29)	-0.022 (0.18)
Income	-0.172 (0.12)	0.065 (0.13)	-0.066 (0.07)
Lib-Auth	0.300 (0.32)	0.805 (0.62)	2.296*** (0.39)
Left-Right	0.637 (0.52)	1.695** (0.68)	0.664 (0.43)
Disabled ID (ref=no)	-0.185 (0.13)	0.115 (0.28)	0.059 (0.19)
Proximity (ref=no)	-0.131 (0.08)	-0.048 (0.36)	-0.201 (0.25)
Constant	1.776*** -0.599	2.246*** -0.59	3.490*** -0.467
Observations	411	263	389
R-squared	0.079	0.058	0.163

Table 10: **Study 2:** Effect of David/Khalid name assignment within each injury treatment on perceptions of injury responsibility, with controls. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth Injury	Motorcycle Injury	Drugs Injury
Name (ref=David)	-0.324** (0.13)	-0.087 (0.15)	-0.359** (0.16)
Age	0.005 (0.00)	-0.003 (0.01)	-0.003 (0.01)
Gender (ref=male)	-0.175 (0.13)	-0.027 (0.15)	-0.478*** (0.18)
Graduate (ref=no)	0.217* (0.13)	0.141 (0.18)	-0.136 (0.17)
Income	0.142** (0.06)	-0.041 (0.07)	0.012 (0.08)
Lib-Auth	-0.556* (0.29)	-1.083*** (0.34)	-3.560*** (0.39)
Left-Right	-1.050*** (0.37)	-1.964*** (0.38)	-1.381*** (0.46)
Disabled ID (ref=no)	0.079 (0.16)	0.004 (0.18)	0.191 (0.21)
Proximity (ref=no)	-0.214 (0.21)	0.611*** (0.16)	0.551** (0.23)
Constant	6.558*** (0.30)	7.178*** (0.35)	7.701*** (0.40)
Observations	419	396	389
R-squared	0.102	0.157	0.286

Table 11: **Study 2:** Effect of David/Khalid name assignment within each injury treatment on perceptions of deservingness, with controls. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth Injury	Motorcycle Injury	Drugs Injury
David	-	-	-
Khalid	-0.893*** (0.23)	-0.294 (0.21)	-0.055 (0.23)
Left-Right scale	-0.721** (0.36)	-1.842*** (0.35)	-1.747*** (0.40)
David $\times$ Left-Right scale	-	-	-
Khalid $\times$ Left-Right scale	-0.562 (0.66)	0.291 (0.64)	-0.319 (0.61)
Constant	6.284*** (0.12)	6.189*** (0.11)	4.784*** (0.15)
Observations	967	1079	1083
R-squared	0.122	0.051	0.046

Table 13: **Study 1:** OLS regression predicting perceived deservingness of subject. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

## C Interaction tables

	Birth Injury	Motorcycle Injury	Drugs Injury
David	-	-	-
Khalid	0.039 (0.11)	-0.32 (0.27)	-0.221 (0.18)
Left-Right scale	-0.102 (0.20)	1.228** (0.53)	0.609* (0.32)
David $\times$ Left-Right scale	-	-	-
Khalid $\times$ Left-Right scale	0.439 (0.30)	-0.503 (0.79)	0.407 (0.48)
Constant	1.197*** -0.072	3.438*** -0.169	5.595*** -0.119
Observations	930	754	1090
R-squared	0.014	0.03	0.014

Table 12: **Study 1:** OLS regression predicting perceived level of responsibility for injury. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth Injury	Motorcycle Injury	Drugs Injury
David	-	-	-
Khalid	0.068 (0.16)	-0.289 (0.42)	0.308 (0.27)
Left-Right scale	0.834 (0.69)	0.649 (0.85)	1.280*** (0.49)
David $\times$ Left-Right scale	-	-	-
Khalid $\times$ Left-Right scale	-0.593 (0.76)	0.858 (1.21)	-0.691 (0.69)
Constant	1.093*** (0.13)	3.478*** (0.31)	5.165*** (0.20)
Observations	540	359	541
R-squared	0.014	0.016	0.018

Table 14: **Study 2:** OLS regression predicting perceived level of responsibility for injury. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth Injury	Motorcycle Injury	Drugs Injury
David	-	-	-
Khalid	-0.386* (0.23)	0.206 (0.26)	-1.002*** (0.31)
Left-Right scale	-0.926** (0.43)	-1.328** (0.56)	-2.908*** (0.52)
David $\times$ Left-Right scale	-	-	-
Khalid $\times$ Left-Right scale	0.293 (0.67)	-1.223* (0.72)	1.982** (0.80)
Constant	6.614*** (0.15)	6.246*** (0.21)	5.666*** (0.21)
Observations	546	548	542
R-squared	0.036	0.084	0.068

Table 15: **Study 2:** OLS regression predicting perceived deservingness of subject. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth injury	Motorcycle injury	Illicit drugs injury
David	-	-	-
Khalid	0.074 (0.15)	-1.153*** (0.35)	-0.107 (0.27)
Lib-Auth scale	0.364** (0.15)	0.826** (0.38)	2.474*** (0.28)
David $\times$ Lib-Auth scale	-	-	-
Khalid $\times$ Lib-Auth scale	0.122 (0.27)	1.180** (0.56)	0.041 (0.41)
Constant	0.952*** (0.07)	3.244*** (0.26)	4.238*** (0.18)
Observations	891	743	1070
R-squared	0.026	0.061	0.173

Table 16: **Study 1:** OLS regression predicting perceived level of responsibility for injury. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth injury	Motorcycle injury	Illicit drugs injury
David	-	-	-
Khalid	0.648** (0.32)	0.586*** (0.22)	-0.32 (0.30)
Lib-Auth scale	-0.796** (0.37)	-1.398*** (0.25)	-4.030*** (0.25)
David $\times$ Lib-Auth scale	-	-	-
Khalid $\times$ Lib-Auth scale	-2.688*** (0.52)	-1.266*** (0.40)	0.156 (0.48)
Constant	6.573*** (0.25)	6.542*** (0.15)	6.801*** (0.14)
Observations	930	1059	1065
R-squared	0.244	0.103	0.267

Table 17: **Study 1:** OLS regression predicting perceived deservingness of subject. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth injury	Motorcycle injury	Illicit drugs injury
David	-	-	-
Khalid	-0.299 (0.37)	0.052 (0.62)	-0.037 (0.40)
Lib-Auth scale	-0.106 (0.45)	0.838 (0.70)	2.292*** (0.45)
David $\times$ Lib-Auth scale	-	-	-
Khalid $\times$ Lib-Auth scale	0.34 (0.49)	-0.171 (0.97)	0.167 (0.60)
Constant	1.384*** (0.35)	3.143*** (0.47)	4.188*** (0.30)
Observations	540	359	541
R-squared	0.003	0.01	0.12

Table 18: **Study 2:** OLS regression predicting perceived level of responsibility for injury. Levels of significance: \*\*\* 99% \*\* 95% \* 90%

	Birth injury	Motorcycle injury	Illicit drugs injury
David	-	-	-
Khalid	0.132 (0.25)	0.448 (0.39)	-0.187 (0.39)
Lib-Auth scale	-0.489* (0.25)	-0.905* (0.53)	-3.452*** (0.40)
David $\times$ Lib-Auth scale	-	-	-
Khalid $\times$ Lib-Auth scale	-0.71 (0.45)	-0.949 (0.64)	-0.255 (0.63)
Constant	6.646*** (0.15)	6.424*** (0.33)	6.818*** (0.25)
Observations	546	548	542
R-squared	0.047	0.064	0.203

Table 19: **Study 2:** OLS regression predicting perceived deservingness of subject. Levels of significance: \*\*\* 99% \*\* 95% \* 90%



## D Robustness check with controls

	Injury Responsibility	Deservingness
Khalid × Baby	0.170** (0.09)	-1.043*** (0.14)
David × Mbike	2.571*** (0.13)	-0.363*** (0.11)
Khalid × Mbike	2.295*** (0.14)	-0.710*** (0.14)
David × Drugs	4.628*** (0.09)	-1.809*** (0.12)
Khalid × Drugs	4.533*** (0.09)	-2.005*** (0.13)
Age	0.004 (0.00)	0.004* (0.00)
Gender (ref=male)	0.375*** (0.07)	-0.441*** (0.08)
Graduate (ref=no)	-0.034 (0.08)	0.046 (0.09)
Income	-0.008 (0.04)	-0.027 (0.04)
Lib-Auth	1.439*** (0.17)	-2.794*** (0.18)
Left-Right	0.195 (0.18)	-0.972*** (0.21)
Disabled ID (ref=no)	-0.046 (0.08)	0.1 (0.09)
Proximity (ref=no)	0.066 (0.09)	0.021 (0.11)
Constant	-0.123 (0.16)	8.115*** (0.20)
Observations	1972	2220
R2	0.708	0.322

Table 20: Study 1: Results of OLS regression predicting perceived injury responsibility and deservingness of assistance. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%.

Note on interpretation: A **positive coefficient** in injury responsibility means that subject is seen as **more responsible** than reference category. A **negative coefficient** for deservingness means subject is seen as **less deserving** than reference category (David x Baby).



	Injury Responsibility	Deservingness
Khalid $\times$ Baby	-0.125 (0.15)	-0.336** (0.14)
David $\times$ Mbike	2.280*** (0.23)	-0.450*** (0.13)
Khalid $\times$ Mbike	2.263*** (0.22)	-0.588*** (0.14)
David $\times$ Drugs	4.213*** (0.17)	-1.493*** (0.15)
Khalid $\times$ Drugs	4.313*** (0.17)	-1.866*** (0.15)
Age	-0.002 (0.00)	0.002 (0.00)
Gender (ref=male)	0.271** (0.11)	-0.234*** (0.09)
Graduate (ref=no)	-0.045 (0.11)	0.073 (0.09)
Income	-0.083 (0.06)	0.041 (0.04)
Lib-Auth	1.116*** (0.24)	-1.739*** (0.21)
Left-Right	0.906*** (0.31)	-1.472*** (0.24)
Disabled ID (ref=no)	-0.042 (0.11)	0.104 (0.11)
Proximity (ref=no)	-0.114 (0.13)	0.273** (0.13)
Constant	0.517 (0.39)	7.706*** (0.21)
Observations	1063	1204
R2	0.671	0.303

Table 21: Study 2: Results of OLS regression predicting perceived injury responsibility and deservingness of assistance. Robust standard errors in parentheses. Levels of significance: \*\*\* 99% \*\* 95% \* 90%.

Note on interpretation: A **positive coefficient** in injury responsibility means that subject is seen as **more responsible** than reference category. A **negative coefficient** for deservingness means subject is seen as **less deserving** than reference category.

## E Question wording

How much do you agree or disagree with each of the following statements?

-[statementStudy 1] Government should redistribute income from the better off to those who are less well off

-[statementStudy 2] Big business takes advantage of ordinary people

-[statements3] Ordinary working people do not get their fair share of the nation's wealth

-[statements4] There is one law for the rich and one for the poor

-[statements5] Management will always try to get the better of employees if it gets the chance

-[statements6] Young people today don't have enough respect for traditional values

-[statements7] People who break the law should be given stiffer sentences

-[statements8] For some crimes, the death penalty is the most appropriate sentence

-[statements9] Schools should teach children to obey authority

-[statementStudy 10] Censorship of films, magazines and the internet is necessary to uphold moral standards

<1> Strongly agree

<2> Agree

<3> Neither agree nor disagree

<4> Disagree

<5> Strongly disagree

<6> Don't know

## F Randomisation Checks

Tables 22 and 23 demonstrates that the random assignment necessary for the experiment to work was a success across socio-demographic, attitudinal, and behavioural measures. Therefore, we can be confident that the differences in perceived deservingness between treatment groups was a result of the manipulations employed in the vignettes.

<b>Variable</b>	<b><i>p</i></b>
Gender	0.090
Age*	0.494
Social Grade	0.890
Education level	0.697
Religion	0.150
Household income	0.521
2016 EU Referendum vote	0.959
2019 General Election vote	0.853
Liberal-Authoritarian scale*	0.783
Left-Right scale*	0.420
Respondent is disabled	0.769

Table 22: Demonstration of random assignment in WES experiment. NB: Significance levels are based on ANOVA for continuous variable (denoted by \*) and X2 for categorical variables.

<b>Variable</b>	<b><i>p</i></b>
Gender	0.394
Age*	0.369
Social Grade	0.778
Education level	0.238
Religion	0.304
Household income	0.678
2016 EU Referendum vote	0.751
2019 General Election vote	0.876
Liberal-Authoritarian scale*	0.527
Left-Right scale*	0.140
Respondent is disabled	0.493

Table 23: Demonstration of random assignment in SES experiment. NB: Significance levels are based on ANOVA for continuous variable (denoted by \*) and X2 for categorical variables.

# G    Soft Manipulation checks

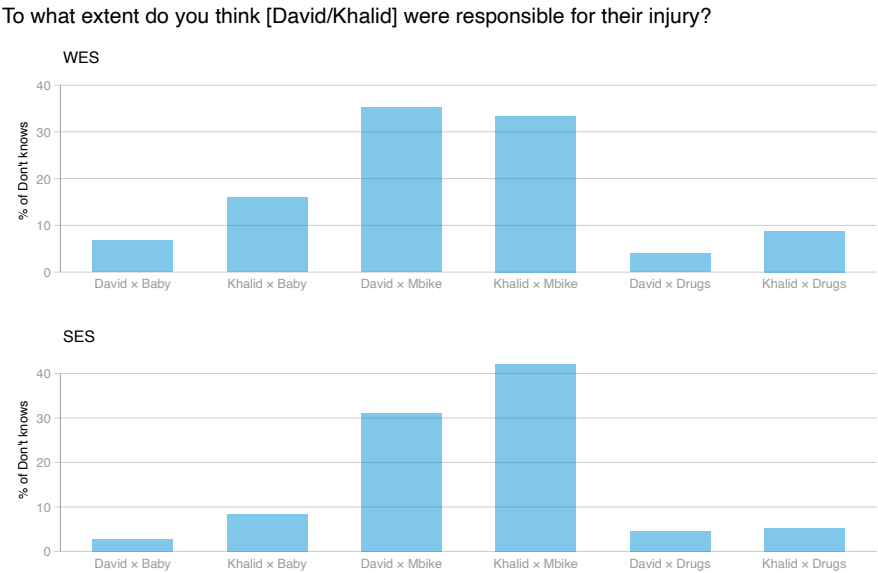


Figure 9

## H Hard manipulation check

As a hard manipulation check, the WES sample included an open-response question approximately 10 items after being asked the outcome item. Respondents were asked if they remembered *how* David/Khalid acquired their brain injury. The open-response allows us to be sure that respondents acknowledged the control aspect of the treatment. Responses were coded by a research assistant with a sample of 20% checked by the authors. Figure 10 displays the percentage of respondents within each group who correctly identified how David/Khalid acquired their injury.

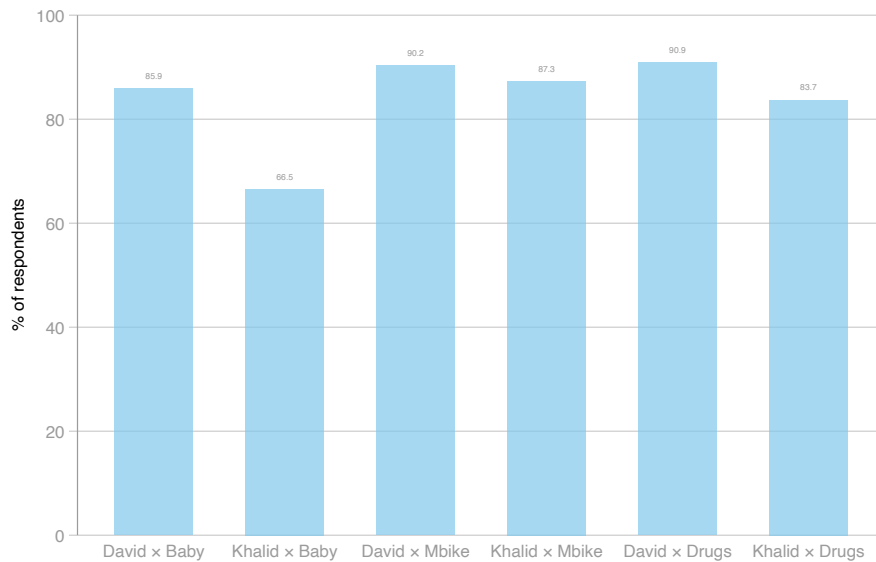


Figure 10: Percentage of respondents passing the hard manipulation check within each treatment group.

In every treatment group, a comfortable majority of respondents passed the manipulation check. In all but one treatment group, more than 80% of respondents passed the manipulation check. In one treatment group (Khalid \* baby), substantially fewer respondents (66.5%) of respondents passed the hard manipulation check. Here, there appeared to be a common misconception among a substantial group of respondents. Approximately 20% of respondents in this treatment group gave responses that suggested Khalid had acquired his injury through conflict in Yemen.