

# Employment situation and the formation of stigmatising attitudes towards people with intellectual disabilities

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## Abstract

This study questioned whether knowledge of the employment situation of a person with an intellectual disability affected stigmatising attitudes towards that individual among a sample of 507 people who did not have intellectual disabilities. A hypothetical individual with a mild intellectual disability was described as either (i) in paid employment, or (ii) living entirely on state social security benefits. Sample members, none of whom were themselves intellectually disabled, unemployed, or living on social security benefits, completed a questionnaire concerning their attitudes towards the person. Many participants who were informed that a person with an intellectual disability worked for a living exhibited more positive attitudes towards the individual than participants advised that the person relied on welfare. The results suggest the existence of a “welfare slur” among some sample members. The level of an observer’s self-reported social status impacted on the favorability of certain attitudes.

## Keywords

intellectual disability, social dominance orientation, social status, stereotypes, stigmatisation

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## Introduction

The stigmatisation of people with intellectual disabilities by members of the non-intellectually disabled public is commonplace (Evans-Lacko et al., 2013; Fox et al., 2018; McCulloch and Scrivano, 2023; Scior et al., 2022). Stigmatisation begets prejudice and discrimination, which can detrimentally affect a person’s quality of life (see Evans-Lacko et al., 2012; Kirkwood and Stamm,

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2006; Lai et al., 2001; Vrbova et al., 2017) including the individual's physical health (Scior et al., 2022; Yeh et al., 2017). Unsurprisingly, therefore, reducing the stigmatisation of intellectual disabilities by members of the public has been a stated objective of the governments of many countries for many years (see Evans-Lacko et al., 2013; Makris and Kapetanaki, 2022).

Particular difficulties confront people with intellectual disabilities when seeking employment. Past research has identified numerous barriers to employment faced by people with intellectual disabilities in this regard, including prevailing beliefs of incompetence, inadequacy and extensive needs in the workplace (see Gormley, 2015); employers' negative attitudes leading to discrimination (Jacob et al., 2023) and beliefs that people with intellectual disabilities cannot learn new skills (Pelleboer-Gunnink et al., 2021); and general assumptions that people with intellectual disabilities are unemployable (Ditchman et al., 2013). Moreover, according to Ditchman et al. (2013) people with intellectual disabilities can experience "teasing and anxiety" when attempting to gain employment (p. 209). Lozova et al. (2022) observed how, in addition to negative stereotyping, there is much use of invective vocabulary among the general public when speaking about people with intellectual disabilities. Nevertheless, employment has many benefits for people with intellectual disabilities, enabling individuals to participate in society, develop social connections, expand work-related skills, be financially self-sufficient, and feel appreciated (Jacob et al., 2023).

Although prior research has examined many problematic issues relating to the employment of people with intellectual disabilities, the question of how members of the public who do not have an intellectual disability view the relevance of employment versus unemployment in relation to the worth of a person with an intellectual disability has not been addressed, and is therefore the subject of the present investigation. Specifically, the study examines certain attributes of those members of the public who are *most likely* to stigmatise individuals with intellectual disabilities where employment and unemployment are concerned. This is an important matter because government and charity anti-stigma information campaigns need to identify and target those segments of the public most likely to perpetuate stigma in order to transmit messages capable of influencing people within these segments (Makris and Kapetanaki, 2022).

The study contributes to current knowledge concerning employment-related matters affecting people with intellectual disabilities by identifying certain factors (social status, social dominance orientation and need for cognitive closure) that may affect public attitudes towards employed and unemployed people with intellectual disabilities. Additionally, the investigation provides a conceptual model of the mechanisms whereby these factors can influence attitudes. An under-researched issue, "welfare slur", which might be attributed to unemployed people with intellectual disabilities is identified, together with the identification of a segment of the population that is more likely than others to stigmatise unemployed people with intellectual disabilities who live on welfare. Outcomes to the present study should help inform policy-makers, charities, and intellectual disability support and advocacy groups vis-à-vis the creation of anti-stigma messages suitable for addressing the prejudices of a particular segment of the population identified as most likely to stigmatise people with intellectual disabilities in employment situations (cf. Yeh et al., 2017).

### *Stigmatisation of people with intellectual disabilities*

Expressions of stigma towards people with intellectual disabilities is an everyday reality for many of those affected and for their families (Bollard et al., 2018; Seewooruttun and Scior, 2014). According to Goffman (1963) stigma involves perceptions that an observed person possesses "an attribute that is deeply discrediting", and which reduces the bearer "from a whole and usual person to a tainted, discounted one" (p. 3). Stigma is connected with negative (and often unfair) social attitudes towards

an individual or group (see [Corrigan and Watson, 2002](#)) which shame the recipient(s) on account of an assumed deficiency or difference, often leading to discrimination ([Werner et al., 2012](#)).

*Stereotyping of people with intellectual disabilities.* Stigma can arise from stereotyping, i.e., the creation of simplified, and often inaccurate and offensive, generalized beliefs about or representations of specific groups ([Biernat and Dovidio, 2000](#)). Stereotypes enable an observer to make quick judgments about others based on a few defining characteristics which are then assumed to apply to everyone in the stereotyped group. Negative stereotypes of people with intellectual disabilities frequently involve misconceptions about both what it is like for an individual to have an intellectual disability and the capabilities of people with intellectual disabilities. Misconceptions can include beliefs regarding deviance, unreliability, helplessness, incompetence, and unpredictability (see [Ali et al., 2008](#); [Biernat and Dovidio, 2000](#); [Werner et al., 2012](#); [Yeh et al., 2017](#)), and even suspicions of aggression and dangerous behaviour ([Jansen-van Vuuren and Aldersey, 2020](#); [Werner et al., 2012](#)). Such views appear to be widespread and can contribute to discrimination and reduced opportunities for people with intellectual disabilities to participate in society ([Ali et al., 2008](#); [Pelleboer-Gunnink et al., 2021](#)). Discrimination can extend to social segregation (see [Pelleboer-Gunnink et al., 2021](#)) and to limited work and housing opportunities ([Ditchman et al., 2016](#); [Jansen-van Vuuren and Aldersey, 2020](#); [Werner et al., 2012](#)).

## Background

The current research explored stigmatising attitudes towards people with intellectual disabilities among a sample of individuals, none of whom themselves had an intellectual disability, who possessed varying levels of social status and preferences for social dominance and cognitive closure. Sample members' attitudes were investigated with regard to whether a participant had been informed that a person with an intellectual disability was either (i) in paid employment and fully self-sufficient financially, or (ii) lived on state welfare payments (cf. [Olson et al., 2021](#)) (see end note<sup>1</sup>). The individual described in the study was stated to exhibit attributes connected with mild intellectual disability, although no definition of intellectual disability (mild or otherwise) was conveyed to the sample members. Only the effects of mild intellectual disability were described.

Mild intellectual disability is a condition that exists in 85% of the one to two percent of the UK population who have an intellectual disability ([ONS, 2023](#)). This (predominant) kind of intellectual disability involves reduced ability to understand new or complex information; to acquire new skills; to cope independently within social situations; to reason, solve problems, plan ahead; and/or learn from experience ([APA, 2022](#); [Shree and Shukla, 2016](#)). However, people with mild intellectual disability are able to function daily with minimal support, and can gain and succeed in many types of employment ([Daily et al., 2000](#); [Salvador-Carulla et al., 2011](#)).

## Employment and people with intellectual disabilities

[Jahoda et al. \(2008\)](#) noted how “work is an aspiration for many people with intellectual disabilities”, and how policy makers typically see the latter’s employment as a major policy goal (p.1). However, obtaining employment can be difficult for individuals with intellectual disabilities (see [Bollard et al., 2018](#)), although precise figures on the matter are not available. The UK government’s *Labour Force Survey*, for example, collects data only on self-reported “mental illness”, reporting in 2022 that 52% of working age adults with a mental disability in England were in paid employment ([ONS, 2022](#)). As regards intellectual disability specifically, [Emerson et al. \(2018\)](#) analysed a database of 426 UK

individuals with intellectual disabilities born in 1970, finding that at age 42, forty percent were in full time and 19% in part time employment.

The question addressed by the present study is whether members of the public who do not have intellectual disabilities perceive unemployed people with intellectual disabilities who rely mainly on state welfare support (see end note<sup>1</sup>) less favourably than those who work for a living? This possibility (cf. Henry et al., 2004; Petersen et al., 2012) arises from the possibility that some members of the public who do not have intellectual disabilities might subject welfare assistance-reliant people with intellectual disabilities to considerably greater critical scrutiny and negative stereotyping than they do when considering individuals with intellectual disabilities who are in paid employment. Welfare claimants might be regarded as somehow less worthy than people who work for a living. If so, anti-stigma campaigns need to address this issue within transmitted public information messages and activities.

In contrast, working in paid employment might be seen as evidence of virtuous effort, consequent perhaps from the historical emphasis on hard work found in many countries and cultures (see Olson et al., 2021) where effort and employment are regarded as beneficial both to the individual and to the wider society. McGlinchey et al. (2013) observed how members of the public often regard employment as benefitting self-esteem, independence, social inclusion, health, sense of identity, and quality of life, irrespective of whether a person has an intellectual disability. Conversely, not working for a living and relying on state welfare payments might be seen as a moral failing (cf. Henry et al., 2004), despite the problems that many people with intellectual difficulties experience when looking for work.

Literature concerning the formation of attitudes towards people with intellectual disabilities has identified three influences potentially relevant to the present research, i.e., the social status of the observer (see for example Akrami, Ekehammar, Claesson and Sonnander, 2006; Morin et al., 2013; Marcone et al., 2019; Dell'Armo and Tassé, 2021) in conjunction with social dominance orientation (see Marcone et al. ; Crowson et al., 2013; Servidio et al., 2024) and, in relation to stereotyping, a person's need for cognitive closure (e.g., Albarracín and Shavitt, 2018; Roets et al., 2015). Reasons for including these variables in the study are outlined below.

### *Social status of an observer who does not have an intellectual disability*

Chung et al. (2017) cited a number of investigations which suggested that prejudice can be lower among people of higher social status. This was due, Chung et al. (2017) continued, to higher status individuals frequently having received a more extensive education, having travelled more, having more extensive social experience, and consequently being better able to understand complex ideas and situations. Conversely, according to Chung et al. (2017), lower social status people are often less well-educated, less well-travelled, less likely to have wide-ranging social experiences, and less tolerant of ambiguity and uncertainty. On the other hand, research cited by Duckitt and Sibley (2010) found that higher social status people do sometimes exhibit prejudice because certain high-status individuals favour dominance over lower social status people to whom they feel superior. This possibility is examined in the next section.

*Social dominance orientation.* Duckitt and Sibley (2010) noted that some individuals exhibit high "social dominance orientation", i.e., a general attitudinal orientation toward intergroup relations whereby individuals high in the trait favour values of power and superiority over others. High social dominance orientation implies an individual's support for an existing social hierarchy that favours higher status people (Sidanius and Pratto, 1999). Moreover, high social dominance orientation has

been found to relate negatively to empathy (Hodson et al., 2009) and positively to various forms of prejudice (Sibley and Duckitt, 2008). A study by Besta et al. (2019) concluded that individuals low on social dominance orientation often held more positive attitudes towards members of outgroups of whatever form or nature. Perhaps, therefore, individuals of higher social status who are also high in social domination orientation will be especially prejudiced against disadvantaged sections of the population, including people with intellectual disabilities.

### *Need for cognitive closure*

Stigmatising attitudes have been found to be greater among individuals who possess high “need for cognitive closure”, i.e., the “desire for firm answers to questions and an aversion toward ambiguity” (Kruglanski and Webster, 1996, p. 264). Vyncke and Van Gorp (2020) argued that people with high need for cognitive closure prefer to reach a conclusion quickly and feel psychological discomfort when confronted with uncertainty. As stereotypes constitute useful means for addressing ambiguity, Vyncke and Van Gorp (2020) continued, individuals with high need for cognitive closure are more likely than others to use stereotypes to form their opinions, and stereotypes concerning intellectual disability are often negative. Moreover, according to Kruglanski and Webster (1996), people with high need for cognitive closure can be significantly harder to influence via anti-stigma public information campaigns than people with low need for cognitive closure, because they are unwilling to alter their prior opinions when faced with opposing facts or opinions.

### *Other possible factors affecting negative attitudes*

Further considerations identified by previous literature which might affect the attitudes of individuals who have not been diagnosed with an intellectual impairment in relation to individuals with an intellectual disability include the former’s age, gender, familiarity with intellectual disability, and whether a person is religious (for details see, for example, Corrigan et al., 2003; Zheng et al., 2016; Chung et al., 2017; Yeh et al., 2017).

## **Methods and materials**

Consequent to discussions with (i) a senior manager in a disability employment support organisation, (ii) the head of a local day centre catering for people with intellectual disabilities, and (iii) two academics specialising in nonprofit marketing at the authors’ home universities, a questionnaire was developed covering the above constructs. This was pre-tested via face-to-face administration to seven members of the public visiting the authors’ home universities on “open days” and who volunteered their services. The purpose of the pre-test was to find ambiguities in wordings and/or overlapping meanings of items. A draft of the questionnaire was presented to a class of 19 post graduate students who answered all its contents and commented on any items they found confusing. The final version was distributed via email to members of the consumer panel of a commercial market research company, the internal procedures of which ensured that the profile of panel members used in the study matched that of the general UK population. Informed consent was obtained from all participants, who were selected via a stratified sampling process whereby every Nth person in the panel was a candidate for inclusion. Filters were applied to confirm that all the participants were employed or retired, or were caring for family members full time, or were in full time education. None were disabled or living on welfare benefits, and none had themselves ever experienced a mental disorder. The budget for the questionnaire distribution was sufficient for a

sample of 600 participants. After data cleansing and removal of implausible replies from certain participants a sample of 507 responses remained.

## Measures

*Effects of source of income.* Three hypothetical individuals with mild intellectual disability were described in the questionnaire sent to the study participants. Firstly, a person who is in paid employment and has very little dependence on state welfare (in the UK all people registered as disabled via an authorised medical practitioner receive disability allowances of some sort); secondly, an individual who is totally dependent on state welfare, and thirdly a person who works part time and who also receives state benefits. Self-employed individuals were not considered, given that self-employment is rare among people with intellectual disabilities (Avellonea et al., 2023) due to, for example, limited access to finance, difficulties with managing workloads and finances in fluctuating business conditions, lack of self-confidence, and paucity of networks (Adams et al., 2019). Nor were unpaid volunteer activities in commercial organisations (internships for instance) considered because, although volunteering has been promoted as a stepping stone and an alternative to employment for work-age adults with disability, their incidence is very uncommon (Trembath et al., 2010).

Each participant in the study was randomly assigned to receive a questionnaire relating to one of these situations and was presented with one of the following statements and an associated question. (Details of the person's intellectual disability situation are taken from APA [2022] and Public Health England [2023].)

1. John, aged 34, has an intellectual disability which causes him to be somewhat less able than others to quickly pick up new skills and/or to understand the meanings of some of the words in fresh information presented to him, especially if the information is a little complicated. Also, John sometimes finds it difficult to remember things, to plan ahead and/or to take decisions independently, and he sometimes has problems in communicating with others and can find it hard to cope with social situations. In general, John is less advanced in conceptual and daily living skills than the average person who does not have an intellectual disability, although John can live and function independently with very little support.

John's disability was diagnosed in John's early childhood, since when he has been officially registered as an intellectually disabled person.

John enjoys walking, jogging, and occasionally plays football for a team at a local disability support centre. He lives alone.

John is in full-time paid employment and receives an annual salary of £17,264 (for 35 hours a week at the 2023 national minimum wage). This is his only substantial income.

What words or phrases come into your mind when thinking about John? Please write at least 3 to 5 words or phrases.

2. Identical to statement 1 above, but part four read:

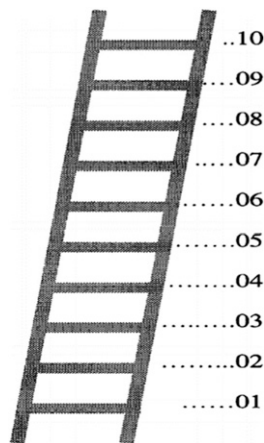
John does not have any paid employment and lives entirely on state welfare benefits. He receives £16,967 per annum in direct welfare payments (the maximum available under the UK government's 2023 benefits cap). This is John's only source of income. (See end note<sup>2</sup>).

3. Identical to 1 above but paragraph four read:

John receives £8,488 per annum in state social security benefits (half the maximum available under the UK government's 2023 benefits cap) and has a part time paid job from which he receives £8,228 per annum (for 15 hours a week in employment at the 2023 national minimum wage). These are John's only sources of income.

**Social status.** The participants were asked standard questions concerning their social status (see Adler et al., 2000), e.g., highest educational qualification and how well-off financially they regarded themselves to be. A further measure of “subjective” social status was applied using the MacArthur ladder (a scale developed by Adler et al. [2000]). Here, respondents were asked to place an “X” on the rung of the ladder that best represents where they think they stand. Subjective social status is likely to reflect not only current social circumstances but also incorporates a self-assessment of the individual’s socioeconomic, educational, and economic background along with future prospects (Singh-Manoux et al., 2003). The following was shown to the participants.

“Think of this ladder as showing where people stand in society.



At the top of the ladder are people who are the best off – those who have the most money, the best education, and the most respected jobs. At the bottom of the ladder are the people who are the worst off – who have the least money, least education and the least respected job or no job.

The higher up you are on the ladder, the closer you are to the people at the top; the lower you are, closer you are to the bottom.

*Where would you place yourself on the ladder in relation to other people in society? Please tick the box for the rung where you think you stand at this time in your life relative to other people.”*

It emerged that the study participants’ responses to the MacArthur ladder scale correlated substantially and significantly with the other measures of social status ( $R > .71$ ) so the MacArthur ladder scale was employed as the sole measure of social status.

**Other measures.** The questionnaire began with items for age category and gender. Measurement items for constructs were mainly adapted from pre-existing inventories in the intellectual disabilities research field which have been frequently validated within that literature. Stigmatising attitude was measured using three items adapted from Link, Cullen, Frank and Wozniak’s (1987) “Social Distance” Scale (Appendix section 4), which were highly correlated (multiple correlation coefficient = .84) and eight items from Taylor and Dear’s (1981) “Community Attitudes to Mental Illness” Scale (Appendix section 5). To validate the latter measure for the present study the eight



items were factor analysed to ensure the items loaded onto to the same factor, the results confirming that this was the case (all loadings exceeded .78, the eigenvalue indicated that 81% of variation in the data was explained by the first factor). The Cronbach's alpha value for the eight items, a measure of the reliability of the scale in terms of whether the items were all associated with the same construct) was .8, suggesting sound reliability. Social Dominance Orientation was assessed using eight items based on [Sidanius and Pratto \(1999\)](#). A factor analysis of these items found that all loaded on the same factor with values exceeding .78, and that the factor explained 80% of total variation in the data. The Cronbach's alpha for the items, at .79, was satisfactory. Perceived negative attributes of people with intellectual disabilities were evaluated via six items suggested by [Yeh et al. \(2017\)](#) (all factor loadings exceeded .78, the factor explained 78% of total variation, Cronbach's alpha = .78). However, as the six items were imposed by the researchers, an additional measure was obtained by asking the participants to provide words and phrases coming to mind "when thinking about John" after they had read the statement concerning John's income (see above). This measure was obtained from a sentiment analysis using [Pennebaker, Boyd, Jordan and Blackburn's \(2015\)](#) Linguistic Inquiry and Word Count package, which records words as either positive or negative. Each substantive word is scored on a scale out of 100, high numbers indicating positivity. The average of these scores was employed as the sentiment measure. Need for cognitive closure was measured using nine items based on [Roets and Van Hiel \(2011\)](#) (all factor loading were greater than .77, the factor explained 75% of total variation, Cronbach's alpha = .81). Familiarity with intellectual disability was assessed via two items adapted from [Evans-Lacko et al. \(2011\)](#). A single item measured the degree of a person's religiosity.

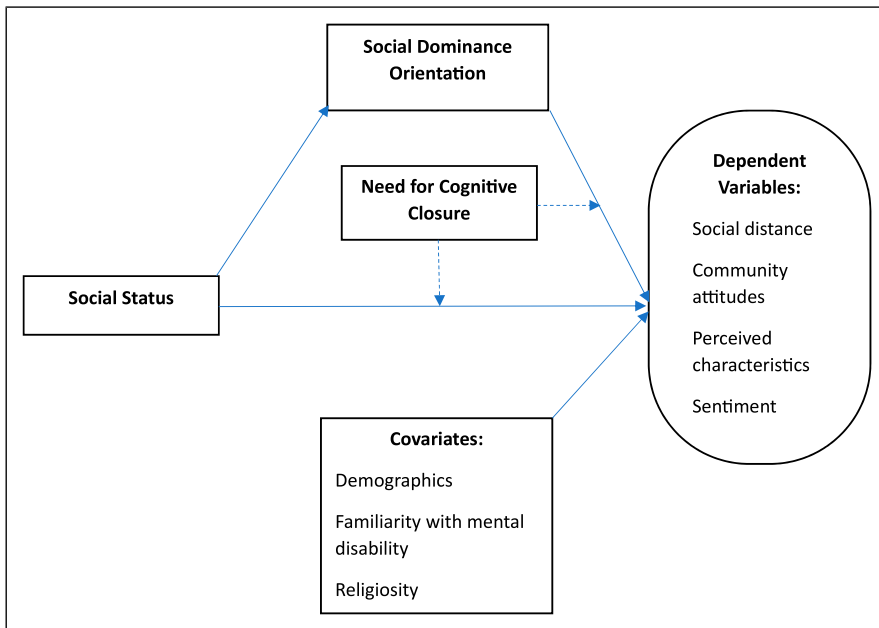
### *The model*

[Figure 1](#) presents the model tested during the investigation, i.e., a moderated mediated configuration ([Hayes, 2022](#) model 15) wherein social status is posited to have (i) a direct effect on each of four dependent variables relating to stigmatising attitudes concerning John, and (ii) an influence on the mediating variable "social dominance orientation", which in turn affects the dependent variables (cf. [Levin et al., 2012](#); [Sibley and Duckitt, 2008](#)). The strengths of the connections between social status and the dependent variables are assumed to be moderated by a participant's level of need for cognitive closure (cf. [Baldner et al., 2019](#); [Todor, 2014](#)). The model was estimated (using average values for each of the constructs) three times; once for each of the income source situations.

## **Results**

[Table 1](#) lists the main characteristics of the participants and their average responses to the explanatory variables. [Table 2](#) shows the areas in which significant differences arose among the responses of the members of the three groups. It can be seen from [Table 2](#) that the people in Group 1 (who had been informed that John was fully employed) tended to express more favourable attitudes towards John on the dependent favourability measures than was the case for members of Group 2 (who had been told that John lives entirely on welfare benefits). The same pattern emerged when comparing Group 1 with Group 3 (where John was described as receiving half his income from employment). Individuals in Group 3 had significantly more favourable views of John than people in Group 2 (where John was described as living entirely on benefits). Overall, therefore, it appears that positive connotations were attached to the knowledge that John works fully or partly for his living, and that existing solely on welfare was viewed less positively.





**Figure 1.** Model of causal influences.

**Table 1.** Participant profile mean values (apart from gender).

	Group 1 (N = 168)	Group 2 (N = 170)	Group 3 (N = 169)
Social distance	2.91	2.42	2.48
Community attitudes	2.80	2.45	2.55
Perceived characteristics	3.00	3.44	3.30
Sentiment	58	50	55
Age	38	42	37
Gender (% female)	48	52	48
Social status	4.5	4.7	5.0
Social dominance orientation	2.1	2.3	2.3
Familiarity with mental disability	2.0	2.0	2.1
Need for cognitive closure	3.0	2.7	3.1
Religiosity	2.0	2.3	2.1

Table 3 gives the results of the estimation of Figure 1. For Group 1 participants (i.e., those informed that John lives on earned income), social status exerted a significantly positive influence on all the dependent favourability measures, i.e., the higher a sample member’s social status the more favourable the person’s attitudes towards the described individual. However, for people in Group 2 (who were told that John lives entirely on welfare), higher social status did *not* increase favourable attitudes significantly. Here, lower social status individuals had much the same views about John as higher status participants. The outcomes for the effects of social status among people

**Table 2.** Significant differences.

	Chi-square <sup>a</sup>	Post-hoc comparisons <sup>b</sup>		
		Group 1 vs Group 2	Group 1 vs Group 3	Group 2 vs Group 3
Social distance	6.39 (.048)	2.09 (.039)	2.12 (.040)	2.22 (.041)
Community attitudes	7.98 (.023)	4.02 (.000)	3.00 (.024)	2.00 (.050)
Perceived characteristics	8.01 (.020)	5.38 (.000)	2.55 (.030)	2.06 (.040)
Sentiment	6.88 (.030)	2.22 (.037)	2.55 (.025)	2.11 (.038)

<sup>a</sup>Kruskal-Wallis H with 2 degrees of freedom.

<sup>b</sup>Dunn's Z-test with Bonferroni adjustment. Significance levels in parentheses.

in Group 3 (informed that John lives on half earned income and half welfare) are comparable to those for Group 1. Having a partial income from employment was viewed positively.

In the present study social status did not determine social dominance orientation significantly for any of the three groups, contradicting some previous literature in the field (e.g., [Caricati and Owuamalam, 2020](#); [Fischer et al., 2012](#)). This could be simply due to the absence of any connection, or to social desirability bias in that some high social status participants may have been reluctant to admit their substantial possession of this particular trait. However, a pre-test of the questionnaire conducted by the researchers included some items from the Marlowe-Crown Social Desirability Scale ([Crowne and Marlowe, 1960](#)), but the items did not attain significance. Evidence from the pre-test indicated that the participants' reluctance to answer the Marlowe-Crown items was due to the items being considered too personal, intrusive, and irrelevant to the study. Hence these items did not appear in the final version of the questionnaire. Nevertheless, the likelihood of social desirability bias arising within the responses was checked through an examination of the frequencies, means and standard deviations of the participants' replies to items that, a priori, might be expected to give rise to bias. None of the average percentages in the highest response categories of these items exceeded 22%, indicating the absence of substantial social desirability bias in the outcomes. More research is needed into this matter.

Social dominance orientation, as predicted (cf. [Mifune et al., 2019](#); [Pratto et al., 1994](#)) had a significantly negative effect on each of the dependent favourability measures in all three groups. Also as anticipated, familiarity with intellectual disability exerted positive and significant influences on the dependent favourability variables in all three scenarios. Age had a significantly positive effect on the dependent variables, other than the measure of perceived characteristics, among members of Groups 1 (informed that John lived on earned income from paid employment) and 3 (John lived on mixed income). However, age exerted significantly negative influences on the favourability variables for Group 2 (informed that John lived on welfare payments). Thus, on the average older people had more favourable attitudes towards a person with an intellectual disability who worked for a living (fully or partially) than was the case for younger participants. Neither gender nor religiosity affected any of the dependent variables significantly. [Morin et al. \(2013\)](#) noted the contradictory evidence that has arisen regarding possible differences in the attitudes of males and females vis-à-vis intellectual disability. Some studies have concluded that women possess more positive attitudes than men, while others found either the reverse or no sex differences whatsoever. The moderation effect of need for cognitive closure on the strength of the influence of social status on the dependent favourability of attitude variables was insignificant throughout. However, need for cognitive closure did

**Table 3. Parameter ESTIMATES**

	Social dominance orientation			Social distance			Community attitudes			Perceived characteristics			Sentiment		
	G1	G2	G3	G1	G2	G3	G1	G2	G3	G1	G2	G3	G1	G2	G3
Subjective social status	.09 (1.24)	.10 (1.11)	.08 (0.99)	.29* (2.90)	.10 (1.24)	.22* (1.99)	.23* (2.00)	.06 (0.44)	.24* (1.99)	-.21* (2.00)	-.19 (1.58)	-.25* (2.52)	.22* (2.44)	.09 (1.07)	.22* (2.00)
Social dominance orientation				-.31* (3.14)	-.33* (2.98)	-.22* (1.99)	-.26* (2.26)	-.31* (2.88)	-.29* (2.23)	-.19* (1.99)	-.37* (4.00)	-.27* (2.09)	-.33* (3.38)	-.41* (4.86)	-.21* (2.60)
Familiarity with disability				.38* (3.39)	.20* (2.20)	.24* (2.81)	.39* (3.44)	.22* (1.99)	.19* (2.40)	-.40* (3.51)	-.29* (3.00)	-.20* (2.12)	.44* (4.09)	.29* (2.02)	.31* (4.67)
Age				.20* (1.99)	-.16* (2.09)	.16* (1.98)	.22* (2.22)	-.19* (2.02)	.19* (2.02)	.10 (1.08)	.08 (1.00)	.10 (1.10)	.25* (3.01)	-.39* (3.71)	.18* (1.98)
Gender				.11 (0.99)	.11 (0.59)	-.02 (0.55)	.10 (1.22)	.09 (1.33)	-.06 (0.76)	.10 (1.29)	.13 (1.60)	.08 (0.08)	.02 (.05)	.13 (1.37)	.08 (1.00)
Religiosity				.17 (1.77)	.15 (1.65)	.09 (1.10)	.11 (1.34)	.11 (1.65)	.07 (0.99)	.12 (1.22)	.10 (1.04)	.07 (0.93)	.10 (1.70)	.13 (1.48)	.10 (1.01)
Need for cognitive closure				-.009 (1.11)	-.008 (1.00)	-.011 (1.00)	-.008 (1.02)	.011 (1.07)	-.001 (0.08)	.001 (0.09)	-.010 (1.02)	-.001 (0.10)	.005 (0.66)	.010 (1.09)	-.004 (0.90)
times by social status															
Need for cognitive closure				-.03* (3.11)	-.05* (4.88)	-.02* (2.26)	-.02* (2.81)	-.05* (4.99)	-.01* (1.98)	.03* (3.00)	.05* (3.39)	.01* (2.10)	-.04* (3.38)	-.05* (4.99)	-.02* (2.00)
times by social dominance orientation															
R-square	.01			.34	.25	.20	.38	.34	.27	.23	.22	.22	.33	.32	.19

T-values in parentheses. \*Indicates significance at the .05 level or below.

intensify significantly the negative impact of social dominance orientation on the dependent variables.

## Conclusion

These results are disturbing from the viewpoint of organisations campaigning to reduce stigmatising attitudes regarding people with intellectual disabilities. The study participants who were informed that John worked for a living expressed more favourable attitudes towards him, suggesting that positive connections were attached to people with intellectual disabilities who are in employment and hence are financially self-sufficient. Overall, the levels of favourability of the attitudes expressed by the sample members towards the three featured individuals were influenced by whether a person was employed or lived on state welfare benefits. (cf. [Henry et al., 2004](#); [Likki and Staerklé, 2015](#); [Olson et al., 2021](#)). This appeared to hold even if an affected person only worked half-time. It appears therefore that some form of work ethic was present among many of the study participants, possibly based on a belief that everyone, including people with intellectual disabilities, should always strive to work in paid employment and hence be financially independent. Living on welfare may have been seen to violate this presumption; implying a perspective among certain members of the sample that many unemployed people with intellectual disabilities could be unwilling to try to improve their situations (cf. [Petersen et al., 2012](#)). This of course ignores the difficulties encountered by many people with intellectual disabilities when seeking employment.

Within the present sample, higher social status was connected with greater levels of favourability of attitudes among sample members who were advised that John worked for a living but had little effect on attitudes where participants were informed that John lived on welfare. This result is partly compatible with the view of [Chung et al. \(2017\)](#) that prejudice can be lower among people of higher social status. However, the outcome only held if a participant was informed that the individual with an intellectual disability was in full or half-time employment. High social status did not significantly influence social dominance orientation; a finding that contradicts certain past research on the topic (see [Sidonius, Levin, Liu and Pratto, 2000](#)). Nevertheless, social dominance orientation did exert a significantly negative effect on the dependent variables, in line with the proposition that social dominance orientation can be associated with prejudice (see [Besta et al., 2019](#)). As predicted by past literature (cf. [Mifune et al., 2019](#); [Pratto et al., 1994](#)), social dominance orientation significantly and negatively influenced *all* the dependent favourability measures in all three groups and clearly represented an important consideration among the members of this particular sample. High need for cognitive closure intensified the negative influence of social dominance orientation on the dependent favourability measures (cf. [Kruglanski and Webster, 1996](#); [Vyncke and Van Gorp, 2020](#)). This underscores the importance of the negative effects of stereotyping vis-à-vis people with intellectual disabilities.

## *Implications for anti-stigma campaigns*

It seems that many of the study participants attached a “welfare slur” to people with intellectual disabilities who live on benefits. This raises the question of whether members of the general public understand the barriers confronted by people with intellectual disabilities when seeking paid employment (see [Stuart \[2006\]](#) and [Lu et al. \[2022\]](#) for discussions of reasons underlying these obstacles). Public awareness of the obstacles involved could be increased via media campaigns which explain the numerous difficulties that people with intellectual disabilities experience when

looking for a job, emphasising that many people with intellectual difficulties who live on welfare do so through no fault of their own.

These outcomes have implications for the design and execution of anti-stigma campaigns and activities by government agencies, charities, and intellectual disability support organisations. Thus, to the extent that low social status is connected with less favourable attitudes towards people with intellectual disabilities, the mass media and other information outlets seen and read by lower status communities might be targeted and could carry anti-stigma messages specially crafted to influence these audiences. Some campaigns could target potential employers, noting how aspects of the consequences of intellectual disability for people at work can be greatly reduced via the provision of limited amounts of support from an employing organisation. Employment opportunities for people with intellectual disabilities are very limited (Ikutegebe et al., 2023) so it is not surprising that, through no fault of their own, many people with intellectual disabilities live on welfare and in consequence may be stigmatised for this by members of the public. Policies for improving the employment prospects of people with intellectual disabilities require the breaking down of existing negative attitudinal barriers among employers (ILO, 2016), including their lack of knowledge and understanding of intellectual disability and, according to Akram et al. (2020), fear of the unknown. Bell (2020) recommended that government information campaigns aimed at employers should emphasise skills rather than stereotypes, give examples of people with intellectual disabilities who are good at their jobs, highlight the benefits for the corporate reputations of businesses that employ people with intellectual disabilities, and note the high levels of retention and engagement of intellectually disabled workers. Government itself could do more in relation to the provision of vocational training for people with intellectual disabilities, and ensure the absence of a social security benefits trap (i.e., the situation that occurs if people become financially worse off through entering employment).

Older people were found on the average to be more likely than younger people to have negative attitudes relating to a person with an intellectual disability who lives on welfare, so anti-stigma campaigns and activities by government agencies, charities, and intellectual disability support organisations relating to this matter might beneficially target older segments of the population. Although the personal traits of high social domination and need for cognitive closure may be firmly embedded within certain individuals, public anti-stigma information campaigns could at least try to mitigate their negative influences on attitudes towards people with intellectual disabilities by publicising within communications crafted to appeal to those individuals high in these tendencies the many positive contributions that people with intellectual disabilities can make to society, describing their competencies and explaining that people with intellectual disabilities need not be seen as “weird” or inferior (Ellison et al., 2013). Scior (2011) noted the paucity of public communication endeavours of this kind although, according to Seewooruttun and Scior (2014), when such public information campaigns have been attempted the outcomes often yielded positive outcomes.

### *Limitations and areas for further research*

Limitations of the study include the facts that the investigation was completed in a single country using a modest sample size and a limited number of explanatory variables. Investigations into the situations pertaining in other countries and cultures would be worthwhile, together with the examination of a wider range of explanatory variables. The current research excluded observers who were themselves unemployed or living on welfare, and results from these groups might be different to those from the present study. Thus, investigations that include broader ranges of types of

participants with regard to their personal backgrounds and characteristics would be useful. Additional research is also needed, within the specific context of intellectual disability, into the cognitive processes involved in the interpretations of people who do not have intellectual disabilities relating to the concept of the “work ethic” possibly presumed to be present among employed people with intellectual disabilities.

Further research is required into the precise causes and natures of negative attitudes regarding intellectual disability expressed during the present investigation by certain older individuals who were informed of a person’s employment status. More research is also needed into connections, within the intellectual disability sphere, between on the one hand social status (other than just financial income), social domination orientation and need for cognitive closure and, on the other hand altruistic tendencies more generally (cf. [Olson et al., 2021](#)). For instance, why, how, and how quickly do people with high need for cognitive closure apply stereotypes when considering the qualities of people with intellectual disabilities, either in employment or living on welfare?

### **Author contributions**

The authors contributed equally to all parts of the research.

### **Declaration of conflicting interests**

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### **Ethical statement**

#### *Ethical approval*

The study was approved by the Kingston University Research Ethics Committee. (approval number KBS/OU41-4A) on 11 December 2022.

#### *Informed consent*

Informed consent was obtained from all participants in the research.

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### **Notes**

1. Intellectual disability qualifies for state welfare support in the UK (see [Gov.UK, 2023](#)). People substantially affected by the condition are entitled to a range of welfare benefits (for details see [Mind \[2023\]](#)).
2. The figure for welfare benefit was the 2023 maximum available under the UK government’s “benefits cap”. The figure for paid employment relates to 49 weeks of full time seven-hours a day work paid at the 2023 national minimum wage.



## References

- Adams, L., Cartmell, B., Foster, R., Foxwell, M., Holker, L., Pearson, A, Stewart, G., Cowling, M. & Kitching, J. (2019). *Understanding Self-employment for People with Disabilities and Health Conditions*. London: Department for Work and Pensions.
- Adler, N.E., Epel, E.S., Castellazzo, G. & Ickovics, J.R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology, 19*(6), 586–592. <https://doi.org/10.1037/0278-6133.19.6.586>
- Akram, K-Mi., Wittevrongel, K., Nicholas, D.B. & Zwicker, J.D (2020). Prioritizing barriers and solutions to improve employment for persons with developmental disabilities. *Disability and Rehabilitation, 42*(19), 2696–2706. <https://doi.org/10.1080/09638288.2019.1570356>
- Akrami, N., Ekehammar, B., Claesson, M. & Sonnander, K. (2006). Classical and modern prejudice: Attitudes toward people with intellectual disabilities. *Research in Developmental Disabilities, 27*(6), 605–617. <https://doi.org/10.1016/j.ridd.2005.07.003>
- Albarracín, D., & Shavitt, S. (2018). Attitudes and attitude change. *Annual Review of Psychology, 69*, 299–327. <https://doi.org/10.1146/annurev-psych-122216-011911>
- Ali, A., Strydom, A., Hassiotis, A., Williams, R. & King, M. (2008). A measure of perceived stigma in people with intellectual disability. *The British Journal of Psychiatry, 193*, 410–415. <https://doi.org/10.1192/bjp.bp.107.045823>
- APA (American Psychiatric Association). (2022). *Diagnostic and Statistical Manual of Mental Disorders* (Fifth Edition). Washington, DC: American Psychiatric Publishing. Text Revision (DSM-5-TR).
- Avellonea, L., Malouf, E., Taylor, JP. & Whittenburg, H. (2023). An international scoping review of factors impacting self-employment outcomes for individuals with disabilities. *Journal of Vocational Rehabilitation, 59*, 7–24. <https://doi.org/10.3233/JVR-230024>
- Baldner, C., Juame, L., Pierro, A. & Kruglanski, A. (2019). The epistemic bases of prejudice: The need for cognitive closure. *Testing, Psychometrics, Methodology in Applied Psychology, 26*(3), 447–461. <https://doi.org/10.4473/TPM26.3.9>
- Bell, M. (2020). People with intellectual disabilities and labour market inclusion: What role for EU labour law? *European Labour Law Journal, 11*(1), 3–25. <https://doi.org/10.1177/2031952519882953>
- Besta, T., Akbas, G., Renström, E., Kosakowska-Berezecka, N. & Vázquez, A. (2019). Liking low-status? Contextual and individual differences in attributional biases of low-status outgroup members. *Journal of Social and Political Psychology, 7*, 192–212. <https://doi.org/10.5964/jspp.v7i1.951.S2CID150674564>
- Biernat, M., & Dovidio, J.F. (2000). Stigma and stereotypes. In Heatherton T.F., Kleck R.E., Hebl M.R. & Hull J.G. (Eds.), *The Social Psychology of Stigma* (pp. 88–125). New York: The Guilford Press.
- Bollard, M., Mcleod, E. & Dolan, A. (2018). Exploring the impact of health inequalities on the health of adults with intellectual disability from their perspective. *Disability and Society, 33*(6), 831–848. <https://doi.org/10.1080/09687599.2018.1459476>
- Caricati, L., & Owuamalam, C.K. (2020). System justification among the disadvantaged: A triadic social stratification perspective. *Frontiers in Psychology, 11*, 40. <https://doi.org/10.3389/fpsyg.2020.00040>
- Chung, H., Jung, S. & Lee, J. (2017). Socio-demographic factors affecting levels of cultural and non-cultural prejudice: comparing Korean, Chinese, and Japanese college students. *Multicultural Education Review, 9*(1), 30–43. <https://doi.org/10.1080/2005615X.2016.1276669>
- Corrigan, P., & Watson, A. (2002). Understanding the impact of stigma on people with mental illness. *World Psychiatry, 1*(1), 16–20.
- Corrigan, P., Markowitz, F. E., Watson, A., Rowan, D. & Kubiak, M.A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behaviour, 44*(2), 162–179. <https://doi.org/10.2307/1519806>

- Crowne, D., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349–354. <https://doi.org/10.1037/h0047358>
- Crowson, H.M., Brandes, J.A. & Hurst, R. J. (2013). Who opposes rights for persons with physical and intellectual disabilities? *Journal of Applied Social Psychology, 43*(Suppl 2), E307–E318. <https://doi.org/10.1111/jasp.12046>
- Dell'Armo, K.A., & Tassé, M.J. (2021). Attitudes, stigma, and ableism toward people with intellectual disability. In Glidden L. M., Abbeduto L., McIntyre L.L. & Tassé M.J. (Eds.), *APA Handbook of Intellectual and Developmental Disabilities: Foundations* (pp. 473–497). Washington: American Psychological Association. <https://doi.org/10.1037/0000194-018>
- Daily, D.K., Ardinger, H.H. & Holmes, G.E. (2000). Identification and evaluation of mental retardation. *American Family Physician, 61*(4), 1059–1070. PMID 10706158.
- Ditchman, N., Kosyluk, K., Lee, E-J. & Jones, N. (2016). How stigma affects the lives of people with intellectual disabilities: An overview. In Scior K. & Werner S. (Eds.), *Intellectual Disability and Stigma: Stepping Out from the Margins* (pp. 31–47). Palgrave Macmillan/Springer Nature. <https://doi.org/10.1057/978-1-137-52499-7>
- Ditchman, N., Werner, S., Kosyluk, K., Jones, N., Elg, B. & Corrigan, P.W. (2013). Stigma and intellectual disability: Potential application of mental illness research. *Rehabilitation Psychology, 58*(2), 206–216. <https://doi.org/10.1037/a0032466>
- Duckitt, J., & Sibley, C.G. (2010). Right-wing authoritarianism and social dominance orientation differentially moderate intergroup effects on prejudice. *European Journal of Personality, 24*, 583–601. <https://doi.org/10.1002/per.772>
- Ellison, N., Mason, O. & Scior, K. (2013). Bipolar disorder and stigma: A systematic review of the literature. *Journal of Affective Disorders, 151*(3), 805–820. <https://doi.org/10.1016/j.jad.2013.08.014>
- Emerson, E., Hatton, C., Baines, S. & Robertson, J. (2018). The association between employment status and health among British adults with and without intellectual impairments: Cross-sectional analyses of a cohort study. *BMC Public Health, 27* (1), 401. <https://doi.org/10.1186/s12889-018-5337-5>
- Evans-Lacko, S, Brohan, E, Mojtabai, R & Thornicroft, G. (2012). Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. *Psychological Medicine, 42*, 1741–1752. <https://doi.org/10.1017/S0033291711002558>
- Evans-Lacko, S., Henderson, C., Thornicroft, G. & McCrone, P. (2013). Economic evaluation of the anti-stigma social marketing campaign in England 2009–2011. *The British Journal of Psychiatry, 202*(S55), S95–S101. <https://doi.org/10.1192/bjp.bp.112.113746>
- Evans-Lacko, S., Rose, D., Little, K, Flach, C., Rhydderch, D., Henderson, C. & Thornicroft, G. (2011). Development and psychometric properties of the reported and intended behaviour scale (RIBS): A stigma-related behaviour measure. *Epidemiology and Psychiatric Science, 20*(3), 263–271. <https://doi.org/10.1017/s2045796011000308>
- Fischer, R., Hanke, K. & Sibley, C.G. (2012). Cultural and institutional determinants of social dominance orientation: A cross-cultural meta-analysis of 27 Societies. *Political Psychology, 33*, 437–467. <https://doi.org/10.1111/j.1467-9221.2012.00884.x>
- Fox, A.B., Earnshaw, V.A., Taverna, E.C. & Vogt, D. (2018). Conceptualizing and measuring mental illness stigma: The mental illness stigma framework and critical review of measures. *Stigma and Health, 3*(4), 348–376. <https://doi.org/10.1037/sah0000104>
- Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Gormley, M.E. (2015). Workplace stigma toward employees with intellectual disability: A descriptive study. *Journal of Vocational Rehabilitation, 43*(3), 249–258. <https://doi.org/10.3233/JVR-150773>

- Gov.UK. (2023). *When Mental Health Condition Becomes a Disability*. London: Department of Health and Social Care.
- Hayes, A.F. (2022). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach* (3rd ed). New York: Guilford Press.
- Henry, P., Reyna, C. & Weiner, B. (2004). Hate welfare but help the poor: How the attributional content of stereotypes explains the paradox of reactions to the destitute in America. *Journal of Applied Social Psychology, 34*, 34–58. <https://doi.org/10.1111/j.1559-1816.2004.tb02536.x>
- Hodson, G., Hogg, S. M. & MacInnis, C. C. (2009). The role of 'dark personalities' (narcissism, Machiavellianism, psychopathy), Big Five personality factors, and ideology in explaining prejudice. *Journal of Research in Personality, 43*(4), 686–690. <https://doi.org/10.1016/j.jrp.2009.02.005>
- Ikutegbe, P., Randle, M., Sheridan, L., Gordon, R. & Dolnicar, S. (2023). Successful employment outcomes for people with disabilities: A proposed conceptual model. *Consulting Psychology Journal, 75*(3), 202–224. <https://doi.org/10.1037/cpb000022>
- ILO (International Labour Organisation). (2016). *The Win-win of Disability Inclusion*. Geneva: ILO. <https://webapps.ilo.org/infostories/stories/employment/the-win-win-of-disability-inclusion#the-win-win-of-disability-inclusion>
- Jacob, U.S., Pillay, J., Adeoye, O.E. & Oni, T.K. (2023). Barriers to employment of people with intellectual disability. *Work (Reading, Mass.), 74*(1), 207–218. <https://doi.org/10.3233/WOR-211097>
- Jahoda, A., Kemp, J, Riddell, S. & Banks, P. (2008). Feelings about work: A review of the socio-emotional impact of supported employment on people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 21*(1), 1–18. <https://doi.org/10.1111/j.1468-3148.2007.00365.x>
- Jansen-van Vuuren, J., & Aldersey, H.M. (2020). Stigma, acceptance and belonging for people with IDD across cultures. *Current Developmental Disorders Reports, 7*(3), 163–172. <https://doi.org/10.1007/s40474-020-00206-w>
- Kirkwood, A., & Stamm, B. (2006). A social marketing approach to challenging stigma. *Professional Psychology: Research and Practice, 37*(5), 472–476. <https://doi.org/10.1037/0735-7028.37.5.472>
- Kruglanski, A.W., & Webster, D.M. (1996). Motivated closing of the mind: “Seizing” and “Freezing”. *Psychological Review, 103*, 263–283. <https://doi.org/10.1037/0033-295X.103.2.263>
- Lai, Y.M., Hong, C.P.H. & Chee, C.Y (2001). Stigma of mental illness. *Singapore Medical Journal, 42*(3), 111–114.
- Levin, S., Matthews, M., Guimond, S., Sidanius, J., Pratto, F., Kteily, N., Pitpitan, E. & Dover, T. (2012). Assimilation, multiculturalism, and colour blindness: Mediated and moderated relationships between social dominance orientation and prejudice. *Journal of Experimental Social Psychology, 48*(1), 207–212. <https://doi.org/10.1016/j.jesp.2011.06.019>
- Likki, T., & Staerklé, C. (2015). Welfare support in Europe: Interplay of dependency culture beliefs and meritocratic contexts. *International Journal of Public Opinion Research, 27*(1), 138–153. [10.1093/ijpor/edu014](https://doi.org/10.1093/ijpor/edu014).
- Link, B.G., Cullen, F.T., Frank, J. & Wozniak, J.F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology, 92*(6), 1461–1500. <https://doi.org/10.1086/228672>
- Lozova, O., Grubi, T., Starynska, N. & Palamarchuk, M. (2022). Psycholinguistic structure of stigmatic statements about persons with intellectual Disabilities. *Psycholinguistics, 32*(1), 112–142. <https://doi.org/10.31470/2309-1797-2022-32-1-112-142>
- Lu, S.J., Liou, T.H., Lee, M.B., Yen, C.F., Chen, Y.L., Escorpizo, R. & Pan, A.W. (2022). Predictors of employment status for persons with bipolar disorder. *International Journal of Environmental Research and Public Health, 19*(6), 3512. <https://doi.org/10.3390/ijerph19063512>

- McCulloch, S., & Scrivano, R. (2023). The effectiveness of mental illness stigma-reduction interventions: A systematic meta-review of meta-analyses. *Clinical Psychology Review, 100*, 102242. <https://doi.org/10.1016/j.cpr.2022.102242>
- McGlinchey, E., McCallion, P., Burke, E., Carroll, R. & McCarron, M. (2013). Exploring the issue of employment for adults with an intellectual disability in Ireland. *Journal of Applied Research in Intellectual Disabilities, 26*(4), 335–343. <https://doi.org/10.1111/jar.12046>
- Makris, A., & Kapetanaki, A. (2022). Practice-based social marketing to improve well-being for people with mental disabilities. *Journal of Marketing Management, 38*(11-12), 1178–1202. <https://doi.org/10.1080/0267257X.2022.2091641>
- Marcone, R., Caputo, A., Esposito, S. & Senese, V.P. (2019). Prejudices towards people with intellectual disabilities: Reliability and validity of the Italian Modern and Classical Prejudices Scale. *Journal of Intellectual Disability Research, 63*, 911–916. <https://doi.org/10.1111/jir.12590>
- Mifune, N., Inamasu, K., Kohama, S., Ohtsubo, Y. & Tago, A. (2019). Social dominance orientation as an obstacle to intergroup apology. *PLoS One, 14*(1), e0211379. <https://doi.org/10.1371/journal.pone.0211379>
- Mind. (2023). *Mental Health and Money Advice: Welfare Benefits*. London: Mind.
- Morin, D., Rivard, M., Crocker, A.G., Boursier, C.P. & Caron, J. (2013). Attitudes on intellectual disabilities. *Journal of Intellectual Disabilities Research, 57*, 279–292. <https://doi.org/10.1111/jir.12008>
- Olson, J., McFerran, B., Morales, A. & Dahl, D. (2021). How income shapes moral judgments of prosocial behaviour. *International Journal of Research in Marketing, 38*(1), 120–135. <https://doi.org/10.1016/j.ijresmar.2020.07.001>
- ONS (Office for National Statistics). (2022). *Labour Force Survey Annual Report 2022*. London: ONS.
- ONS (Office for National Statistics). (2023). *Statistical Bulletin, Disability, England and Wales: Census 2021*. London: ONS.
- Pelleboer-Gunnink, H.A., van Weeghel, J. & Embregts, P.J.C.M. (2021). Public stigmatisation of people with intellectual disabilities: A mixed-method population survey into stereotypes and their relationship with familiarity and discrimination. *Disability and Rehabilitation, 43*(4), 489–497. <https://doi.org/10.1080/09638288.2019.1630678>
- Pennebaker, J.W., Boyd, R.L., Jordan, K. & Blackburn, K. (2015). *The Development and Psychometric Properties of LIWC2015*. Austin, TX: University of Texas at Austin.
- Petersen, M.B., Sznycer, D., Cosmides, L. & Tooby, J. (2012). Who deserves help? Evolutionary psychology, social emotions, and public opinion about welfare. *Political Psychology, 33*(3), 395–418. <https://doi.org/10.1111/j.1467-9221.2012.00883.x>
- Pratto, F., Sidanius, J., Stallworth, L.M. & Malle, B.F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*(4), 741–763. <https://doi.org/10.1037/0022-3514.67.4.741>
- Public Health England. (2023). *Learning Disabilities: “All Our Health Guide” 2015, updated 2023*. London: Gov.UK. <https://www.gov.uk/government/publications/learning-disability-applying-all-our-health/learning-disabilities-applying-all-our-health>
- Roets, A., Kruglanski, A.W., Kossowska, M., Pierro, A. & Hong, Y. (2015). The motivated gatekeeper of our minds: New directions in need for closure theory and research. In Olson J.M. & Zanna M.P. (Eds.), *Advances in Experimental Social Psychology, 52*, pp. 221–283. New York: Academic Press. <https://doi.org/10.1016/bs.aesp.2015.01.001>
- Roets, A., & Van Hiel, A. (2011). Item selection and validation of a brief, 15-item version of the Need for Closure Scale. *Personality and Individual Differences, 50*(1), 90–94. <https://doi.org/10.1016/j.paid.2010.09.004>
- Salvador-Carulla, L., Reed, G. M., Vaez-Azizi, L. M., Cooper, S. A., Martinez-Leal, R., Bertelli, M., Adnams, C., Cooray, S., Deb, S., Akoury-Dirani, L., Girimaji, S. C., Katz, G., Kwok, H., Luckasson, R., Simeonsson,

- R., Walsh, C., Munir, K. & Saxena, S. (2011). Intellectual developmental disorders: towards a new name, definition and framework for “mental retardation/intellectual disability” in ICD-11. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 10(3), 175–180. <https://doi.org/10.1002/j.2051-5545.2011.tb00045.x>
- Scior, K. (2011). Public awareness, attitudes and beliefs regarding mental disability: A systematic review. *Research in Developmental Disabilities*, 32(6), 2164–2182. <https://doi.org/10.1016/j.ridd.2011.07.005>
- Scior, K., Cooper, R., Fenn, K., Poole, L., Colman, S., Ali, A., Baum, S., Crabtree, J., Doswell, S., Jahoda, A., Hastings, R. & Richardson, L. (2022). Standing up for Myself’ (STORM): Development and qualitative evaluation of a psychosocial group intervention designed to increase the capacity of people with intellectual disabilities to manage and resist stigma. *Journal of Applied Research in Intellectual Disabilities*, 35(6), 1297–1306. <https://doi.org/10.1111/jar.13018>
- Seewooruttun, L., & Scior, K. (2014). Interventions aimed at increasing knowledge and improving attitudes towards people with mental disabilities among lay people. *Research in Developmental Disabilities*, 35(12), 3482–3495. <https://doi.org/10.1016/j.ridd.2014.07.028>
- Servidio, R, Cammarata, I.G., Abbate, S.C. & Boca, S. (2024). Classical and modern prejudice toward individuals with intellectual disabilities: The role of experienced contact, beliefs in a just world and social dominance orientation. *International Journal of Environmental Research and Public Health*, 21(3), 355. <https://doi.org/10.3390/ijerph21030355>
- Shree, A., & Shukla, P.C. (2016). Intellectual disability: Definition, classification, causes and characteristics. *Learning Community*, 7(1), 9–20. <https://doi.org/10.5958/2231-458X.2016.00002.6>
- Sibley, C., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, 12(3), 248–279. <https://doi.org/10.1177/1088868308319226>
- Sidanius, J., Levin, S., Liu, J. & Pratto, F. (2000). Social dominance orientation, antiegalitarianism and the political psychology of gender: An extension and cross-cultural replication. *European Journal of Social Psychology*, 30, 41–67. [https://doi.org/10.1002/\(SICI\)1099-0992\(200001/02\)30:1<41](https://doi.org/10.1002/(SICI)1099-0992(200001/02)30:1<41)
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An Intergroup Theory of Social Hierarchy and Oppression*. Cambridge: Cambridge University Press.
- Singh-Manoux, A., Adler, N. & Marmot, M. (2003). Subjective social status: Its determinants and its association with measures of ill-health in the Whitehall II study. *Social Science and Medicine*, 56(6), 1321–1333. [https://doi.org/10.1016/S0277-9536\(02\)00131-4](https://doi.org/10.1016/S0277-9536(02)00131-4)
- Stuart, H. (2006). Mental illness and employment discrimination. *Current Opinion in Psychiatry*, 19(5), 522–560. <https://doi.org/10.1097/01.yco.0000238482.27270.5d>
- Taylor, S. M., & Dear, M.J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7(2), 225–240. <https://doi.org/10.1093/schbul/7.2.225>
- Todor, I. (2014). Need for closure and cognitive inhibition of unwanted or irrelevant information. *Procedia - Social and Behavioural Sciences*, 141, 712–717. <https://doi.org/10.1016/j.sbspro.2014.05.125>
- Trembath, D., Balandin, S., Stancliffe, R.J. & Togher, L. (2010). Employment and volunteering for adults with intellectual disability. *Journal of Policy and Practice in Intellectual Disabilities*, 7, 235–238. <https://doi.org/10.1111/j.1741-1130.2010.00271.x>
- Vrbova, K., Prasko, J., Ociskova, M., Kamaradova, D., Marackova, M., Holubova, M., Grambal, A., Slepecky, M. & Latalova, K. (2017). Quality of life, self-stigma, and hope in schizophrenia spectrum disorders: A cross-sectional study. *Neuropsychiatric Disease and Treatment*, 13, 567–576. <https://doi.org/10.2147/NDT.S122483>
- Vyncke, B., & Van Gorp, B. (2020). Using counter framing strategies to enhance anti-stigma campaigns related to mental illness. *Social Science and Medicine*, 258, 113090. <https://doi.org/10.1016/j.socscimed.2020.113090>

- Werner, S., Corrigan, P., Ditchman, N. & Sokol, K. (2012). Stigma and mental disability: A review of related measures and future directions. *Research in Developmental Disabilities, 33*(2), 748–765. <https://doi.org/10.1016/j.ridd.2011.10.009>
- Yeh, M.A., Jewell, R.D. & Thomas, V.L. (2017). The stigma of mental illness: Using segmentation for social change. *Journal of Public Policy and Marketing, 36*(1), 97–116. <https://doi.org/10.1509/jppm.13>
- Zheng, Q., Tian, C., Jing, GU, Tao, J., Liang, Z., Chen, X., Fang, J., Ruan, J., Ai, Q. & Hao, Y. (2016). Comparison of attitudes toward disability and people with disability among caregivers, the public, and people with disability: Findings from a cross-sectional survey. *BMC Public Health, 16*, 1024. <https://doi.org/10.1186/s12889-016-3670-0>

## Appendix

### The questionnaire

*I. General.* Age category, gender, religiosity (5-point scale “I am 5 = very religious, 1 = not at all religious”). Social status (see text).

Unless otherwise stated all items were scored on 5-point scales: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree.

#### Need for cognitive closure

- (a) I do not like situations that are uncertain.
- (b) I dislike questions which could be answered in many different ways.
- (c) I find that a well-ordered life with regular hours suits my temperament.
- (d) I feel uncomfortable when I do not understand the reason why an event occurred in my life.
- (e) When I am confronted with a problem, I am dying to reach a solution very quickly.
- (f) I would quickly become impatient and irritated if I would not find a solution to a problem immediately.
- (g) I dislike it when a person’s statement could mean many different things.
- (h) I enjoy having a clear and structured mode of life.
- (i) I do not usually consult many different opinions before forming my own view.

#### Social dominance orientation

- (a) An ideal society requires some social groups to be on top and others to be on the bottom.
- (b) Social groups at the bottom are just as deserving as groups at the top (reverse-scored [RS]).
- (c) We should not try to guarantee that every social group has the same quality of life.
- (d) Social group equality should not be our primary goal.
- (e) It would be good if all social groups could be equal (RS).
- (f) Increased social equality is beneficial to society (RS).
- (g) Some groups of people are just more worthy than others.
- (h) It is unworkable to try to make social groups equal.

#### Social distance

- (a) I would feel very comfortable about renting a room in my home to someone like John.
- (b) I would feel very comfortable about working on the same job alongside someone like John.
- (c) I would feel very comfortable about having someone like John as my next-door neighbour.



*Community attitudes*

- (a) In general, I feel favourable towards people like John who have an intellectual disability.
- (b) More emphasis should be placed on protecting the public from people like John. (RS).
- (c) People like John who have an intellectual disability have for too long been the subject of ridicule.
- (d) We need to adopt a far more tolerant attitude towards people like John in our society.
- (e) Increased government support for people like John with an intellectual disability is a waste of time. (RS)
- (f) We have a responsibility to provide the best possible care for people like John who have an intellectual disability.
- (g) It is best for people like John who have an intellectual disability to live in secure and supervised accommodation apart from the rest of the community. (RS)
- (h) Facilities for people like John who have an intellectual disability should be kept out of residential neighbourhoods. (RS)

*Perceived characteristics.* People like John who have an intellectual disability tend to be:

- (a) Irresponsible
- (b) Unpredictable
- (c) Incompetent
- (d) Difficult to deal with
- (e) Threatening
- (f) Dangerous

*Familiarity with intellectual disability (R = .67)*

- (a) Have you ever worked with, lived with, been close to or had a neighbour with an intellectual disability?
- (b) I know a lot about intellectual disability.