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Chapter

# Stigma: An Investigative Analysis of the Irish Public's Knowledge and Perception of Autism

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## Abstract

Levels of stigma toward autism have greatly reduced over the past two decades, particularly since the introduction of various anti-stigma and educational campaigns. However, stigma does remain negatively impacting the lives of people with autism, despite attempts to educate the public about the condition. One country in which this is apparent is Ireland, where, although various autism campaigns have been implemented, and there is evidence of improved attitudes and behavior toward individuals with autism, there still remains a lack of knowledge and understanding with regard to the condition. This chapter presents some novel findings regarding the knowledge, attitudes, and behavior of the Irish public toward autism. In an exploratory analysis, results demonstrate that whilst the Irish public professes an awareness of autism, a deep understanding of the condition is not present. There is also confusion regarding factors that contribute to autism. Reassuringly, there is little evidence of discrimination toward autistic individuals, but there are elements of prejudice that still exist. Details of these findings are outlined and discussed.

**Keywords:** stigma, knowledge, prejudice, discrimination, autism, Ireland

## 1. Introduction

Public stigma is defined as interrelated problems of knowledge (ignorance), attitudes (prejudice), and behaviors (discrimination) [1]. The negative impact of such stigma is multifaceted, posing real-life problems, such as difficulties with employment and access to accommodation [2, 3], reduced access to mental and physical health care [3], reduced life expectancy [4], and self-stigma, low self-esteem, and self-confidence [5, 6]. It has been argued that the emotional impact of stigma can contribute to the physical, psychological, and social burden inherent in many conditions, and can be as great a source, if not a greater source, of suffering than the manifestation of the condition itself [7].

Stigma, by its nature, leads to “othering.” This is evident in Link and Phelan’s [8] description of stigma, which involves labeling, stereotyping, status loss, rejection, and cognitively separating into “us” and “them” groups. Such “othering” takes place in the context of power inconsistencies that allow one group to successfully devalue

another. Stigmatized people are often seen as incompetent. They are blamed for their suffering. They are socially marginalized in ways that could be considered ableist [9].

Over the past couple of decades, the public's conception of autism, and with it, levels of public stigma toward autism, has undergone a monumental shift. Autism was originally defined in the 1940s as a mental illness, a form of childhood schizophrenia and the result of cold parenting. It was viewed as rare and profoundly disabling. More recently, however, this view has changed. The 1980s saw autism described as a pervasive developmental disorder, recognizing the biological underpinnings of the condition. The 1990s introduced the idea that autism exists on a spectrum, from mild to severe. This decade also saw the emergence of the neurodiversity movement. Indeed, the term neurodiversity was coined in 1997 by sociologist Judy Singer, who is herself autistic. Through this lens autism is no longer considered an illness or disability; rather the autistic brain is said to be "wired" differently, leading to an alternative way of viewing and experiencing the world. In essence, it has now been assigned a comparatively positive social value.

To aid this newer understanding of autism, various public educational programs and campaigns have emerged over the past two decades, instructing the public about autism and neurodivergence. These include, amongst others, the "Too Much Information" campaign in the UK, "Say Yes to Autism Acceptance" in Ireland, "Autism Speaks" in the USA and Canada, "ASD Awareness Campaign" in Romania, and "Change Your Reactions" in Australia. The impact of campaigns such as these is positive and noteworthy. Public awareness of Autism has improved in many parts of the world. This is demonstrated by surveys conducted in, for example, the UK [10], France, [11], the USA, Canada [12], Australia [13], and Ireland [14].

However, despite this progress in awareness and education, stigma toward autism still exists. Whilst these surveys demonstrate that the public possesses a basic knowledge of autism, and professes positive attitudes toward people with autism, results also reflect persistent misconceptions about autistic people, and an ensuing desire to distance themselves from autistic individuals [15].

It would thus appear that neither awareness nor scientific advances have fully eradicated the stigma attached to autism, whether explained via conventional psychosocial and psychoanalytic frames or the more recent neurobiological models. It may be that knowledge, in and of itself, is insufficient to shift the deeply entrenched beliefs and associations the public hold toward autism. Instead, perhaps what we need is a deeper understanding and acceptance of the differences observable in autistic people.

Gray [16] considered that autism has uniquely stigmatizing traits due to the atypical social behaviors associated with autism, coupled with a lack of any obvious physical explanation for these behaviors. This in effect confuses people, feeds into the "us and them" mentality outlined by Link and Phelan [8], and potentially leads to a belief that autistic people are somehow responsible for their atypical behaviors. Many studies have corroborated this idea, finding that atypical verbal and nonverbal communication behaviors displayed by autistic people are associated with negative first impressions and reduced intentions to pursue social interaction with the autistic individual [17, 18].

Similarly, stereotypes of autism are predominantly negative. In Wood and Freeth's [19] study, students were asked to list all of the characteristics/traits that society associates with autism. Eight of the 10 most commonly listed traits were negative and included (1) poor social skills, (2) introverted and withdrawn, (3) poor communication, (4) difficult personality or behavior, (5) poor emotional intelligence, (6) awkward, (7) obsessive, and (8) low intelligence. The only two positive traits listed in

the most frequent 10 traits were special abilities and high intelligence. Interestingly, five of the eight negative traits mentioned refer directly to observable communicative behaviors, affirming Sasson's 2017 and 2019 findings [17, 18]. Wood and Freeth's study is not the only study to demonstrate the association between autism and negative stereotypes. The "same chance report" conducted by the autism advocate group "As I Am" in Ireland found that 6 in 10 people associate negative connotations with autism.

So, as anti-stigma campaigns are raising awareness of autism, and improving attitudes toward autism, they are not improving the entrenched negative stereotypes that the public hold about autism. One reason for this might be the methods used by autistic individuals to deal with such stereotypes and stigma—many people strategically use concealment and masking in an attempt to pass as neurotypical. Autistic masking or camouflaging is the conscious or unconscious suppression of natural responses and adoption of alternatives across a range of domains, including social interaction, movement, and behavior [20]. Whilst this often works as an effective coping mechanism against stigma in the short term, it has been associated with late/missed diagnosis, mental health issues, burnout, and suicidality [20]. It also limits public exposure to typical autistic behavior, which limits familiarity. Familiarity is important, as it has been shown to decrease stigma [21]. People like and accept what's familiar [22]. Familiarity has been defined as the interpersonal knowledge of another individual, but it also comprises affective and behavioral components [23]. As such it is separate from factual knowledge—the kind of knowledge typically imparted in the type of educational campaign that we have seen in support of autism over the past two decades.

When we examine levels of autism knowledge globally, we see vast differentiation between countries. Research shows that public knowledge of autism is particularly poor in Saudi Arabia [24], China [25, 26], and Pakistan [27], but much better in countries, such as Australia [28], USA [25, 29], Northern Ireland [30], and the UK [31]. Interestingly the countries that present with the greatest knowledge levels are the same countries in which autism education campaigns have been run, affirming the use and effectiveness of such campaigns. One notable exception to this is Ireland. According to the same chance report, in 2022 only 4 in 10 Irish people claim to have a "good" understanding of autism. In our own recent study, comparing knowledge, attitudes, and behaviors toward autism, schizophrenia, and bipolar disorder in Ireland, we found that compared to schizophrenia and bipolar disorder, the Irish public's knowledge of autism was lacking, even though their attitudes and behaviors toward autistic people were largely positive [14].

This paper is thus a deeper dive into the data gathered on autism in that study, in an attempt to understand what elements of knowledge were proving particularly problematic for the Irish public. Is it awareness of autism, understanding of autism, or stigmatizing beliefs, that are present amongst the Irish public, and what does this mean for autism stigma going forwards?

## **2. Methods**

### **2.1 Participants**

307 participants were recruited via online sites, including social media (such as Twitter and Facebook). Demographic information was gathered on place of residence, gender, age (in 5 years groupings), socioeconomic status (according to the occupation of the head of household), income, education, marital status, and

family structure. Participation was voluntary and anonymous and occurred only after informed consent was obtained. All assessments were conducted in accordance with the National College of Ireland ethics committees' approval, and participants did not receive compensation for participation in the study. On completion of the questionnaire, participants were debriefed and provided with the contact details of the researcher should they have any follow-up questions. In total, participation took approximately 10 minutes.

## 2.2 Measures

All participants completed an online survey titled "Perceptions and representations of mental illness" adapted from research by Durand-Zaleski *et al.* (2012). The questionnaire had 22 questions that asked participants about their knowledge, attitudes, and behaviors toward mental disorders in general, and specifically toward schizophrenia, bipolar disorder, and autism. The data presented in this chapter draws solely on the responses about autism. A detailed description of the questionnaire employed can be found in our previously published paper titled "Knowledge, attitudes and behaviors toward schizophrenia, bipolar disorder and autism in Ireland: A pilot study [14]."

In brief, the questionnaire aims to explore whether individuals understand the "terminology" of autism and what actually constitutes the condition.

The survey comprised questions designed to capture data on key themes examined in previously published questionnaires exploring knowledge, attitudes, and beliefs [32–38]. Key domains targeted include:

*Knowledge* explored participants' knowledge of autism in terms of (a) prevalence (b) causes (e.g., genetic vulnerability, external stressors), (c) controllability (by the individual themselves or via different treatments), and (d) stability and predictability.

*Attitudes* were explored using questions that assessed autism terminology.

*Behavior* was explored using questions about participants' reactions, such as avoidance or social distancing.

The items were formatted to include "yes/no/do not know" questions, rank ordering of statements, or Likert scale ratings. Likewise, some questions about predicted behaviors (e.g., would the respondent be prepared to work alongside someone with bipolar disorder, schizophrenia, or autism) assessed differences in reaction to, or degree of discrimination toward, each disorder.

## 2.3 Design

This study used a cross-sectional design. The three stigma components of knowledge, attitudes, and behaviors were examined. Participants were given a score of 1 for each correct answer to five questions asking about knowledge and these were summed to calculate an overall knowledge score. Participants were given a score of one-to-three based on whether they agreed or disagreed with each of eight statements about attitudes, and these were summed to calculate an overall attitudes score. Participants were also given a score of one-to-three based on whether they agreed or disagreed with each of three statements about behaviors, and these were summed to calculate an overall behaviors score. For knowledge, a higher score meant greater knowledge of a particular diagnosis. For both attitudes



and behaviours, a higher score meant greater positivity toward a particular diagnosis. Further details of how the total scores were calculated can be found in the appendices.

## 2.4 Procedure

Study participants completed the survey online using Google Forms. Responses were saved as a Microsoft Excel .xlsx file, which was then converted to an IBM SPSS statistics .sav file for descriptive statistics and calculation of variables of interest.

## 3. Results

### 3.1 Sample characteristics

The sample was 75% female, 23% male, and 2% who identified as other (see **Table 1**). 42% of respondents were under the age of 25, 45% of respondents were aged between 26 and 49, and 13% of respondents were aged over 50. About 60% of respondents had received tertiary education, and a quarter of respondents had an income level of between 1000 and 2500 euro. The majority of this sample were single, employed, and had no children living at home.

Demographic		Frequency	Percent
Gender	Male	70	23
	Female	231	75
	Other	6	2
Age	18–25	124	40
	26–35	65	21
	36–49	77	25
	50–65	37	12
	66+	4	1
Occupation	Employed	165	54
	Student	85	28
	Student & employed	4	1
	Homemaker	18	6
	Unemployed	28	9
	Retired	3	1
Marital status	Single	177	58
	In a relationship	12	4
	Cohabiting	12	4
	Married	86	28
	Separated	6	2
	Divorced	9	3
	Widowed	5	2

Demographic		Frequency	Percent
Family structure	No children at home	181	59
	1–2 under 15	77	25
	1–2 over 15	21	7
	3+ under 15	12	4
	3+ over 15	14	5
Level of education	Primary	45	15
	Junior certificate	13	4
	Leaving certificate	53	17
	Certificate/Diploma	5	2
	Degree	108	35
	Masters	73	24
	PhD	5	2
Income level	0	19	6
	Social welfare	43	14
	10,000–25,000	78	25
	26,000–35,000	54	18
	36,000–50,000	47	15
	51,000–99,000	37	12
	100,000+	11	4
	Retired	1	1

**Table 1.**

*Sociodemographic characteristics of sample, N = 316. Missing responses from each category are those that preferred not to answer that question.*

### 3.2 Awareness of autism

Awareness of autism was measured by asking the following question: For autism, please tick one of the following options: (a) you know the name and are able to describe it, (b) you know the name without being able to describe it, or (c) you have never heard of the illness. Results demonstrate that 99% of respondents recognized the term autism. However, when respondents were asked if they could describe some of the characteristics of autism, the proportions decreased to 76%.

To understand whether a particular subset of the sample might have less awareness of autism than the rest, associations between awareness and demographic variables were assessed via a series of Pearson chi-square tests. We found no association between awareness of autism and the demographic variables of education, income level, and family structure. However, an association was found between awareness of autism and the demographic variables of gender, age, and marital status, as depicted in **Table 2**, with males, younger age groups, and single people demonstrating less awareness of autism. It should be noted that age and marital status are associated (Pearson chi-square: 179.928;  $p = <0.001$ ), most likely accounting for the marital status finding.

Demographic variable	Pearsons chi-square	P value	Category that demonstrated significantly less awareness of autism
Gender	25.159	<0.001	Males
Age	31.497	0.002	18–25 years
Marital status	35.87	0.007	Single people

**Table 2.**  
 Demographic variables positively associated with awareness of autism.

### 3.3 Understanding of autism

As can be seen in **Table 3**, the majority of participants believe that autism is not contagious, does not worsen with time, involves lifelong treatment, causes motor disabilities, and expresses in young adults. The majority of participants did not know that autism could be diagnosed early. There was also confusion over the hereditary nature of the condition, and whether or not autism could be categorized alongside other conditions.

Responses to the question of autism prevalence can be found in **Table 4**, with the majority of participants believing that autism occurs at a prevalence of 10%.

### 3.4 Perception of factors that contribute to autism

As can be seen in **Table 5**, despite confusion in the previous question regarding the hereditary nature of autism, most participants believe that genetics contribute to the condition (63%). Other non-environmental factors, age and gender, are also chosen quite often as contributory factors. Many participants believe that the environmental factors of “conditions of life” and “parent/child relationships” contribute to autism, whilst fewer participants think that environmental factors, such as psychological or emotional shock, drugs, alcohol, and food, play a role in the condition.

Autism	Agree n (%)	Disagree n (%)	Do not know n (%)
Is contagious	5 (2)	299 (95)*	7 (2)
Worsens with time	45 (15)	200 (64)*	63 (20)
Can be diagnosed early	0*	10 (3)	304 (96)
Is a condition with which you can live normally with treatment	183 (58)*	90 (29)	39 (12)
Involves lifelong treatment	219 (70)	53 (17)*	37 (12)
Is hereditary	103 (33)*	119 (38)	87 (28)
Is a condition like any other	124 (40)*	129 (41)	55 (18)
Often causes motor disabilities	165 (52)*	77 (25)	68 (22)
Expresses in young adults	218 (69)	59 (19)*	33 (11)

\*This denotes the correct answer.

**Table 3.**  
 Participants' understanding of autism (1% of participants did not answer all questions).



In your opinion, what percentage of Irish people have been, are or will 1 day be affected by autism	1% n (%)	10% n (%)	25% n (%)	50% or more n (%)
Autism	72 (23)*	148 (47)	67 (21)	19 (6)

\*Denotes the closest to the correct answer. In 2022, the official percentage in Ireland is 1.5%.

**Table 4.**  
Understanding of the prevalence of autism.

Factors that contribute to autism	n(%)
Genetic factors	198 (63)
Food	38 (12)
The conditions of life (living environment, lifestyle, etc.)	107 (34)
The parent/child relations	91 (29)
Age	86 (27)
The sex of the individual	68 (22)
Psychological or emotional shock	59 (19)
Drug or alcohol	55 (17)
You do not know	45 (14)

**Table 5.**  
Number of participants who believe the factors listed contribute to autism (percentages are rounded to the nearest whole number).

### 3.5 Attitudes toward people with autism

Overall participants demonstrate a positive attitude toward autism. Most participants feel that people with autism are able to assume the responsibility of a family. The majority of participants also disagree that people with autism are left numbed by their treatment, cannot live with a partner, must be isolated from society, require daily assistance, cannot hold down a job, and represent a danger to self and others. See **Table 6** for further details.

### 3.6 Behavior toward people with autism

Very little discrimination toward people with autism was demonstrated in the sample (see **Table 7**). Most participants would happily work with, live with, and allow children to receive education with someone who had Autism.

### 3.7 Opinion on source of autism information

Participants are dissatisfied with the level of information they are getting from the media, their doctor, the medical community, and governmental agencies, generally feeling either too informed or not informed enough by these sources. In particular, participants want to hear more from governmental agencies and the media and less from the medical community, including their doctor (see **Table 8**).

<b>A person with Autism...</b>	<b>Agree n (%)</b>	<b>Disagree n (%)</b>	<b>Do not know n (%)</b>
...Is able to assume the responsibility of a family	163 (52)	93 (29)	56 (18)
...Must follow treatments that leave them numbed	36 (11)	207 (66)	65 (21)
...Cannot live with a partner	20 (6)	249 (79)	39 (12)
...Cannot live in society, must be isolated	12 (4)	289 (92)	8 (3)
...Needs to be assisted in his/her life everyday	110 (35)	159 (50)	40 (13)
...Cannot hold down a job	28 (9)	247 (78)	32 (10)
...Represents a danger to self (suicide, prison, indebtedness...)	34 (11)	241 (76)	35 (11)
...Often represents a danger to others (murder, rape, violence...)	19 (6)	253(80)	37 (12)

**Table 6.** *Participants' perception of social handicap associated with autism (2% of participants did not answer all ques; percentages are rounded to nearest whole number).*

<b>Question</b>	<b>Yes happily n (%)</b>	<b>Yes if I had to n (%)</b>	<b>Absolutely not n (%)</b>
Would you work with someone who had autism:	249 (79)	57 (18)	5 (2)
Would you allow your children to be in the same class as a child with autism	264 (84)	42 (13)	6 (2)
Would you live under the same roof as a loved one with autism	246 (78)	57 (18)	7 (2)

**Table 7.** *Acceptance level of autism as measured by behavior toward people with autism.*

<b>Do you think you are too informed, adequately informed, or not informed enough about autism by ...</b>	<b>Too informed n (%)</b>	<b>Sufficiently informed n (%)</b>	<b>Not informed enough n (%)</b>
The media	30 (10)	114 (36)	166 (53)
Your doctor	146 (46)	23 (7)	140 (44)
The medical community	147 (47)	21 (7)	142 (45)
Governmental agencies	96 (30)	7 (2)	206 (65)

**Table 8.** *Perceptions of information sources on autism.*

### 3.8 Correlation between knowledge, attitudes, and behavior toward autism

Finally, we analyzed via Pearson's correlation coefficient, whether there was a correlation between the variables of knowledge, attitudes, and behaviours toward autism. We were interested in this because participants appeared to perform least well on questions of knowledge, and better on question relating to attitudes and behavior.

Measure	1	2	3
1. Knowledge	1	.143*	.145*
2. Attitude	.143*	1	.402**
3. Behavior	.145*	.402**	1

\*Correlation is significant at the 0.05 level (2-tailed).

\*\*Correlation is significant at the 0.01 level (2-tailed).

**Table 9.**

*Correlation between the variable knowledge, attitude, and behavior toward autism.*

We wanted to know if this poor knowledge was likely to impact subsequent attitudes and behavior. To test this, we used the total scores of these variables, as outlined in the methods section under “design” for this analysis. All three variables correlated with each other, as can be seen in **Table 9**.

#### 4. Discussion

This study examined the knowledge, attitudes, and behaviors of 307 adults in the Republic of Ireland toward autism. Overall, the findings reveal a gap in knowledge about the condition, leading to the formation of certain unhelpful attitudes, although attitudes overall were positive. Future intended behavior toward autistic people were also very positive, with 98% of respondents stating they would be happy to work, live, and educate their children, with someone with autism. As the element of stigma that was most obviously impaired in our sample was knowledge, much of this discussion will be spent in consideration of these knowledge findings and what they mean for stigma and autism going forward.

In considering participant demographics and autism knowledge, we found that young single men have less knowledge on autism than other demographic groups. This discovery corroborates other findings in the literature. Previous research demonstrates that females are more aware of autism than males [24]. One possible reason for this is that females are more interested in studying medical information than males [13, 28, 39, 40], leading to a substantial difference in knowledge between males and females, as well as a stronger knowledge of specific illnesses and conditions in females [28]. Women speak to each other more about medical matters and are more engaged in using the internet for health-related information searching, using it for social motives and enjoyment. They also judged the usability of the internet medium and of the information gained by health information searches higher than men did. Overall, the research suggests that women have a higher personal disposition of being well-informed on medical matters [40, 41]. This might also partially explain why young single men have the least knowledge of autism in our study. Men who are in relationships, particularly long-term relationships (which are naturally associated with age) are more likely to enter into discussions on health-related matters with their partner, thus acquiring knowledge. Outside of relationship status, however, age and gender have both been reported as determinants of health-related knowledge, as have education and income (SES), which are of course associated with age [42].

Interestingly, when asked about preference for a source of autism information, participants as a whole expressed a preference for hearing from governmental agencies and the media. Almost half of the respondents also indicated that they receive

too much information from the medical community. Together, these findings might suggest that people want to hear less medical-related facts and information, and more person-centered information; the kind of knowledge gained from hearing personal stories. Storytelling has been touted as the best way to make the leap from information to knowledge, and as the best way to capture and transfer tacit knowledge [43]. Ramasubramanian [44] confirms that storytelling in news-related media has a positive impact on reducing negative stereotypes in readers, and recent research confirms that storytelling narratives, particularly those constructed with the first-person point of view, are effective in reducing stigma [45, 46]. There is still a body of work to be done in understanding which elements of storytelling are most impactful, and how government agencies and the media can best employ storytelling narratives when presenting information on autism, but it is a promising avenue for increasing autism knowledge in the future.

If we delve deeper into the type of knowledge questions participants struggle with in our study, a general picture of an autistic person emerges as a youth who has motor difficulties, requires lifelong treatment, and is impacted by factors, such as genetics, their relationship with their parents, their living conditions, gender, and age. Certain facets of this description are likely to be hangovers from past misinformation. Autism was originally viewed as profoundly disabling and the result of cold parenting. Also, much of what society at large learns about autism is produced by representations of autism in novels, TV series, movies, or autobiographies [47], and many of these representations are misleading. Cognitive psychology informs us that when asked about a topic with which we lack familiarity, our brains tend toward cognitive biases, which are unconscious and automatic processes designed to make decision-making quicker and more efficient. They are, however, erroneous in nature, leading to information misinterpretation and reduced accuracy [48]. One such bias is the availability heuristic. According to Tversky and Kahneman [49], the availability heuristic occurs when people judge the frequency of events in the world by the ease with which examples come to mind. As such, if a certain message is frequently promulgated, then that is what our brain will latch on to when we think of any given concept, even if the message is incorrect. In this way, repeatedly hearing that parenting is associated with autism, for example, makes the connection between autism and parenting stronger and more easily accessible. Thus, to eradicate these errant messages, we must either cease their production or increase the output of correct information.

After all, information not only impacts our thoughts and beliefs, it impacts our attitudes and behaviors also. As our study demonstrates, knowledge (ignorance) is correlated with attitudes (prejudice) and behavior (discrimination). This correlation finding is not novel, having been reported by numerous studies across various domains [50–52]. Although we found all three factors to be intercorrelated, many studies report that the strongest associations lie between knowledge and attitudes and attitudes and behavior [53, 54]. This is interesting, because we found of the three, knowledge was the poorest in our sample, followed by attitudes. Behavior was actually very positive, with only 2% of participants reporting negative intended behavior toward autistic people. Indeed, we can see the connection between knowledge and attitudes in our sample by looking closely at the attitude statements that participants agree with and comparing them to knowledge gaps. For example, only half of the respondents feel that autistic people can assume responsibility for a family and a full 35% believe that autistic people need to be assisted in their life every day. This corresponds with knowledge gaps or beliefs that autistic people require lifelong treatment, and that autism is somehow different from other types of conditions.

One limitation of this study relates to sample demographics. Most of the participants had an income less than or equal to €25,000 (44%) and were aged between 18 and 25 (40%). As such, the sample is not fully representative of the Irish public as a whole. To address this, we are currently running a full-scale, population-representative study in Ireland, investigating the public's knowledge, attitude, and behavior toward various conditions, including autism. This will hopefully shed light on some of the unanswered questions remaining after this initial exploratory analysis.

## **5. Conclusions**

In conclusion, this study showed that in our young Irish sample, whilst attitudes and behaviors toward autistic people are largely positive, there is evidence of knowledge gaps that should be addressed, as they are potentially impacting attitudes toward the condition. Respondents relayed a desire to learn more information from governmental agencies and the media, and many felt that too much information was received from medical quarters. As such, stigma policy and campaigns targeted toward young people, and young men in particular, could benefit from a focus on increasing familiarity and understanding, possibly through the medium of storytelling and personal narrative. It is yet unclear whether these same educational approaches are desired across the Irish population as a whole. To answer this, we are currently conducting a full-scale, population-representative study further examining autism stigma in an Irish context.

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### **A. Appendices Procedure for calculating total scores for knowledge, attitudes, and behavior**

*To calculate knowledge*, participants were given a score of 1 for each correct answer to the following sub-questions.

Autism...:

1. .... Is contagious (false).
2. .... Is a condition with which one can live normally, with treatments (true).
3. .... Involves lifelong treatment (false).
4. .... Is a hereditary condition (true).



5. .... Is a condition like any other (true).

Where participants gave an incorrect answer or said “I do not know,” they were given a score of 0. Correct scores were added to give a total knowledge score.

*To calculate attitudes*, each of the sub-questions was used:

### **A person with autism...**

1. ... Is able to assume the responsibility of a family
2. ... Must follow treatments that leave them numbed
3. ... Cannot live with a partner
4. ... Cannot live in society, must be isolated
5. ... Needs to be assisted in his/her life everyday
6. ... Cannot hold down a job
7. ... Represents a danger to herself (suicide, prison, and indebtedness)
8. ... Often represents a danger to others (murder, rape, violence ...)

For sub-question 1, a higher agreement was recorded as a higher score, with “Agree” recorded as 3, “I do not know” recorded as 2, and “Disagree” recorded as 1.

For sub-questions 2 to 8, a lower agreement was recorded as a higher score, with “Agree” recorded as 1, “I do not know” recorded as 2, and “Disagree” recorded as 3. Scores were added to give a total attitudes score.

*To calculate behavior*, Questions 12, 13, and 14 of the questionnaires were used:

12. Would you work with someone who had autism?

13. Would you allow your children to be in the same class as a child with autism?

14. Would you accept to live under the same roof as a loved one if s/he had autism?

Higher agreement was recorded as a higher score, with “Yes happily” recorded as 3, “Yes if I had to” recorded as 2, and “Absolutely not” recorded as 1. Scores were added to give a total behaviors score.

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