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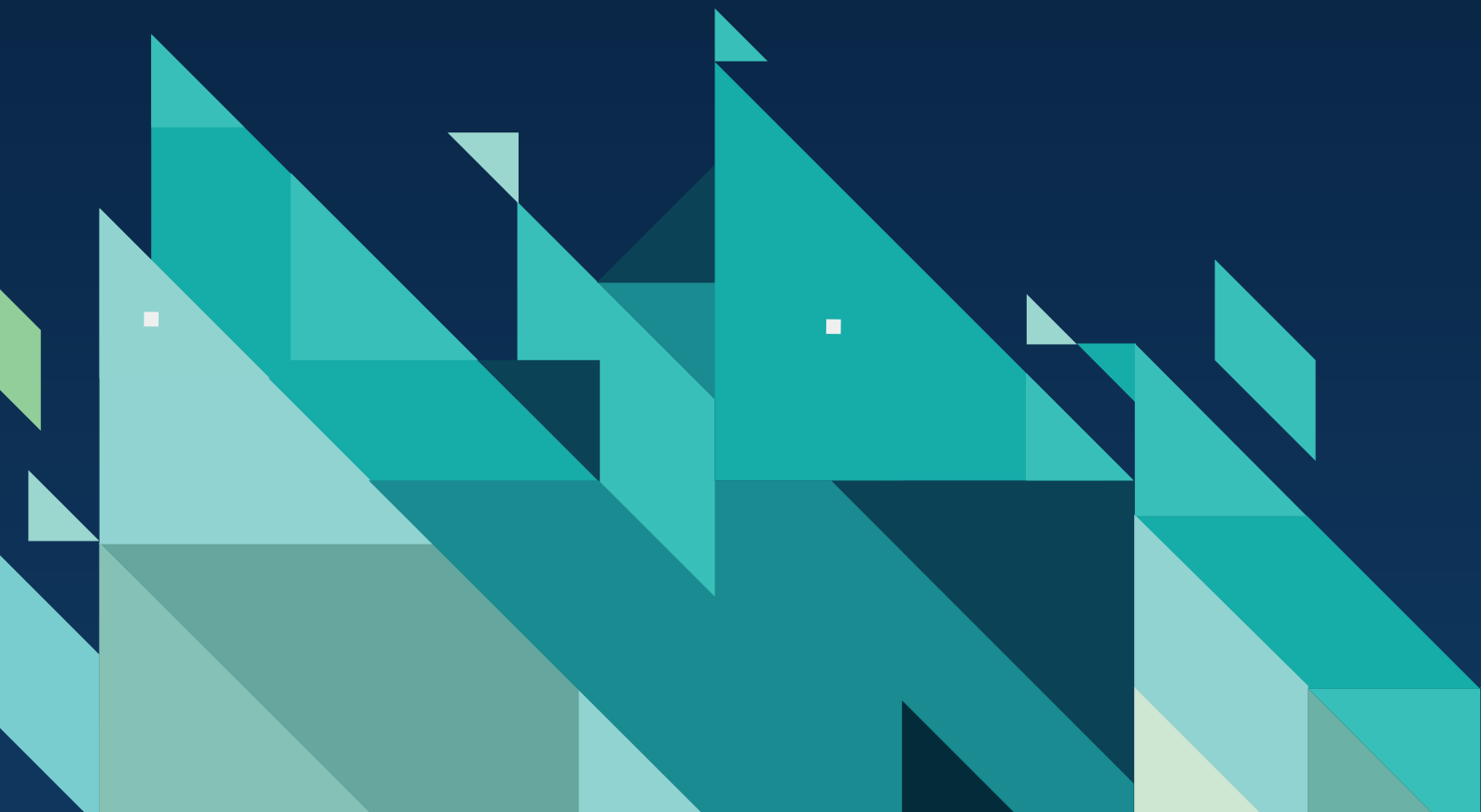
Perceived discrimination and young people's health and wellbeing in Ireland: A longitudinal analysis

DANIEL CAPISTRANO, HELEN RUSSELL AND EVA SLEVIN



PERCEIVED DISCRIMINATION AND YOUNG PEOPLE'S HEALTH AND WELLBEING IN IRELAND: A LONGITUDINAL ANALYSIS

Daniel Capistrano

Helen Russell

Eva Slevin

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The authors

Daniel Capistrano is a Research Officer at the Economic and Social Research Institute (ESRI). Helen Russell is a Research Professor and head of the Social Research Division at the ESRI and an Adjunct Professor at Trinity College Dublin (TCD). Eva Slevin is a Research Assistant in the Social Research Division at the ESRI.

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Abbreviations

AUDIT	Alcohol Use Disorders Identification Test
BAME	Black, Asian and minority ethnic
CES-D	Centre for Epidemiological Studies Depression Scale
CSO	Central Statistics Office
EDS	Everyday Discrimination Scale
EU	European Union
GUI	Growing Up in Ireland
LGBA+	Lesbian gay bisexual asexual+ acronym based on categories included in the GUI survey
LGBTIQ+	Lesbian gay bisexual transgender intersex queer+ acronym used in policy documents
LLC	Long-lasting condition
OLS	Ordinary least squares
SMFQ	Short Mood and Feelings Questionnaire

Executive summary

Background

Discrimination, defined as the unfair treatment of groups based on intrinsic characteristics, has pervasive and long-lasting consequences for the individuals who experience it. Previous research has found that individuals who experience discrimination have worsened physical and mental health outcomes (Williams et al., 2019; Schmitt et al., 2014; Benner et al., 2018). Furthermore, Schmitt et al. (2014) find that there is a stronger relationship between discrimination and poor wellbeing for children than for adults. Young people's self-esteem and identities are continually developing at this stage, and discrimination may have a broader impact on their development (Marks et al., 2015).

This research fills an identified gap in studying discrimination using the Growing Up in Ireland (GUI) data (Philippe et al., 2025). GUI is a longitudinal study of children and their families in Ireland. We focus on Cohort '98, born in 1998, and explore their experiences of discrimination at the key development periods of age 17 and 25. Discrimination is measured in this research through perceived discrimination, the individual's perception that they are treated less favourably than others (Paradies, 2006). The GUI dataset collects this using the Everyday Discrimination Scale (EDS) (Williams et al., 1997). The scale used in the GUI survey consists of five items, and asks respondents[1]:

> In your day-to-day life, how often have any of the following things happened to you:
>
> - You are treated with less courtesy or respect than other people
> - You receive poorer service than other people at restaurants or stores
> - People act as if you are not smart

[1] The response categories are: 'Almost every day', 'At least once a week', 'A few times a month', 'A few times a year', 'Less than once a year' and 'Never'.

- People act as if they are afraid of you
- You are threatened or harassed

Those who record any of these experiences more than a few times a year are also asked what they think was the reason for this treatment (e.g. age, gender, ethnicity, appearance, education/income level). Perceived discrimination as measured by the EDS differs from the Irish legal definition of discrimination, which protects individuals from discrimination in accessing goods and services and in the workplace under specific grounds which does not include appearance, social background, or in the case of those aged under 18, age-related discrimination.

The GUI dataset presents a unique opportunity to study how young people experience discrimination over time. The longitudinal nature of the data allows for examination of the prevalence of perceived discrimination across key developmental stages, and examination of how this discrimination relates to key outcomes. In this study, we use five different variables to examine these outcomes: subjective general health, life satisfaction, self-esteem, depression and alcohol consumption. These variables were chosen as they reflect different dimensions of health and wellbeing, considering data availability and policy relevance.

Factors contributing to perceived discrimination among young people

At the age of 17, the majority of Cohort '98 (76%) report that they experienced at least one of the EDS categories at least a few times a year. This reduces to 66.4 per cent at age 25. At 17, most of the group who had perceived discrimination felt that this was related to their age (63%) followed by appearance (54%) and gender (40%). Gender is the most cited ground for discrimination at 25 (41% of those who reported discrimination).

The average EDS score decreases between the age of 17 and 25. Scores differed across characteristics and across time. In particular,

for sex.[2] At 17, young men recorded higher EDS scores than young women but this switched around at 25. At 17, young men were more likely to report that people act as if they are afraid of you (42.2% of those that reported discrimination) than women (26%). Among those recording any discrimination at age 17, the proportion who report they were threatened or harassed was 27 per cent for men and 17.6 for women, and this pattern then reverses at age 25 to 28.6 per cent of men and 35.5 per cent of women. This points to a concerning trend in how both men and women are perceived to be treated during these key development stages.

We examine the socio-demographic factors associated with higher discrimination scores at 17 and 25 using statistical models. These consider a range of characteristics that are protected by equality legislation (ethnicity, disability, sex/gender, sexual orientation, etc.), as well as factors such as family social class background and time spent online. This latter control is used as a proxy for exposure to online discrimination.

The first set of models examine the relationship between the socio-demographic factors outlined above and EDS score at the relevant age. At 17, females have lower scores compared to males, while transgender and LGBA+[3] young people record higher scores than their cisgender and heterosexual counterparts. Those with a disability (that hampers daily activities) and with a long-lasting condition (not hampered) have significantly higher EDS scores at 17 compared to those who are non-disabled.

Young people with no religion have higher EDS scores than their Catholic counterparts. Citizenship is also significant in the model but unexpectedly those who are not Irish citizens have lower EDS scores than their Irish counterparts. Furthermore, we find that large amounts of time spent online is associated with higher EDS scores, with those who spend between 0 and 3 hours per day online reporting lower EDS scores than those who spend more than three hours online. However,

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[2] Sex is used here rather than gender as the gender question changes between waves, transgender status is included as an additional control. Where young men/women are referred to, this references sex as reported by the young person.

[3] Lesbian/gay, bisexual, asexual, and other (including questioning).

those who spend no time online report higher EDS scores than those who spend more than three hours online.

In the models examining characteristics associated with EDS scores at age 25, there are fewer significant factors. At age 25, due to attrition as young people move away from family homes or migrate, there is a much smaller sample size. At 25, similar to 17, LGBA+ young people have higher discrimination scores. However, being transgender is not significant, this may partly be due to small numbers. At 25, young people from a minority ethnicity have higher EDS scores, potentially reflecting a greater occurrence of ethnic or racial discrimination as the young person moves into the workplace or better measurement of ethnicity. Disability status remains a significant predictor of higher perceived discrimination at 25. Time spent on screens of any sort for leisure is not significant. Finally, EDS scores at 17 are a significant predictor of EDS scores at 25, showing the risks of perceived discrimination persists over time: if an individual is discriminated against at 17, they are likely to continue experiencing discrimination at 25.

Perceived grounds of discrimination

Individual characteristics are also associated with the perceived grounds of discrimination. Female 17-year-olds are more likely to report gender discrimination and age discrimination than males, and less likely to report discrimination on the grounds of ethnicity, appearance and accent. Being transgender is significantly associated with higher odds of reporting discrimination on the grounds of gender, sexual orientation and disability. Being LGBA+ is associated with higher odds of reporting discrimination on the grounds of sexual orientation or appearance. Having a disability that restricts daily activities is significantly related to disability-based discrimination and appearance-based discrimination. Those who are not Irish citizens or have an ethnic minority parent are more likely to report ethnic/racial discrimination. Compared to professional/managerial social class, belonging to any other social class is significantly associated with higher ethnic discrimination, and discrimination on the grounds of sexual orientation and appearance.

At 25, we find fewer characteristics significantly associated with reporting discrimination on specific grounds. Being female is

associated with higher odds of gender discrimination and age discrimination, and lower odds of ethnic and sexual orientation discrimination. LGBA+ status is associated with higher odds of reporting discrimination on the grounds of sexual orientation and minority ethnic status is significantly associated with higher ethnic discrimination, as would be expected. Being from a rural background is associated with lower odds of perceived discrimination based on ethnicity, age, and accent.

Outcomes of discrimination at age 25

We examine the impact of discrimination on a range of outcomes: general health, life satisfaction, self-esteem, depression, and problematic alcohol consumption. We examine this using both the EDS score at 25 and a derived variable reflecting change in EDS between 17 and 25, as well as using a binary variable indicating whether the participant perceived any discrimination at age 25. In each statistical model, we control for the relevant condition at 17 to account for each individual's prior level of health and wellbeing.

Higher perceived discrimination at 25 is associated with lower odds of reporting 'very good' or 'excellent' general health even when health at 17 is held constant. As expected, we find that health status at 17 is positively correlated with health status at 25.

The level of life satisfaction at 17 is a significant predictor of life satisfaction at 25. Controlling for other characteristics and prior life satisfaction, there is a clear pattern of decreasing life satisfaction as perceived discrimination increases.

Self-esteem at 17, measured using the Rosenberg Self-Esteem Scale, is also a significant predictor of self-esteem at 25. The EDS score at 25 is also a significant predictor of lower self-esteem.

Depression is measured differently at 17 and 25, nevertheless depression at 17 measured using the Short Mood and Feelings Questionnaire (SMFQ) is a significant predictor of depression score at 25 using the CES-D scale for measuring adult depression. We find that EDS is significantly associated with higher depression scores, and higher predicted probabilities of clinically significant levels of depression.

The literature has identified that health behaviours are one pathway through which discrimination leads to poorer mental and physical health. The model shows a positive correlation between perceived discrimination at 25 and alcohol consumption at 25 controlling for alcohol consumption at 17.

Finally, as a robustness check of these findings, we take advantage of the longitudinal nature of this study and examine if the change in EDS score between 17 and 25 is also related to the health and wellbeing outcomes above. We find that an increase in EDS score is associated with worse general health, lower life satisfaction, lower self-esteem, and higher depression score. Alcohol consumption is the only outcome for which the change in EDS score is not a statistically significant predictor.

Conclusions and implications

The prevalence of everyday discrimination and its association with poorer health and wellbeing outcomes among young people outlined in this report underlines the importance of tackling discrimination in society. Direct measures to address discrimination include legal measures such as equality and hate crime legislation; however, other research shows that few cases of discrimination are reported through formal channels and fewer still will be the subject of legal cases (EUFRA, 2024d). Therefore, legislation may best serve as a deterrent to discriminatory behaviour by institutions and individuals. There have been recent calls to add new grounds for discrimination to Irish legislation, including socio-economic background. The results presented in this report lend support to the call to include socio-economic status as a discrimination ground.

Recent policy strategies such as the National Action Plan Against Racism 2023–2027, the National Strategy for Women and Girls 2025–2030, the National LGBTIQ+ Inclusion Strategy II 2024–2028, and the National Human Rights Strategy for Disabled People 2025–2030 contain a range of actions and commitments to address discrimination, but the key issue will be resourcing and implementation. Evaluating the impact of the strategy measures is also crucial. The availability of quality data disaggregated by protected characteristics (such as ethnicity, sexual orientation, disability, etc.) and of discrimination is essential for monitoring outcomes. This will be

supported by the recently published Equality Data Strategy, which highlights the importance of disaggregated and harmonised equality data (Government of Ireland, 2026). Policies at an organisational level, including workplaces, schools and colleges are also essential to prevent discrimination.

While preventing discrimination should be the primary objective, policy can also tackle the consequences. For example, extended wellbeing and mental health supports for young people is important especially in light of growing demand for mental health services and strains in current provision (Jigsaw, 2026).

Chapter 1
Background

Discrimination refers to the unfair treatment of groups based on a set of intrinsic characteristics, such as disability, sexual orientation or race. Despite the existence of legislative protections there is significant evidence of experiences of discrimination among the adult populations. A wide body of international research has also outlined the adverse consequences of discrimination for affected individuals, including the detrimental impact of discrimination on individuals' wellbeing and mental health (see section 1.3).

This research draws on the Growing Up in Ireland (GUI) cohort study, a national longitudinal study which surveys young people throughout their lives. These young people are asked questions about their perceived discrimination at ages 17 and 25, using the Everyday Discrimination Scale (EDS). The longitudinal nature of this data means that any changes in the rates of perceived discrimination as the young person ages can be observed. It also allows for this research to examine the impact of health and wellbeing outcomes at age 25 controlling for earlier variance. This research is a first analysis of perceived discrimination and outcomes among the GUI cohorts, addressing a gap identified in a recent review of GUI outputs conducted by Philippe et al. (2025).

This first chapter will discuss how previous research has measured discrimination in the Irish and European context. It will also examine existing research on health and wellbeing consequences of perceived discrimination.

1.1 Defining and measuring discrimination

The academic literature distinguishes between stereotypes which are beliefs about a group (cognitive), prejudice which refers to feelings about a group (affective) and discrimination which is an action (behavioural) (Allport, 1954; Nelson, 2025). This study is concerned with discrimination. It is defined in Irish law as the less favourable treatment of a person due to being a member of or being associated with someone who is a member of any of the groups defined under the Equal Status Act 2000. This treatment must be perceived as less

favourable, and the interpretation of this is rooted in historic norms and values.

Discrimination is frequently confused with prejudice in the public discourse. As argued by Quillian (2006) most definitions proposed are consistent with a seminal formulation of Allport (1954, p.10) conceptualising prejudice as '…an antipathy based upon a faulty and inflexible generalization'. These two aspects of prejudice, affective ('antipathy') and cognitive ('based upon a generalization'), are characteristic of an individual attitude or emotion towards others. In contrast, discrimination is expressed through people's behaviour, (Quillian, 2006).

Discrimination can also be distinguished between individual and structural discrimination, the latter referring to discrimination built into societal structures through historic norms and prejudices that limit minorities' access to opportunities and resources. Structural discrimination may be more difficult for an individual to perceive, as this relates to an ongoing experience. The EDS does not capture this structural dimension directly, although structural discrimination can be expressed through an individual's everyday experiences (Groos et al., 2018). Depending on the social and historical context, where someone is treated differently than others due to a minority status, this might indicate a structural cause.

Complete measurement of discrimination is limited by data collection, where there is a lack of valid and comparable data across countries and groups. Surveys often rely on the subjective reporting of discrimination, which can be affected by the respondent's understanding of what constitutes discrimination, as well as the wording of the question. It is also often difficult to objectively determine the reasons for unfair treatment.

Research on discrimination uses a variety of methods to isolate the effects and occurrence of discrimination. This includes traditional non-experimental decomposition approaches and field experiments (Verhaeghe, 2022). The former approach often uses surveys to examine, for example, the impact of discrimination on wages. An issue in this approach is determining how much of the residuals are explained by discrimination, and a lack of causal evidence between discrimination and differing wages. Comparatively, experiments

conducted either in controlled environments (e.g. a laboratory) or in the field employ a comparative approach to isolate the effects of discrimination. Field experiments are used to assess discrimination in recruitment (Lippens et al., 2023), or housing (Flage, 2018). Correspondence experiments will send out job or housing applications from minority applicants and matching majority counterparts. Callback rates for two identical (aside from name) applicants can be compared, isolating the impact of discrimination on e.g. hiring.

A core source of data on discrimination is self-reported survey data, such as the EU Survey on Immigrants and Descendants of Immigrants[4] (EUFRA, 2025a). Asking individuals directly about their experiences of discrimination has a number of advantages. Unlike experiments or audit studies, which are limited to discrete events/environments, surveys can ask respondents about the occurrence and experience of specific treatments in a range of environments. Prejudice and stereotypes can also be measured using surveys of the general population, aiming to investigate attitudes towards specific groups. Surveys of perceived discrimination are particularly useful to explore discrimination experiences across countries and over time, if asked in a consistent manner (Cave et al., 2020).

The Everyday Discrimination Scale (EDS), as implemented in the GUI, is commonly used in this type of survey research (Harnois et al., 2022; Lawrence et al., 2022; Seabra et al., 2024). The psychometric attributes of this scale have been widely evaluated and found to produce robust evidence of experiences with discrimination (Slemon et al., 2022). However, self-reported discrimination may suffer from some measurement errors. Individuals may interpret the same behaviour in different ways, and some forms of discrimination can be invisible to those affected (e.g. institutional-level decision-making). Reporting may be inconsistent across multiple waves of longitudinal research, with memory or increased education affecting reporting (Van Dyke, 2022). Question wording may also influence the respondent's answer (Barkan, 2018). For example, asking someone directly if they have been discriminated against or treated unfairly leads to lower

[4] Note that data for Ireland is collected using a quota sampling method at the level of local electoral areas, which may not be fully representative.

prevalence estimates than questions that give respondents examples of unfair treatment (Russell et al., 2011).

1.2 Previous research on perceived discrimination

1.2.1 Levels and distribution of perceived discrimination in Ireland

National surveys of perceptions of discrimination in Ireland have been collected on a five-yearly basis by the Central Statistics Office (CSO) (2025a). These surveys provide respondents with a definition of discrimination as prescribed in Irish legislation. Respondents are asked whether they have experienced discrimination over the last two years in a variety of settings. Namely: in the workplace, while looking for work, in shops, pubs or restaurants, using financial services (banks, insurance companies, etc.), in education, while looking for housing, and while accessing health services.

The latest survey was carried out in 2024 and found that 22 per cent of adults felt discriminated against in at least one setting in the two years prior to interview (Central Statistics Office, 2025a). This represented an increase of four percentage points from 2019, when the figure was 18 per cent and was 10 percentage points higher than the rate in 2014.

Rates of discrimination were significantly higher among Black respondents (49%) and Traveller/Roma respondents (45%), gay/lesbian (59%), bisexual (55%) and those who identified as transgender or non-binary (46%) (Central Statistics Office, 2025a). Females reported higher rates of discrimination than males (27% vs. 20%). Young people were the age group most likely to report discrimination: 30 per cent of 18–24-year-olds said they had experienced discrimination in the last two years, and the rate declined with age. Those aged over 65 had a discrimination rate of 12 per cent or lower. The latest CSO report does not publish discrimination by disability status, but analysis of the earlier waves found that those with a disability reported significantly higher rates of discrimination (Banks et al., 2018) and were most likely to report discrimination when accessing health services.

Turning to the environment in which the discrimination occurs, 7 per cent of the population perceived discrimination in the workplace (CSO, 2025a). This figure rises to 10 per cent if limited to the eligible

population (i.e. excluding those not employed in the last two years and not stated). Young people aged 18–24 and those aged 25–34 years were more likely to perceive discrimination at work than other age groups. Young people were also most likely to report sexual harassment in the workplace (CSO, 2025a). Eight per cent of the eligible population perceived discrimination while looking for work. This figure rose to 31 per cent among the Traveller/Roma group, 18–19 per cent of the gay/lesbian and bisexual population, and 19 per cent among Muslims. One in ten young people aged 18–24 perceived discrimination searching for work, which was the same as the rate observed for the 35–44 age group, though higher than for other age groups.

Perceived discrimination when accessing or using services in the last two years was most common for housing: 9 per cent of the eligible population felt they had been discriminated against while looking for accommodation and 7 per cent in sustaining accommodation. Perceived discrimination in retail and hospitality stood at 5 per cent, while it was 4 per cent for accessing financial services, 2 per cent for accessing education, 4 per cent 'in education' and 2 per cent accessing transport services. Perceived discrimination accessing health services ranged from between 1 and 3.5 per cent of the eligible population depending on the service (GP/community based/hospital/specialists).

Perceived discrimination in retail and hospitality was exceptionally high for members of the Traveller and Roma community, among minority ethnic groups (especially Black respondents) and those identifying as gay/lesbian or bisexual. In the case of perceived discrimination in health services, rates were highest amongst those who were transgender/non-binary, bisexual, Black or other ethnicity, and those of no religion (CSO, 2025a). Females reported a higher rate of discrimination than males across all of the different service domains. At a European level, based on a different data source, perceived discrimination reported by transgender women in Ireland was among the highest in the EU at 69 per cent (EUFRA, 2024c).

Young people were more likely to feel they were discriminated against than older age groups in nearly all service domains. The gaps between the young adults and older groups were widest in the case of housing, hospitality and within education. Perceived discrimination was highest

among young people while accessing primary care services and specialist care but not for hospital care and community care. Financial services were the only service area where the oldest age groups reported the highest level of discrimination. Notably, a high proportion of financial discrimination was attributed to age (CSO, 2025a).

A 2022 study by Költő et al. using the 2018 Health Behaviour in School-Aged Children survey (N = 6,242) examined perceived discrimination across a number of grounds among young people aged 12–19 in Ireland. Respondents were asked how often they were treated unfairly or negatively due to their age, gender, disability status, race, sexual orientation, religion, membership of the Traveller community or other reasons. They use a case-matching approach to match minority groups with non-minority peers, finding a significant difference in reporting of discrimination between these groups. They find a large effect size for sexual minority and Traveller adolescents, a medium effect size for immigrant adolescents, and a small effect size for adolescents with a disability or chronic condition. They also find that almost half of respondents reported age-based discrimination.

Research by the EU Fundamental Rights Agency (EUFRA) confirms the high level of perceived discrimination among the Traveller and Roma community in Ireland (EUFRA, 2025b). Three out of four Travellers and two out of three Roma felt that they had been discriminated against in the last 12 months because of their Traveller/Roma status. There was a 10-percentage point increase in perceived discrimination among Travellers compared to the previous survey in 2019. The report also documents the high levels of poverty, housing deprivation, lower rates of employment, and lower life expectancy for Travellers and Roma in Ireland.

The CSO surveys provide rich information on the groups that have experienced discrimination across different contexts and how this has changed over time. This data has been used in a range of research (Banks et al., 2018; Fahey et al., 2019a; 2019b; McGinnity et al., 2017; Grotti et al., 2024). However, the surveys do not contain information on wellbeing or health and are cross-sectional in nature so cannot shed light on the longitudinal patterns. The current study therefore provides a first assessment of the outcomes associated with perceived discrimination for a nationally representative sample of young people in a longitudinal context.

While the research in this report does not focus on public attitudes, it is relevant to consider which groups face the most prejudiced attitudes in Irish society as this can translate into direct discrimination. In research published by the Department of Children, Equality, Disability, Integration and Youth (2023), individuals were surveyed about their attitudes towards 46 named groups. Some of these groups are protected under legislation, such as 'a Hindu family' (ethnic status), while others such as 'a person with a criminal record for violence' are not. Most respondents were positive about living next door to someone from an equality group, and less positive with their child being in a love relationship with someone from a given equality group. The least positive attitudes towards a protected group are seen for Travellers or Roma (53% would feel comfortable living next door, 43% would be comfortable if their child was in a love relationship). This is corroborated by other research on the high levels of discrimination faced by Travellers and Roma in Ireland (Carron-Kee et al., 2024; Költő et al., 2022). In an EU-wide survey using similar measures, attitudes of people in Ireland to equality groups was consistently more positive than the EU average (European Commission, 2023).

Other research finds that attitudes towards Muslim immigrants are significantly more negative than attitudes towards white immigrants (Fahey et al., 2019a). Attitudes towards Muslim immigrants have also worsened, in the short term at least, in response to external political factors, such as the 2015 Paris terrorist attacks (ibid.). Attitudinal research is subject to social desirability bias. Applying techniques to address this bias showed higher levels of prejudice against migrants and ethnic minority groups in Ireland (Timmons et al., 2026) and people with a disability (Timmons et al., 2023). Highly educated groups were more likely to mask negative attitudes towards ethnic minorities.

Direct evidence of the experience of discrimination and harassment in Ireland is also available from legal caseloads, crime statistics and field experiments. There has been an increase in the rates of hate crime and hate-related incidents in Ireland as reported by An Garda Síochána (2021; 2024), from 448 in 2021 to 676 in 2024. Race was the most prevalent discriminatory motive in both years. Experimental audit studies have also revealed discrimination towards migrants accessing employment (McGinnity et al., 2009) or housing (Gusciute et al., 2022) in Ireland.

1.2.2 Europe

EU law prohibits discrimination across a range of grounds, which is based on treaty provisions as well as the principles of equality set out in the EU Charter of Fundamental Rights. EU competence covers discrimination on the grounds of sex, racial or ethnic origin, religion, disability, age or sexual orientation (European Commission, 2025). The EU has further established its agenda on inclusion through the EU action plan on integration and inclusion 2021–2027. More specific equality plans were also established, such as the EU gender equality strategy 2020–2025 and the EU anti-racism action plan 2020–2025. The next stages of both these strategies are currently being developed.

Across the EU, perceived discrimination, i.e. the proportion of the population that experienced discrimination or harassment over the last 12 months, has increased on average from 15 per cent in 2019 to 21 per cent in 2023 (European Commission, 2023). The rate in Ireland (17%) was below the EU average in 2023. The same research finds that most respondents believe there is widespread discrimination against different equality groups in their country, increasing between 2019 and 2023. Ireland's responses sit just under the EU average. Countries with the largest proportion believing discrimination is widespread are in the Netherlands and France, while Latvia and Lithuania are lowest.

Age is the most common ground of discrimination across the EU and 45 per cent of respondents in the EU (and Ireland) think age-related discrimination is widespread in their country. Ireland is just below the EU average when respondents are asked about the extent of gender discrimination, with 37 per cent of respondents saying that gender discrimination is widespread compared to 38 per cent in the EU.

The EU has also produced reports specific to equality groups, which survey these groups directly to determine the challenges faced by these groups. For example, research focusing on people of African descent (EUFRA, 2024a) found that discrimination was higher than the EU average in 2023 (36% compared to 21%), with the highest discrimination rates recorded when looking for a job and at work. The same study found few of those experiencing harassment or crime reported it to the police or other authorities (12 per cent) due to the belief that reporting it would not change anything, bureaucracy, and a lack of trust in law enforcement.

For Muslims in the EU (EUFRA, 2024b), racial discrimination has risen since 2016. In 2022, the 12-month prevalence of racial discrimination increased by 10 percentage points to 35 per cent. The level of perceived discrimination in the LGBTIQ+ group had decreased from 42 per cent in 2019 to 36 per cent in 2023 (EUFRA, 2024c).

For Muslims, reporting of discrimination was even lower than for those of African descent, at just 6 per cent. Reporting of discrimination is also low across other equality groups; just 11 per cent of LGBTIQ+ respondents (EUFRA, 2024c) across the EU reported discrimination to an organisation. Most respondents who did not report discrimination did not do so because they believed nothing would happen (49%), while 37 per cent felt that it happened too much to merit reporting. This reflects the lack of trust in official channels for equality groups.

In the 2023 Eurobarometer survey on discrimination in the EU, 11 per cent of Europeans who experienced discrimination or harassment noted that it occurred when using or requiring healthcare services (European Commission, 2023); this was 14 per cent in Ireland. The magnitude of health discrimination can differ within minority groups. EU-level research found that 45 per cent of all LGBTIQ+ respondents, and 1 in 7 transgender women, encountered difficulties accessing healthcare services in their countries (EUFRA, 2024c).

Research in Britain by the Equality and Human Rights Commission (Abrams et al., 2018) found that 42 per cent of adults reported experiencing prejudice (bias towards a group) or discrimination (actions based on this bias) in the previous year. While Maletta et al. (2023) found a perceived discrimination prevalence rate of 18 per cent in the UK. Rates were significantly higher amongst the youngest age group (18–14), as well as among females, ethnic minorities, those with a disability, and those with higher income and education.

These results, as well as the findings from the CSO (2025a), suggest that the age group covered by the current study (interviewed at age 17 and age 25) perceive higher discrimination levels and are therefore more likely to be exposed to negative impacts of discrimination compared to other age groups. While young people are often not considered in ageism discussions, research has found that younger age groups have higher odds of perceived discrimination (Vogt Yuan, 2007; Bratt et al., 2018). Moreover, Vogt Yuan (2007) finds that younger

people are more likely to identify their age as the basis for their unfair treatment than older people.

1.3 Discrimination and mental health and wellbeing outcomes

Discrimination can lead to a range of adverse outcomes, including poor physical and mental health, restricting economic opportunities, and increasing housing and financial insecurity (OECD, 2025). Our focus here is on mental health and wellbeing outcomes; however, it is acknowledged that discrimination can have both a direct wellbeing effect and an indirect effect via higher poverty rates and unemployment, which can have a detrimental effect on wellbeing.

There is substantial literature exploring the relationship between self-reported discrimination and health outcomes. Williams et al. (2019) identified 29 literature reviews and meta-analyses between 2013 and 2019 on the relationship between discrimination and both physical and mental health outcomes. While much of the research is US-based, many included studies are international. This study finds consistent effects of perceived discrimination across a wide range of mental health outcomes, with some evidence of stronger effects for negative outcomes (e.g. depression, anxiety) than for positive wellbeing measures (ibid.). The growing number of longitudinal studies which link changes in levels of discrimination over time to an increase in distress and depression is also noted. With regard to physical health, discrimination is found to be associated with outcomes such as poor general health, cardiovascular disease, high BMI, cortisol and hypertension (ibid.). Differences in the effects of discrimination are observed by sex ('female' higher than 'male') and ethnic group ('Black' higher than 'Chinese/Hispanic' followed by 'White') (ibid.).

Williams et al. (2019) outline a range of pathways through which individual-level discrimination influences health, namely psychological responses, biological processes (e.g. stress responses), behavioural responses (e.g. negative health behaviours like alcohol consumption), healthcare use responses and individual/collective protective responses (e.g. emotional support, religious beliefs). They also highlight that these responses to individual perceived discrimination sit alongside the health effects of cultural racism and

institutional/structural racism which influence income, education, employment, housing, healthcare, etc.

A number of meta-analyses have focused on children and young people (Priest et al., 2013; Benner et al., 2018) or have included studies on both child and adult populations (Schmitt et al., 2014). Discrimination was found to be associated with heightened anxiety, depression, externalising behaviour, internalising behaviour and conduct problems in those aged under 18 (Priest et al., 2013) and negatively related to positive wellbeing, e.g. life satisfaction, self-esteem (Priest et al., 2013; Benner et al., 2018). Where adult and youth outcomes are compared, the relationship between perceived discrimination and poor wellbeing was stronger for children than for adults (Schmitt et al., 2014). There is also growing evidence of negative impacts of caregivers' experience of discrimination for child outcomes (Heard-Garris et al., 2018). Young people's self-esteem and identities are still developing at this stage in life, and discrimination may have a more negative impact (Marks et al., 2015; Benner et al., 2018).

Fewer studies have examined the effects of self-reported discrimination and mental health and wellbeing outcomes across other groups. Past research has explored the effects of sex-discrimination and mental health (Hackett et al., 2019) and disability and mental health (Hackett et al., 2020). Pascoe and Smart Richman (2009) include other forms of discrimination, though the studies still predominantly address racism (125 of the 192 studies included address racial discrimination, 29 gender, 13 sexual orientation and 41 general or other). Maletta et al. (2023) in the UK find a significant relationship between perceived discrimination (of any type) and psychological wellbeing (measured by the General Health Questionnaire). Conducting a mediation analysis, they find that higher rates of mental health problems among young people, ethnic minority groups, women and those with a long-lasting health condition/disability was partially explained by their higher levels of perceived discrimination. Vogt Yuan (2007) finds that age-based discrimination across the whole population leads to increased psychological distress and lower wellbeing. Denise (2012) finds that this impact is compounded where multiple discrimination exists for young people, for both mental and physical health outcomes.

Discrimination can also impact on health behaviours. A systematic review examining the relationship between perceived discrimination and increased alcohol consumption (Gilbert and Zemore, 2016) finds that the majority of studies examining this pathway are cross-sectional, with a clear need for more longitudinal data and representative samples. Literature on this subject notes that social context, including discrimination, housing and food insecurity, or chronic stress, is an important influence on substance use or abuse (Amaro et al., 2021). Amaro and colleagues posit that early exposure to social stressors like discrimination are foundational in the 'psychobiological cascade that creates vulnerability to substance use and its consequences'.

OECD research (Hardy and Schraepen, 2024) has found that controlling for self-reported discrimination, at-risk groups such as racialised communities, persons with disabilities, LGBTIQ+ people, and religious communities have similar wellbeing outcomes to the general population. This suggests that it is discrimination, rather than group membership driving these disparities. This research examines a subset of European countries, which includes Ireland. There is a lack of longitudinal data that studies long-term outcomes, so it is difficult to determine the lasting impacts of discrimination.

Those experiencing discrimination are more likely to feel unsafe, or believe that their voice doesn't matter (OECD, 2025). This in turn can lead to worse wellbeing outcomes. Discrimination can lead to a higher risk of mental health difficulties, including suicide. In the 2023 EU LGBTIQ+ survey[5] (EUFRA, 2024c), 37 per cent of all respondents had considered suicide. Ireland's rate is above this average, at 43 per cent of LGBTIQ+ respondents contemplating suicide.

There is an increased risk of loneliness for those experiencing discrimination; approximately 35 per cent of at-risk individuals who reported experiencing discrimination reported feeling lonely 'most or all of the time' compared to 20 per cent of at-risk individuals who did not report discrimination (OECD, 2025). This loneliness can stem from discrimination or a feeling of not belonging. In a study of loneliness within BAME (Black, Asian, and minority ethnic) communities in the UK (British Red Cross and Co-op Foundation, 2019), almost half of those

[5] Online survey conducted in 2023 of 98,272 LGBTIQ+ respondents living in the 27 Member States.

who had experienced discrimination reported being always or often lonely, compared to just 28 per cent of those who hadn't experienced discrimination. This loneliness could be due to discrimination, where people from different backgrounds feel less safe in their environment due to past experiences.

Multiple discrimination, while harder to measure, has been found to lead to compounding health and wellbeing outcomes. For example, experiencing multiple forms of discrimination is linked to increased stress, depression and anxiety levels (OECD, 2025). For LGBTIQ+ respondents (EUFRA, 2024c) who were in an additional minority group, nearly half had contemplated suicide (49%), 12 percentage points higher than those identifying as solely LGBTIQ+.

Discrimination can occur in multiple contexts. A key feature of the lives of the current cohort of young people is their participation in online activities and interaction. There is significant evidence of increased online racism, misogyny, homophobia, transphobia, xenophobia and other forms of hate speech (Siapera et al., no date) that young people may be particularly exposed to. To date, there have been relatively few studies on how online activity is related to subjective reports of discrimination. There is some evidence that online harassment is correlated with later offline harassment (Weinstein et al., 2021). Other research finds that among children, perceived discrimination is associated with lower excessive internet use, but higher online risk-taking (Bosman et al., 2015). However, the relationship between higher levels of internet use and discrimination may run both ways as there is evidence that discrimination from peers leads to higher excessive internet use (Urbanova et al., 2020).

1.4 Anti-discrimination policy framework in Ireland

Individuals are protected from discrimination in Ireland through two pieces of legislation: The Equal Status Acts (IHREC, 2020), and the Employment Equality Acts (WRC, 2025). The former covers discrimination in accessing goods and services, while the latter addresses discrimination in hiring and at work. Nine protected grounds were referred to in the initial legislation: gender, civil status, family status, sexual orientation, age, religious belief, race, disability and membership of the Traveller community. Since then, a specific ground in relation to housing discrimination has been introduced – this

specifies that those in receipt of housing assistance cannot be discriminated against in access to housing. There are proposals to introduce new grounds for discrimination, such as socio-economic status (IHREC, 2023).

While discrimination is prohibited under these acts, prosecution relies on the formal reporting of discrimination, and research has found that discrimination is widely underreported (EUFRA, 2024a; 2024b; 2024c). This lack of reporting is also seen in the Irish context. Fanning and Michael (2018) argue that the infrastructure for responding to discrimination in Ireland was damaged by the austerity measures following the financial crash in 2008, such as the abolition of the National Consultative Committee on Racism and Interculturalism and cutting the budget for the Equality Authority by approximately 43 per cent. Ireland has progressed its anti-discrimination legislation more recently, updating its hate crime legislation in 2024 with the Criminal Justice (Hate Offences) Act. The part of the legislation addressing hate speech (section on incitement to violence or hatred) was dropped. However, the existing Prohibition of Incitement to Hatred Act 1989 makes it an offence 'to publish, display or distribute written or visual materials – as well as saying words or engaging in behaviour – which are threatening, abusive or insulting and are intended or, having regard to all the circumstances, are likely to stir up hatred' on the basis of 'race, colour, nationality, religion, ethnic or national origins, membership of the Travelling community or sexual orientation' (but not age, disability, sex or gender).

1.5 Outline of report

The data and methodology used for this study are described in Chapter 2, including a discussion of the Everyday Discrimination Scale that is used in the study. Chapter 3 describes the prevalence of perceived discrimination at age 17 and 25 in Ireland. The chapter also contains models of the factors influencing higher discrimination scores at both ages and the perceived reasons for discrimination. Chapter 4 explores the relationship between perceived discrimination and health and wellbeing at age 25 – the outcomes considered are subjective general health, life satisfaction, self-esteem, depression, and problematic alcohol consumption. The final chapter summarises the findings and considers the implications for policy.

Chapter 2
Data and methodology

2.1 Data and methodology

This research uses the Growing Up in Ireland (GUI) dataset, a nationally representative longitudinal study of children in Ireland which has followed more than 18,000 families as their children grow up. We specifically focus on Cohort '98 when they were 17 and 25 years old, in 2015/2016 and 2023/2024. These waves of the survey ask respondents about their experiences of discrimination using the Everyday Discrimination Scale (EDS). The EDS was originally developed to assess routine mistreatment of ethnic minority/racial groups (Williams et al., 1997). The scale is based on the concept of discrimination as a recurrent part of everyday life (Essed, 1991). The original scale has nine items, and a shorter five-item version is used in the GUI. The scale asks respondents:

> In your day-to-day life, how often have any of the following things happened to you:
>
> - You are treated with less courtesy or respect than other people
> - You receive poorer service than other people at restaurants or stores
> - People act as if you are not smart
> - People act as if they are afraid of you
> - You are threatened or harassed

Respondents are asked to respond on a five-point scale from 'almost every day' to 'never', with respondents answering 'at least a few times a year or more' asked a follow-up question on what they believe the main reason(s) for their experiences were. This provides a selection of 14 options including gender, race, age, religion, sexual orientation and disability, where respondents can select as many as are applicable. The total EDS score is given by adding the scores from each of the five items together and dividing by 5.

The EDS has been widely used in racial/ethnic discrimination research (Kessler et al., 1999; Bastos et al., 2010; Paradies et al., 2015; Williams et al., 2019). Other research has used the scale to examine discrimination in sexual or gender minorities (Seabra et al., 2024) or age-based discrimination (Gee et al., 2007; Vogt Yuan, 2007). Other research ignores respondents' perception of the reason for mistreatment and use the scale as a general indicator of discrimination (e.g. Lee and Turney, 2012). As we are interested in all forms of discrimination, we adopt the latter approach and do not restrict analysis on the basis of the perceived grounds of discrimination. The scale has been found to reflect a single underlying dimension (Harnois et al., 2019) but some concerns have been raised about the equivalence of the scale across different groups (Bastos and Harnois, 2020). Harnois et al. (2019) notes that certain groups are stereotyped as untrustworthy or criminal and are therefore more likely to be directly mistreated in service interactions or threatened, while other groups stereotyped as being less competent may be treated with less respect. Because of the potential for group difference on individual scale items, we also run robustness tests based on a dichotomous variable that distinguishes those that experience discrimination from those that do not.

This research examines the factors associated with discrimination within the GUI '98 Cohort. We assess a range of socio-demographic factors to identify significant correlates of higher rates of discrimination. For that, we built statistical models using ordinary least squares (OLS) regressions whenever the discrimination is measured through a numeric scale and logistic regression for binary outcomes. We then examine the relationship between EDS scores and the following health and wellbeing outcomes: self-reported general health, life satisfaction, self-esteem, depression and problematic alcohol consumption. One of the main methodological challenges to understanding this relationship is to account for differences in the outcomes stemming from individual characteristics not measured by the study. For instance, one might argue that specific traits of a respondent could influence both their reports of perceived discrimination and their self-esteem, and failing to account for these could provide biased estimates of the relationship between perceived discrimination and self-esteem. However, one of the key advantages of a longitudinal study is that by including a prior measurement of self-esteem, we account for these individual characteristics that are stable

over time. In the following sections, we provide a detailed description of the variables used to examine this relationship. Where possible, we use variables that are the same in each wave of the study. Inconsistencies and cases where we use the variable at 17 where there are none suitable at 25 are detailed in Appendix Table A.4.

2.1.1 Sampling and attrition and weighting in Growing Up in Ireland

The sample design for GUI Cohort '98 was based on a two-stage selection process in which the school was the primary sampling unit and the children within the school as the secondary unit. A nationally representative sample of 1,105 schools was selected from the total of 3,326 primary schools in Ireland in 2007/2008. Eighty-two per cent (910) were recruited into the survey (Thornton et al., 2016). By Wave 2 at 13, almost all of Cohort '98 was in second-level education. Due to the sampling strategy of the study, the estimates of the longitudinal statistical models are presented with clustered robust standard errors based on the school clustering of Wave 1.

The GUI adopts a fixed panel design, meaning that no new respondents are added after Wave 1. As with all longitudinal studies, the GUI study experiences attrition over time. In this study, we use data from Wave 3 (age 17) and Wave 5 (age 25) of Cohort '98. Data collection was administered through online questionnaires in Wave 5. In Wave 3, the main questionnaire was completed using computer-assisted personal interviewing (CAPI) but the EDS questions were included in the sensitive questionnaire that was completed using computer-assisted self-interviewing.

The overall response rate for Wave 3 was 83 per cent. Analysis by the ESRI GUI study team (Murphy et al., 2019) found that non-response at Wave 3 was related to primary caregiver education, income levels, social class and the child's score on the Drumcondra Reasoning Test at age 13. The data includes weights to correct for attrition, which are applied throughout the analysis. For the age 17 analysis, we apply the cross-sectional weight, as we are not assessing this against earlier waves. This includes all those who complete Wave 1 and Wave 3, even

if they do not complete Wave 2. The total N is 6,216[6]. Weights adjust for both changes in the population and differential inter-wave attrition (ibid.). At Wave 5, the response rate is considerably lower at 49.8 per cent (CSO, 2025b). For age 25 analysis, we use the longitudinal weight produced by the CSO (ibid.) as the analysis includes Wave 3 responses. This weight limits the sample to those who participate in all five waves (N = 2,594).

2.1.2 Protected characteristics

The GUI data contains information that covers most of the characteristics protected by equality legislation: sex/gender, sexual orientation, religion, disability, ethnicity, nationality, family status, as well as information on young people's socio-economic background. However, not all the relevant information is collected at age 17 and age 25. For example, ethnicity of the young person is not collected at age 17 (or prior), and citizenship is only collected at 25.

Sex and gender are also measured differently in each wave. Age 17 collects information as to whether the individual is of male or female sex, and also asks if they are transgender. At 25, individuals are asked a similar question about sex, with a third category, and are also asked whether their gender identity is the same as their birth sex. To avoid inconsistencies due to question wording, we use the variable at 17, as there is little difference across waves in this variable.

Despite the large sample size in the GUI data (6,216 at 17, 3,380 at 25), religion and sexual orientation variables had issues with small case numbers. We therefore aggregate some categories and acknowledge that this aggregation may disguise differences between groups. At age 25, sexual orientation is aggregated into heterosexual, don't know/prefer not to say, and LGBA+, which combines the responses lesbian/gay, bisexual, asexual and questioning. Religion is aggregated into Catholic, no religion, and other religions. Disability status is aggregated into three categories: no disability, disabled but not hampered in daily activities (referred to as long-lasting condition/LLC), and disabled but hampered in daily activities (severely and to some

[6] There are 177 families that participated in Wave 3 but not Wave 2. Checks showed that results at age 17 hold if the longitudinal weight is applied instead.

extent). We include a variable of whether or not the young person is an Irish citizen in both waves.

Parental and family characteristics are also used in the models. Social class of the household based on parental occupation is used as an indicator of the young person's social background. This is split into professional/managerial, non-manual, skilled manual, semi/unskilled, and no social class. This final category is distinct as it refers to households where parent(s) have no past or previous employment recorded with which to assign a class, it does not include missing cases. Ethnicity is not collected from the young person at 17, therefore parents' ethnic background and nationality is included instead. The models at 17 use a binary variable of whether either parent is from a Black and minority ethnic group, as well as a dichotomous variable asking whether one (in the case of lone-parent households) or both parents was born in Ireland. While the parental ethnicity status variable contains a category for Traveller (a ground for discrimination in Ireland), the available micro-data was collapsed. Therefore, Travellers/Roma cannot be analysed as a separate group, despite previous research (Carron-Kee et al., 2024) showing that they face particularly high levels of prejudice and discrimination in Ireland. At 25, ethnicity is reported by the young person. We also include whether the young person lives in an urban or rural area at 25, as this information on urban/rural location is not available in the data at age 17.

We additionally control for time spent online during the week for leisure. This asks the young person to estimate the number of hours that they spent online during the week and at weekends. At 17, the variable used asks the young person to estimate 'how much time spent online on a typical weekday'. At 25, the variable used changes and asks 'on a typical weekday, how much screentime do you spend for leisure'. The age 25 variable therefore potentially includes time spent watching TV, etc. These variables are included as proxy for potential exposure to online discrimination.

2.1.3 Outcomes

Chapter 4 measures outcomes for young people experiencing discrimination. We examine a range of physical and wellbeing outcomes, in line with the literature on discrimination discussed in section 1.3. These measures are based on existing, evidence-based

scales, but differ between ages as some scales are specific to children and young people, and others are asked only to adults.

General health is measured using a scale measure of self-rated general health asked in both waves. Young people are asked to rate their general health on a five-point Likert scale from excellent to poor. Depression is measured differently in each wave, though both measures have high internal validity and are suitable for the age of the respondent. At 17, the young person is asked questions from the Short Mood and Feelings Questionnaire (SMFQ) (Angold et al., 1995). This is a 13-item self-report measure designed to measure depression in children and adolescents. The young person is asked to rate each of the 13 statements relating to affective and cognitive symptoms in the prior fortnight as true, sometimes true, or not true. The items include questions such as 'I felt miserable or unhappy', and 'I hated myself'. The developers of this measure consider scores above 8 to indicate depression in children and adolescents. The models shown in Chapter 3 use the total SMFQ score as the dependent variable. At age 25, depression is measured using the Centre for Epidemiological Studies Depression (CES-D) eight-item scale. This is more suitable for adult respondents. The young person is asked to rate how frequently in the prior week they experienced different depression symptoms such as 'I felt depressed' or 'I was bothered by things that usually don't bother me'. These are given on a four-point rating scale, from rarely or none of the time to most or all of the time (5–7 days). The respondent's score is obtained by summing responses across each category. A composite score of 7 or higher is considered a 'clinically significant' level of psychological distress (McNamara et al., 2021).

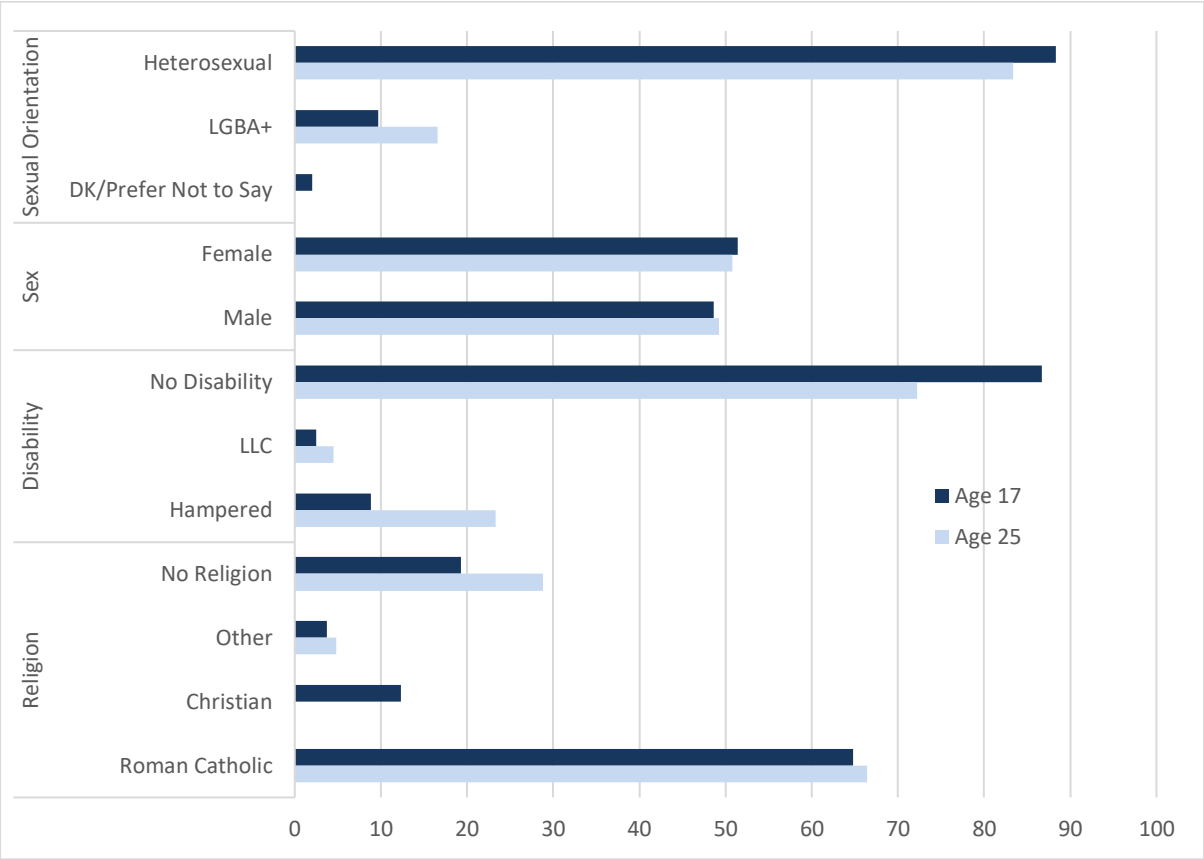
Life satisfaction is captured in both waves by asking the young person to rate their level of satisfaction with life on an 11-point scale, where 0 is extremely unsatisfied and 10 is extremely satisfied. Life satisfaction correlates with positive psychological wellbeing (Suldo and Huebner, 2004) and is useful here as it uses a consistent measure across both waves. Similarly, self-esteem is measured using the Rosenberg Self-Esteem Scale in both waves. This scale is six items rated on four-point scales (strongly disagree–strongly agree). Examples of items include 'I feel that I have a number of good qualities', and 'I certainly feel useless sometimes'.

The final variable examined is problematic alcohol consumption, measured by the Alcohol Use Disorders Identification Test (AUDIT) score. This score is derived from a 10-item screening tool developed by the World Health Organization. In the analytical sample, values range from 0 to 33, with higher values denoting higher likelihood of problematic alcohol consumption and alcohol dependence. We examine these outcomes in two models using the same socio-demographic characteristics as controls with one model controlling for EDS scores at age 25 and the second controlling for change in EDS scores between age 17 and age 25. This latter model examines whether change in discrimination over time will impact on outcomes.

2.2 Cohort ’98 characteristics

Here we visualise the distribution of the socio-demographic characteristics discussed in section 2.1.1. The GUI dataset is based on a fixed-panel design, which randomly sampled primary schools across Ireland, and then randomly sampled nine-year-old children from the selected schools. The Wave 1 sample is regionally representative, though may have changed somewhat over time as families move.

Figure 2.1 Distribution of socio-demographic characteristics in Cohort '98 (%)



Source: Growing Up in Ireland Cohort '98 Waves 3 and 5. Authors' analysis. Weighted using cross-sectional weights.
Note: LLC refers to long-lasting condition.

Figure 2.1 displays characteristics for Cohort '98 at age 17 and 25. Many of the characteristics highlighted here are included in the grounds for discrimination, such as gender, sexuality, and disability. Just under 10 per cent of Cohort '98 identified as LGBA+ at 17. At 25, this increases to 16.6 per cent. The proportions of Cohort '98 at age 25 split by sex are similar to age 17.

The majority of Cohort '98 at 17 are Catholic (64%), while other religions (Muslim, Jewish, etc.) make up just 4 per cent of this cohort and 19 per cent are of no religion. At 25, more people have no religion (29%).

At age 17, most of the cohort (86%) have no long-lasting condition (LLC), 5 per cent have a long-lasting condition that does not hamper their daily activities and 9 per cent have a LLC that limits their activities; this group is classified as having a disability. At age 25, the

proportion of young people that are defined as having a disability (having a LLC that hampers daily activities) increases to 23 per cent. This may be due to selective attrition; for example, those without a disability may be more likely to have dropped out of the survey. It may also be due to changes in the way that the questions were asked, or additional identification of conditions between 17 and 25. This cohort additionally experienced the COVID-19 pandemic, which had large-scale physical and mental health impacts.

Very few of the young people are not Irish citizens (3.9%). Among mothers, 13 per cent were born outside of Ireland, and 6 per cent of Cohort '98 had no parents born in Ireland. Ethnicity of the young person is measured at age 25, but not at 17. The majority (82.4%) of Cohort '98 are white Irish.

2.3 Conclusions

This chapter has outlined the data and methodology used to produce the analysis in the forthcoming chapters. This research presents a first longitudinal analysis of discrimination using Cohort '98 in the Growing Up in Ireland dataset. Discrimination is measured using the Everyday Discrimination Scale (EDS), which examines the extent to which individuals feel discriminated against in their day-to-day life. This chapter presents the characteristics used in the models in Chapters 3 and 4, as well as the health and wellbeing outcomes examined in Chapter 4. We present the composition of specific socio-demographic characteristics of Cohort '98 at age 17 and age 25 in section 2.2. This is important to keep in mind in Chapters 3 and 4, as we present models of discrimination and outcomes for these characteristics.

Chapter 3

Rates and distribution of perceived discrimination in Cohort ’98

This chapter presents models of everyday discrimination scores, controlling for socio-demographic characteristics for the Growing Up in Ireland (GUI) Cohort ’98 at 17 and 25. The Everyday Discrimination Scale (EDS) used here measures perceived discrimination when the young people are aged 17 (2015/2016) and 25 (2022/2023). This discrimination takes place in the context of rising rates of discrimination across Europe, but in a country with relatively positive attitudes towards minority groups compared to other European countries (see Chapter 1).

The make-up of Cohort ’98, as discussed in Chapter 2, has some relevant distinctions from the broader Irish population due to the fixed panel design of the GUI research. Cohort ’98 sampled from the population of nine-year-olds in 2007/2008 and will therefore not include any young person moving to Ireland after this point. The cohort is predominantly white Irish, meaning that discrimination on the grounds of ethnicity may be lower than expected. Small numbers for some groups have also meant aggregation is required, which may mask some variation.

The following sections examine rates of perceived discrimination within the ’98 Cohort, as well as the ground(s) on which this discrimination occurred. This informs the models of everyday discrimination scores presented in section 3.3. We present two ordinary least squares (OLS) models of everyday discrimination scores for Cohort ’98 at age 17 and age 25, controlling for socio-demographic characteristics. We also examine factors associated with specific grounds for discrimination in a series of logistic regressions.

3.1 Cohort ’98 rates of perceived discrimination

The young person’s responses to the EDS are examined in two ways here – the average score across the scale and the proportion of respondents that report any of the five experiences measured **at least a few times a year**. The latter is used as a measure of the prevalence of perceived discrimination.

At 17, the majority of Cohort '98 (76%) report experiencing discrimination in at least one of the EDS questions **at least a few times a year**. This proportion decreases to 66.4 per cent at age 25 as the cohort ages. At 17, of those stating that they were discriminated at least a few times each year, 63 per cent stated that they experienced age-based discrimination. This pattern shifts at age 25, reducing to 33 per cent. This suggests that age-based discrimination is driving the higher rate of discrimination at age 17. This is corroborated in past research which finds higher rates of reported discrimination among young people (Vogt Yuan, 2007; Bratt et al., 2018). Young people feeling they are treated differently due to their age is relevant to policymaking, particularly initiatives seeking to give young people a voice in policies which affect them.

The EDS total score ranges from 0–5. The total score across the five experiences (see Chapter 2), where 0 = never and 5 = almost every day is divided by 5. A score of 0 means no discrimination occurs in any of the five categories, while a score of 5 means all five categories are experienced 'almost every day'. The mean EDS score for Cohort '98[7] decreases between age 17 and age 25, from 1.245 (SD 0.01) at age 17 to 1.12 (SD 0.01) at age 25. Scores are strongly left-skewed[8], with most respondents scoring below 2 on the scale at both ages. This higher discrimination at 17 persists if comparing scores of only those who reported discrimination more than a few times a year, as well as only considering the proportions experiencing non-age-based discrimination.[9] The majority of those reporting age-based discrimination at 17 also report discrimination on other grounds; just 8.5 per cent of those reporting discrimination record age as the only ground.

We also estimate mean scores by minority characteristic. The average score for women is 1.17 at age 17, and 1.14 at age 25. For men, this is 1.32 at age 17 and 1.09 at age 25. Consequently, women have slightly higher discrimination scores than men at age 25, despite men having a

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7 This includes those who do not experience discrimination.

8 We conduct robustness checks to ensure that residuals are normally distributed, satisfying the assumptions of an OLS regression.

9 The mean score for those who experienced discrimination at least a few times a year is 1.53 at age 17, and 1.39 at age 25. If limited to those experiencing discrimination, but not age-based discrimination, the mean score is 1.5 at age 17 and 1.36 at age 25.

greater score at 17. Scores are also higher for LGBA+ respondents at age 17 and 25 compared to heterosexual young people (1.57 vs. 1.2 at 17 and 1.29 vs. 1.1 at 25). Further scores by minority characteristics can be found in the Appendix Table A.1.

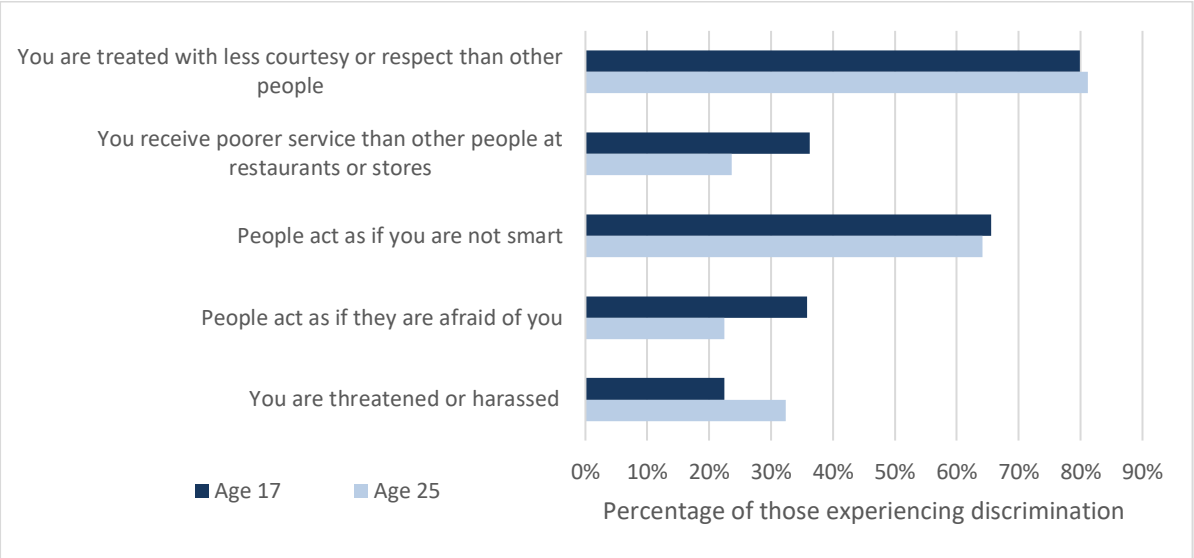
The responses to the five EDS categories also change over time (Figure 3.1). The proportion stating that they had experienced[10] service-based discrimination or people acting as if they are afraid of you reduces across time. Conversely, the proportion reporting being threatened or harassed increases between age 17 and 25. This may be due to the context in which the perceived discrimination takes place (school vs. workplace/bars, etc.)[11]. This can also be explained by exploring the demographic distribution of responses.

There are gendered differences in the proportions reporting discrimination over time. Of those discriminated against more than a few times each year, 42.2 per cent of 17-year-old men select the category 'people act as if they are afraid of you' compared to 26 per cent of women. This reduces to 29.1 per cent of men and 16.5 per cent of women at age 25. Comparably, for the category 'you are threatened or harassed', 27 per cent of men select this at 17 compared to 17.6 per cent of women. At 25, this pattern reverses: 28.6 per cent of men (who experience discrimination) feel they are threatened or harassed, while the proportion of women feeling this way almost doubles to 35.6 per cent.

[10] A few times a year or more.

[11] This cannot be confirmed as the GUI data does not include the location in which discrimination took place.

Figure 3.1 Responses to categories on the Everyday Discrimination Scale at 17 and 25



Source: Growing Up in Ireland Cohort '98 Data Waves 3 and 5.
Note: Shows percentage of those reporting discrimination a few times per year or more often, who reported each experience.

3.2 Grounds of perceived discrimination

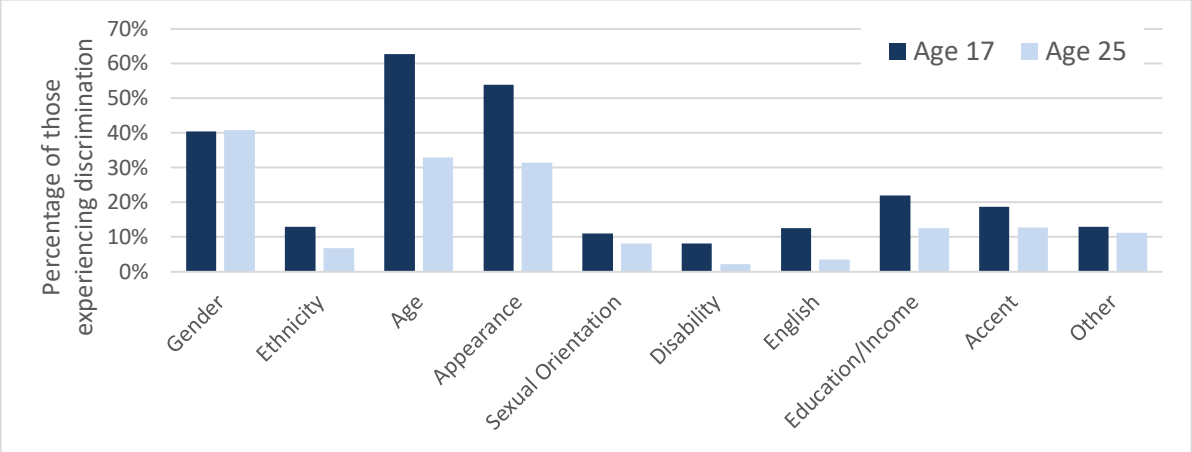
Those who perceive discrimination at least a few times per year are asked what they think is the main reason for this experience. They are given a list of pre-coded options such as your gender, your race, your age, your ability to speak English, etc. and were also permitted to add other reasons. Multiple responses were allowed. This is the respondents' interpretation of what motivated another person's poor treatment of them, and therefore likely to be subject to some error. Nevertheless, it provides some interesting insights into what young people feel to be the most salient factors in their experiences.

At 17, age is the most cited ground of discrimination, with 63 per cent of young people reporting this was a factor in their treatment (Figure 3.2). This falls to 33 per cent at age 25. Physical appearance (weight, height, other aspect of physical appearance) was seen as the reason for discrimination by 54 per cent of young people at 17 years and 32 per cent at age 25. Gender is selected as a ground for discrimination by 41 per cent of young people at both waves. This makes it the most common ground at 25. Income/education is mentioned by 21 per cent of those experiencing discrimination at 17 and by 13 per cent at age 25, while 19 per cent and 13 per cent respectively mention their accent as the reason they were discriminated against. This suggests that socio-

economic background may play a role in perceived discrimination. The remaining grounds are reported by less than 20 per cent of respondents. The smaller percentages for grounds such as ethnicity (‘my race’ or ‘the colour of my skin’) and disability partly reflect the relatively smaller number of respondents who are of an ethnic minority background or with a disability in the dataset (Chapter 2). However, at 17 we see that among those of ethnic minority background reporting discrimination, the majority mention race/colour as the reason. Comparatively, while relatively higher than those without a disability, few young people with a disability experiencing discrimination identify disability as a ground for their discrimination. A higher proportion identify their appearance.

The salience of age and appearance at 17 and subsequent decline as the young person ages speaks to the period of identity formation occurring as they transition to adulthood. Appearance-based discrimination may relate more to bullying behaviours occurring at schools, which has been found to occur for adolescents (age 13) in the GUI data (Smyth and Darmody, 2025; McNamara et al., 2020). A high proportion of Cohort ’98 were also dieting or exercising to change their body shape at 17 (McNamara et al., 2020). Perceptions of age-based discrimination may result from adulthood transitions, and a sense of being both a child and an adult (Arnett, 2014).

Figure 3.2 Perceived grounds of discrimination at 17 and 25 years



Source: Growing Up in Ireland Cohort '98 Data Waves 3 and 5. Authors' analysis.
Notes: Percentage of those who perceived discrimination at least a few times a year. Those who did not perceive discrimination are excluded. Respondents could select more than one ground.

3.3 Predictors of perceived discrimination at 17

3.3.1 OLS model of discrimination at 17

Table 3.1 presents the results of an OLS regression, examining socio-demographic characteristics associated with higher EDS scores at age 17. These results should be interpreted in the context of the characteristics presented in sections 0 and **Error! Reference source not found.**, as well as Chapter 2. The coefficients presented in Table 3.1 should be interpreted in the context of the reference category, where a significant positive value refers to a significantly higher EDS score compared to the reference category.

Female birth sex is significantly associated with lower EDS scores at 17 compared to male ($p \leq 0.001$). This is expected given the results outlined in section 3.1, which found that men report higher rates of perceived discrimination at this age. Men particularly responded to 'people act as if they are afraid of you' and 'you have been threatened or harassed' at a higher rate than women and reported that discrimination on these questions was due to their gender[12] at a higher rate.

[12] Note that gender-based discrimination refers to gender identity, while the sex variable measures sex at 17.

Whether the young person is transgender or prefers not to say is significant in the model ($p \leq 0.05$), with EDS scores significantly higher than those who identify as cisgender. LGBA+ status is also significant in the model ($p \leq 0.001$), with higher scores for LGBA+ individuals compared to their heterosexual counterparts.

Young people with a disability that hampers their daily activities have significantly ($p \leq 0.001$) higher EDS scores than those without a disability at age 17. Those whose disability does not hamper their daily activities do not see a significant difference. Those with no religion also have significantly ($p \leq 0.001$) higher EDS scores than Catholic respondents. Other religions (Muslim, Jewish, Protestant, other) do not see a significant difference. This is likely due to low numbers in this group.

Young people that are not Irish citizens have significantly ($p \leq 0.05$) lower EDS scores than those who are Irish citizens. This is unexpected considering the prevalence of racial discrimination, but this cohort is less diverse due to the requirement of being in Ireland at age 9 for inclusion in Cohort ’98. Parents’ ethnicity and nationality is not significantly related to perceived discrimination, nor is social class background.

The data does not contain information on where the perceived discrimination took place. Given the high level of misogynistic and racist content circulating on some online platforms, we added a control to measure the amount of time spent online as a proxy for such exposure. There is also evidence that young people experiencing more harassment online will also experience offline harassment (Weinstein et al., 2021). We find that time spent online has a U-shaped relationship with discrimination scores. Those who spend the highest and lowest time online have the highest EDS scores. Those spending less than 3 hours online, but more than 0, have lower EDS scores compared to those with high online time. In this model, no reported time online is associated with higher EDS scores compared to those who spend more than 3 hours online, all else equal.

Table 3.1 Predictors of everyday discrimination score at age 17

	All
	Coefficient
Sex (ref: male)	
Female	-0.151***
Transgender (ref: cisgender)	
Transgender	0.836*
Prefer not to say	0.382*
Sexual orientation (ref: heterosexual)	
LGBA+	0.242***
Don't know/prefer not to say	0.012
Disability status (ref: not disabled)	
LLC not hampered	0.043
Disability	0.197***
Religion (ref: Catholic)	
No religion	0.165***
Other religion	0.052
Citizenship (ref: Irish citizen)	
Not Irish citizen	-0.260*
Parent(s)' ethnicity (ref: white Irish)	
Either parent from ethnic minority	-0.171
One or both parents born in IE (ref)	
No parents born in IE	-0.115
Family class background (ref: professional/managerial)	
Non-manual	-0.063
Skilled manual	-0.037
Semi/unskilled	-0.015
No social class	-0.082
Time spent online weekdays (ref: >3 hrs online during weekdays)	
No time	0.357*
<1 hr	-0.215***
1–2 hrs	-0.155***
2–3 hrs	-0.113*
Don't know but>0	0.022
Constant	1.351***
Observations	6064
Adjusted R-squared	0.055

Source: Growing Up in Ireland Cohort '98 Data Wave 3. Authors' analysis. Weight used is cross-sectional weight at 17.

Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

3.3.2 OLS model of discrimination at 25

The OLS model presented in table 3.2 should be interpreted in the same way as table 3.1. Coefficients refer to the change in EDS score compared to the reference category, where a positive significant coefficient means that EDS scores are higher for that category compared to the reference.

EDS scores on average were lower at age 25 than at age 17, but they are also associated with different characteristics. Sex (measured at 17 for consistency) is not significantly associated with higher EDS scores, despite rates of gender-based discrimination being consistently high across waves. This is most likely due to the small difference between scores for male and female participants at age 25 (see Table A.1). There is no significant difference in the EDS scores of transgender and cis-gender individuals at 25. LGBA+ young people see significantly ($p \leq 0.05$) higher EDS scores than heterosexual young people.

Young people aged 25 with a disability that hampers their day-to-day activities have significantly ($p \leq 0.001$) higher EDS scores than those who do not have a disability. Non-hampered disability status is not significant. The young person’s own ethnicity is recorded at 25. Being part of an ethnic minority is now associated with significantly ($p \leq 0.05$) higher EDS scores than those who are white Irish as expected. Social class and time spent online is not significant in this model.

EDS scores at 17 are significant ($p \leq 0.001$). This means that higher EDS scores at 17 are significantly associated with higher EDS scores at 25, reflecting an ongoing occurrence of discrimination throughout the lives of these young people.

Table 3.2 Predictors of Everyday Discrimination Scale scores at age 25

	Coefficient
Sex at 17 (ref: male)	
Female	0.075
Transgender status at 17 (ref: cisgender)	
Transgender	-0.047
Prefer not to say	-0.033
Sexuality (ref: heterosexual)	
LGBA+	0.134*
Don't know/prefer not to say	-0.182
Disability status (ref: no disability)	
LLC not hampered	-0.024
Disability hampered	0.273***
Religion (ref: Catholic)	
No religion	-0.066
Other religion	0.029
Citizenship (ref: Irish citizen)	
Not Irish citizen	0.117
Ethnicity (ref: white Irish)	
White other	-0.125
Ethnic minority	0.385*
Missing	0.208
Social class (ref: professional/managerial)	
Non-manual	-0.028
Skilled manual	-0.094
Semi/unskilled	-0.14
No social class	0.109
Urban rural status (ref: urban)	
Rural	-0.051
Urban status missing	0.129
Time spent online for leisure (ref: over 3 hrs)	
<1 hr	0.125
1–2 hrs	0.068
2–3 hrs	0.029
EDS score at 17	0.340***
Constant	0.565***
Observations	1794
Adjusted R-squared	0.173

Source: Growing Up in Ireland Cohort '98 Data Wave 5. Authors' analysis. Weighted using longitudinal weights at 25. Transgender status and sex is measured at 17.

Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

3.3.3 Grounds for discrimination at 17

After answering the Everyday Discrimination Scale, respondents are asked in both waves what they feel are the grounds they were discriminated on, such as gender or appearance. The models in Table 3.3 show the predictors of each ground for discrimination at age 17. Results are presented as odds ratios, referring to the increase in likelihood of reporting discrimination on each ground compared to the reference category. Scores above 1 refer to an increase in likelihood, while scores below 1 refer to a decrease. Grounds are not mutually exclusive, and this question is only asked to those who report discrimination occurring. It is important to note that small numbers of observations[13] for some of these categories may inflate the odds ratios.

Table 3.3 shows that sex is significant for discrimination on the grounds of gender, ethnicity, age, appearance and accent. Females have higher odds of reporting discrimination on the grounds of gender and age compared to their male counterparts. They have lower odds of reporting discrimination on the grounds of ethnicity, appearance and their accent. Young people who are transgender have higher odds of reporting discrimination on the grounds of gender, ethnicity, disability status, sexual orientation and education/income compared to their cisgender counterparts. Sexual orientation and disability status are most significant here.

The odds of discrimination on the grounds of appearance and sexual orientation are higher for those who are LGBA+ compared to those who are heterosexual. Similarly, disability status is associated with significantly higher odds of discrimination on the grounds of disability. Aside from this, having a non-hampering condition is associated with higher odds of discrimination on the grounds of ethnicity, and having a hampering disability is associated with higher odds of discrimination on the grounds of appearance.

Reporting no religion is associated with lower odds of discrimination on the grounds of ethnicity compared to Catholic young people. Religion is not significant for any other category. Non-Irish citizenship

[13] These models use a binary variable indicating whether the young person felt they were discriminated against on a specific ground, it excludes those that did not experience discrimination at least a few times a year.

is associated with higher odds of discrimination on the grounds of ethnicity, and lower odds of discrimination on the grounds of age and appearance. Parental ethnic status is associated logically with higher odds of discrimination on the grounds of ethnicity, and lower odds of discrimination on the grounds of disability. Similarly, whether parents are born in Ireland is associated with lower odds of discrimination on the grounds of disability and age.

Having no religion is associated with lower odds of discrimination on the grounds of ethnicity compared to Catholic 17-year-olds. Young people who are not Irish citizens are significantly more likely to experience ethnicity-based discrimination. Parental Black, Asian and minority ethnic (BAME) status is significantly ($p \leq 0.001$) associated with higher odds of discrimination on the grounds of ethnicity. Having no parents born in Ireland is associated with lower odds of discrimination on the basis of age, disability and sexual orientation compared to those with at least one parent born in Ireland.

Social class is significant for discrimination on the grounds of ethnicity, sexual orientation, and disability. In particular, children of all social classes have higher odds of experiencing ethnicity-based discrimination compared to their counterparts in the professional/managerial social class. Similarly, sexual orientation sees the same pattern, though is only significant for semi/unskilled and no social class. Non-manual and semi/unskilled are positively associated with higher odds of reporting discrimination on the basis of disability. Those from a semi/unskilled background have higher odds of reporting discrimination on the basis of appearance compared to those from a professional/managerial background, all else equal.

Time spent online is significant for ethnicity, disability status, appearance, sexual orientation, education or income, and accent, though only for some categories. Those who spend less than 3 hours online have significantly lower odds of reporting appearance-based discrimination than those who spend >3 hours online, suggesting that online discrimination may be an issue. Medium levels of time (1–2 hours) spent online are associated with significantly ($p \leq 0.01$) lower odds of discrimination on the basis of sexual orientation compared to those who spend >3 hours online. Those who spent less than 1 hour online had a lower likelihood of reporting ethnic or accent-based discrimination. Those who spend 1–2 hours online have significantly

lower odds of discrimination on the grounds of education/income. No time spent online is associated with higher odds of reporting discrimination on the basis of disability or ethnicity compared to those who spend >3 hours online, suggesting that this may identify a particularly excluded group.

Table 3.3 Logit models of grounds for discrimination at age 17

Perceived ground for discrimination	Gender	Ethnicity	Age	Disability status	Appearance	Sexual orientation	Education/ income	Accent
Sex (ref: male)								
Female	2.564***	0.735*	1.838***	1.02	0.838*	0.88	1.118	0.699***
Not transgender								
Transgender	3.047*	2.963*	0.854	5.282***	1.88	6.388***	2.591*	1.8
Prefer not to say	2.745	0.962	0.511	0.48	0.88	3.905*	1.734	0.879
Sexual orientation (ref: heterosexual)								
LGBA+	1.034	0.904	1.193	1.063	1.379*	8.601***	0.856	1.234
Don't know/prefer not to say	0.904	2.837**	0.68	1.654	0.923	1.311	1.888*	1.596
Disability status (ref: no disability)								
LLC not hampered	1.335	1.547	1.11	3.223***	1.266	1.366	1.367	1.182
Disability	0.812	0.707	0.889	2.416***	1.465**	0.968	0.996	0.904
Religion (ref: Catholic)								
No religion	1.193	0.568**	0.844	0.698	1.004	1.19	0.798	0.935
Other	1.124	0.764	0.823	0.86	0.976	0.923	0.967	0.872
Citizenship (ref: Irish citizen)								
Not Irish citizen	0.604	3.499***	0.413*	0.219	0.330**	1.083	0.346	1.032
Parental ethnic status (ref: no parent BAME)								
Either parent BAME	1.064	21.426***	0.986	0.325*	0.726	0.571	0.605	0.687
Ref: one or both parents born in IE								
No parents born in IE	0.939	1.255	0.642*	0.293**	1.348	0.427*	0.813	1.382
Social class (ref: professional/managerial)								
Non-manual	0.895	1.482*	0.842	1.649*	1.163	1.362	0.951	1.018
Skilled manual	1.077	1.701*	0.916	1.247	1.446**	1.323	0.975	1.157
Semi/unskilled	1.204	2.035***	0.881	1.744*	1.593**	1.596*	1.202	1.003
No social class	1.045	2.019***	0.855	1.554	1.246	1.705*	1.208	1.046
Time spent online during weekdays (ref: >3 hrs)								
None	1.383	3.075**	0.739	3.840***	0.622	1.453	1.24	1.463
<1 hr	0.932	0.595*	0.935	1.004	0.656**	0.725	0.848	0.630*
1–2 hrs	1.058	0.922	1.056	0.849	0.783*	0.607**	0.671**	0.763
2–3 hrs	1.167	0.021	1.238	0.962	0.84	0.698	0.85	0.876
Don't know but>0	1.022	1.225	1.085	1.575	0.984	1.041	1.072	0.943
Observations	4754	4753	4755	4721	4754	4751	4752	4722

Source: Growing Up in Ireland Cohort '98 Data Wave 3. Authors' analysis. Models use cross-sectional weights at age 17.

Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

3.3.4 Grounds for discrimination at 25

Table 3.4 presents the results of a series of logistic regressions on perceived grounds for discrimination at the age of 25. This question is only asked to those who report any discrimination and are not mutually exclusive. An individual can report that their discrimination is due to more than one factor. We do not include some of the grounds as the sample size was too small (e.g. disability discrimination). Results are presented as odds ratios, showing the relative odds of reporting discrimination on one ground for a given characteristic compared to the reference category for that characteristic (e.g. women compared to men).

Those whose sex is female have significantly ($p \leq 0.001$) higher odds of gender or age discrimination at 25 than men, which aligns with the shift in women reporting discrimination between 17 and 25 discussed in section 3.1. Being female is associated with lower odds of reporting discrimination on the grounds of ethnicity or sexual orientation at age 25 compared to male. As expected, those who are LGBA+ are significantly more likely to perceive discrimination on the grounds of sexual orientation than their heterosexual counterparts. Sexuality is not significant for any other ground, and transgender status is not significant in these models. Those who don't know or prefer not to say regarding whether they are transgender are less likely than their cisgender counterparts to say their discrimination is on the grounds of gender.

Disability status is significant for reporting discrimination on the grounds of education/income, where those with a long-lasting condition have lower odds than non-disabled persons of experiencing discrimination on this ground. For those with a disability hampering their day-to-day lives, this is associated with higher odds of reporting discrimination on the grounds of appearance compared to their non-disabled counterparts. With regards to ethnicity, ethnic minority status is associated with significantly higher odds of reporting discrimination on the grounds of ethnicity compared to white Irish. Citizenship is significant only for the accent ground, where those who are non-Irish are significantly ($p \leq 0.001$) more likely to perceive discrimination on the grounds of their accent compared to those with Irish citizenship.

Unexpectedly, those with a semi/unskilled social class background are less likely to report education/income-based discrimination than the professional/managerial class. For those with no social class background, they are significantly less likely to report discrimination on the grounds of gender or ethnicity, and significantly more likely to report accent-based discrimination. Urban-rural location is significant for ethnic- and age-based discrimination, where those from a rural background have lower odds of reporting discrimination on these grounds.

Time spent online is only significant in the appearance model, with those spending a moderate amount of time online (1–2 hours) having lower odds of reporting discrimination on the basis of appearance than those who spend >3 hours online. EDS score at 17 is significant for the grounds of sexual orientation and appearance. Higher EDS scores at 17 are associated with higher odds of perceived discrimination on the ground of appearance, and lower odds of discrimination on the ground of sexual orientation.

Broadly, fewer factors are significant here for predicting discrimination on specific grounds at age 25, which might be due to the smaller sample size. However, clear relationships are observed for sexual orientation and ethnicity predicting discrimination on these grounds, and sex predicting discrimination across a range of grounds.

Table 3.4 Logit models of grounds for discrimination at age 25

Grounds for discrimination	Gender	Ethnicity	Age	Appearance	Sexual orientation	Education/ income	Accent
Sex at 17 (ref: male)							
Female	7.995***	0.373**	2.270***	0.98	0.421**	0.994	0.7
Transgender status (ref: cisgender at 17)							
Transgender	3.417	1	1.046	1	4.074	1	0.597
Prefer not to say	1.896	7.083*	0.287	0.453	3.09	0.87	0.781
Sexual orientation (ref: heterosexual)							
LGBA+	1.075	0.939	1.143	1.492	26.508***	1.294	1.05
DK/prefer not to say	0.308	0.467	0.244	0.781	1	2.648	0.473
Disability (ref: not disabled)							
LLC not hampered	1.144	0.587	0.726	0.816	1.619	0.240*	1.683
Disability hampered	1.433	1.416	0.689	1.502*	1.692	1.336	1.175
Religion (ref: Catholic)							
No religion	2.154***	0.849	0.847	1.114	1.553	0.958	1.346
Other religion	2.177	2.05	0.442*	0.876	0.715	0.942	2.452
Ethnicity (ref: white Irish)							
White other	1.559	0.792	0.508	6.909	1.041	1.027	0.025*
Ethnic minority	0.32	29.736***	1.843	0.532	0.419	0.633	0.418
Missing	0.54	0.516	3.347	1.202	1	1	1
Citizenship (ref: Irish citizen)							
Not Irish citizen	2.107	1.028	1.035	0.303	0.835	0.518	9.315*
Social class (ref: professional/managerial)							
Non-manual	0.867	1.282	1.059	1.177	1.088	0.815	0.764
Skilled manual	1.014	1.435	1.092	1.155	1.591	1.901	1.654
Semi/unskilled	0.68	0.319	0.503*	0.863	1.962	0.445*	0.714
No social class	0.426*	0.337*	0.604	1.586	3.258	1.555	2.447*
Urban/rural status (ref: urban)							
Rural	0.696	0.361**	0.706*	0.722	0.598	1.08	0.483*
Urban missing	0.809	0.245	0.818	0.753	0.082**	0.966	0.236
Time spent online not at work (ref: > 3 hrs)							
<1 hr	0.746	3.013	0.976	0.847	0.223	0.928	0.713
1–2 hrs	1.396	1.532	1.018	0.608*	2.092	0.613	1.066
2–3 hrs	1.08	1.388	1.121	0.831	1.395	1.223	1.047
EDS score at 17	0.982	0.796	1.059	1.213*	0.587*	0.946	1.313
Observations	1354	1346	1354	1346	1333	1339	1347

Source: Growing Up in Ireland Cohort '98 Data Wave 5. Authors' analysis. Models use longitudinal weights at 25.

Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

3.4 Conclusion

This chapter presents the rates and grounds of perceived discrimination across Cohort ’98 at 17 and 25, and discusses the results of models addressing the characteristics associated with higher scores on the Everyday Discrimination Scale, as well as characteristics associated with perceiving discrimination on specific grounds. The majority of young people report multiple reasons for their discrimination suggesting that the experience of discrimination is intersectional. At age 17, age is the most common reason cited for discrimination, but this is nearly always cited alongside other reasons. By age 25, gender is the most common reason cited.

We find a range of factors which are associated with higher discrimination scores. Young people from an ethnic minority have higher discrimination scores at age 25 than the non-minority group but we do not have the same measure at 17. Those in the LGBTIQ+ community and those with a disability have consistently higher EDS scores than their reference counterparts. At 17, we find that being female is associated with a lower EDS score. Young men at 17 were more likely to report that ‘people act as if they are afraid of you’ and ‘you have been threatened or harassed’ than women. At 25, this pattern shifts, with women experiencing being threatened or harassed at a higher rate.

Chapter 4

Discrimination, wellbeing and health

Perceived discrimination has been found to be associated with a wide range of life outcomes, including physical and mental health (Williams et al., 2019), life satisfaction and self-esteem (Priest et al., 2013), and problematic behaviours such as alcohol consumption (Gilbert and Zemore, 2016). Most of the literature has focused on studies conducted in the US and on racial discrimination. European research on the topic has been predominantly cross-sectional (de Freitas et al., 2018). In this chapter, we investigate health and wellbeing outcomes for young people at age 25 years. The longitudinal design of the Growing Up in Ireland (GUI) data means that we can test whether health and wellbeing at age 25 are related to experiences of perceived discrimination taking into account levels at age 17.

To explore these relationships, we use statistical models that estimate to what extent the variation in wellbeing and health of respondents at 25 is associated with their perceived discrimination, even when we consider their previous levels of wellbeing and health at 17.

As discussed in Chapter 2, the following variables from GUI were selected to measure wellbeing and health:

General health: A scale of self-rated general health questions were asked in both GUI waves. Young people were asked to rate their general health on a five-point Likert scale ranging from poor to excellent. To facilitate interpretation, the original values were grouped into two levels: the reference group is a combination of ‘very good’ and ‘excellent’, which is compared against responses ‘poor’, ‘fair’ and ‘good’ combined.

Life satisfaction: Participants were asked to rate their level of satisfaction with life on an 11-point scale, where 0 is extremely unsatisfied and 10 is extremely satisfied.

Self-esteem: This is measured using the Rosenberg Self-Esteem Scale in both waves. This scale is composed of six items rated on four-point scales (strongly disagree – strongly agree). Examples of items include

'I feel that I have a number of good qualities', and 'I certainly feel useless sometimes'. The final scale at age 25 varies from 0 to 18.

Depression score: This is measured differently in each wave. At age 25, depression is measured using the Centre for Epidemiological Studies Depression (CES-D) eight-item scale. The young person is asked to rate how frequently in the prior week they experienced different depression symptoms. These are given on a four-point rating scale. The respondent's score is obtained by summing responses across each category.

Depression status: A composite value of 7 or higher in the depression score is considered a 'clinically significant' level of psychological distress (McNamara et al., 2021).

AUDIT score: This is a 10-item screening tool for alcohol consumption. A total score of 20 or more may indicate alcohol dependence and scores of 8 or more are suggestive of strong likelihood of harmful alcohol consumption (Cassidy et al., 2008).

It is important to emphasise that all these outcome variables are based on self-reported data. Although these types of data are valuable to assess individual health and wellbeing status (Alwan, 2026), they have limitations as they are more prone to response biases and accuracy, which can be particularly relevant in our longitudinal design.

All statistical models include a corresponding measurement of wellbeing and health at age 17. This allows us to assess the association of discrimination with the outcome variables accounting for time-invariant unobserved confounders; in other words, individual characteristics that might not be measured and do not change over time. In this way, we examine how current levels of perceived discrimination can be related to their health and wellbeing, even considering more permanent characteristics of individuals. We also control for a range of socio-demographic characteristics identified in Chapter 2. Unless indicated, these variables are measured at age 25. The transgender variable is not collected at age 25.

The statistical models were estimated using either logistic regression (general health and depression status) or ordinary least squares (OLS) regressions. Table 4.1 shows the estimates of each variable expressed

in odds ratios for logistic regressions or beta coefficients for OLS regressions. As discussed in Chapter 2, due to the GUI sampling strategy, we calculated clustered robust standard errors using the Wave 1 school ID.

In the models using odds ratios, values lower than one indicate decreased odds of the outcome and values higher than one denote increased odds of the outcome. For beta coefficients, the value expresses the estimated change in the outcome scale for each unit changed in the variable.

Overall, the estimated effects of the perceived discrimination variable in the models indicate a significant negative correlation with wellbeing and health outcomes. For each additional unit of the EDS score at age 25, we expect either a lower value for ‘general health’, ‘life satisfaction’ and ‘self-esteem’, or a higher value for ‘depression score’, ‘depression status’ and the ‘AUDIT’ scale. In the next sections, we discuss each of these models separately.

Table 4.1 Coefficients/odds ratios of the models for all health and wellbeing outcomes at 25

	General health	Life sat	Self-esteem	Depress score	Depress status	AUDIT score
Characteristic	OR	Beta	Beta	Beta	OR	Beta
(Intercept)	0.17***	5.5***	7.8***	1.6***	0.09***	8.3***
EDS score 25	0.66***	-0.49***	-1.1***	1.7***	2.16***	0.32*
Health 17	2.11***					
Life sat 17		0.23***				
Self-esteem 17			0.38***			
Depression 17				0.21***	1.11***	
AUDIT score 17						0.35***
Sex at 17 (ref: male)						
Female	0.92	0.16*	-0.23	0.78***	1.46***	-1.4***
Transgender status at 17 (ref: cisgender)						
Transgender	0.64	0.28	1.2	-2.6*	0.34	0.83
Prefer not to say	0.77	0.45	0.23	-0.74	0.4	-2.2
Sexual orientation (ref: heterosexual)						
LGBA+	0.50***	-0.47***	-0.58**	0.87***	1.58**	0.98**
DK/prefer not to say	0.49*	0.51	0.24	-0.58	0.81	-2.8*
Religion (ref: Catholic)						
No religion	0.94	0.1	0.35*	0.12	1.02	-0.04
Other	0.49**	0.05	0.68	0.1	0.81	-2.5***
Religion missing	1.16	0.17	0	0	0.92	-0.11
Citizenship at 17 (ref: Irish citizen)						
Not Irish citizen	1.53	0.1	2.6***	-2.4*	0.23	-1.9
Time online outside of work (ref >3 hrs)						
<1 hr	1.18	0.32	0.51	-1.6***	0.25***	-1.1
1–2 hrs	2.22***	0.34***	0.75***	-1.2***	0.54***	-1.1***
2–3 hrs	1.49***	0.28**	0.64***	-0.92***	0.60***	-0.53*
Ethnicity (ref. white Irish)						
White other	1.27	-0.12	-1.3*	0.66	1.47	-1.6
Ethnic minority	2.89**	-0.03	0.13	1	1.18	1.7
Ethnicity missing	2.67	-1.8***	-3.5***	1.2	2.04	-0.23
Social class background (ref: professional/managerial)						
Non-manual	1.06	-0.08	-0.16	-0.01	0.77	0.01
Skilled manual	0.60**	0	0.43*	-0.4	0.54***	-2.1***
Semi/unskilled	0.48***	-0.2	-0.33	0.65*	1.25	-0.38
No social class	0.71*	-0.11	-0.19	0.02	1	-2.5***
Urban/rural status (ref: urban)						
Rural	1.19	0.07	0.13	-0.05	1	-0.52*
Urban missing	0.89	-0.14	0	0.12	0.93	-1.3***
Disability status (ref: no disability)						
LLC not hampered		-0.04	-0.15	0.36	1.34	0.35
Disability hampered		-1.0***	-1.7***	3.5***	4.57***	-0.79**

Source: GUI Cohort '98, Waves 3 and 5.

Notes: *p<0.05; **p<0.01; ***p<0.001. Variables measured at age 25 unless otherwise stated. Abbreviations: CI = confidence interval, OR = odds ratio, LLC = long-lasting condition.

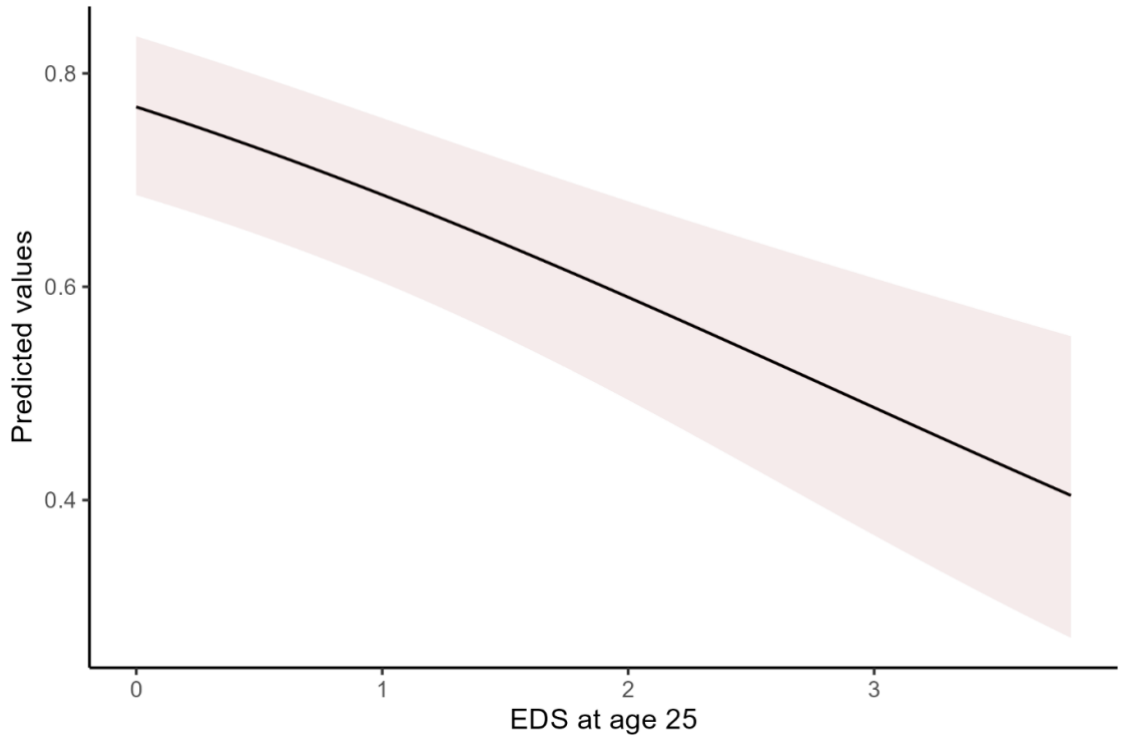
4.1 General health

The first column of Table 4.1 shows the estimated increase in the odds of being in a higher level of general health for each additional unit of the variable included in the model. As expected, the 'general health' measured at age 17 is positively associated with general health at age 25. An additional level on this five-point scale at age 17 is associated with increased odds of indicating 'very good' or 'excellent' health at age 25 in the reference categories.

Examining the other control variables, five other factors have statistically significant differences between groups. First, the LGBA+ group is predicted to have lower odds of indicating better general health compared to the heterosexual group. The group who reported leisure screen time of between 1 and 2 hours or between 2 and 3 hours per day is also predicted to have higher odds of better general health compared to the group with leisure screen time higher than 3 hours per day. Finally, those participants who have a working-class background (skilled manual or semi/unskilled) have also lower odds of reporting better general health compared to those with a 'professional/managerial' social class background.

More importantly, following the overall hypothesis of this study, the perceived discrimination is expected to have a negative association with general health at 25. Using marginal effects from the model, we estimate an average 7 per cent decrease in the probability of indicating 'very good' or 'excellent' health for each additional unit of the EDS score. Figure 4.1 shows the predicted probabilities of indicating 'very good' or 'excellent' health according to the EDS scale after averaging all the values of the covariates included in Table 4.1. The figure shows a linear decreasing probability of reporting better levels of general health as EDS values increase. There is more uncertainty regarding the size of the effect at the high end of the scale due to the lower number of observations. However, the overall negative pattern of the negative relationship between perceived discrimination and self-reported health is clear.

Figure 4.1 Average predicted probabilities of 'very good' or 'excellent' general health at age 25 by EDS score



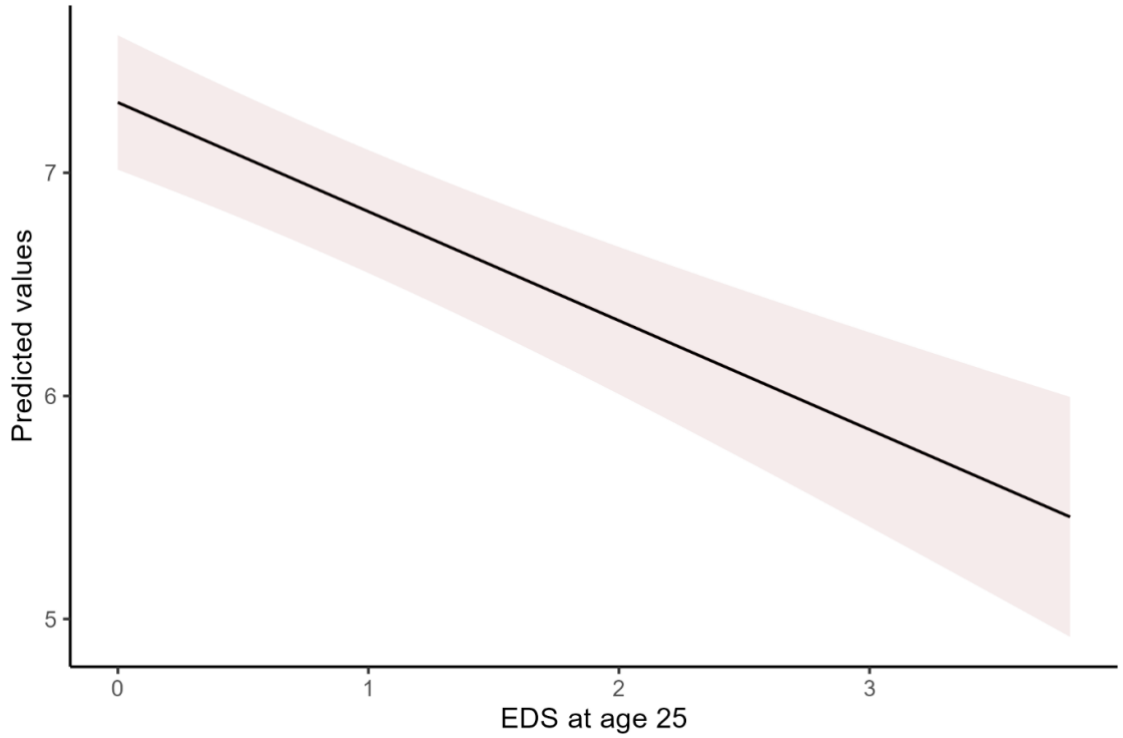
Source: Growing Up in Ireland Cohort '98, Waves 3 and 5.
Note: Estimated from model outlined in Table 4.1. The shaded area represents the 95 per cent confidence interval of the estimate.

4.2 Life satisfaction

Life satisfaction was measured in GUI through an 11-point scale varying from extremely unsatisfied (0) to extremely satisfied (10). Similar to subjective general health, the level of 'life satisfaction' at age 17 is a significant predictor of level of the same scale at age 25. For each additional unit in the scale in the initial time point, we expect 0.23 additional points in the scale at age 25 for the reference groups. Female respondents also tend to report significantly higher levels of life satisfaction compared to male respondents. Statistically significant differences across groups are also found for sexual orientation, ethnicity, leisure screen time, main activity, and educational attainment.

Figure 4.2 shows the average predicted value of life satisfaction for each value of the EDS scale at age 25. Controlling for all the other individual characteristics as well as the level of life satisfaction reported at age 17, there is a clear pattern of decreasing life satisfaction as perceived discrimination increases.

Figure 4.2 Average predicted life satisfaction at age 25 by EDS



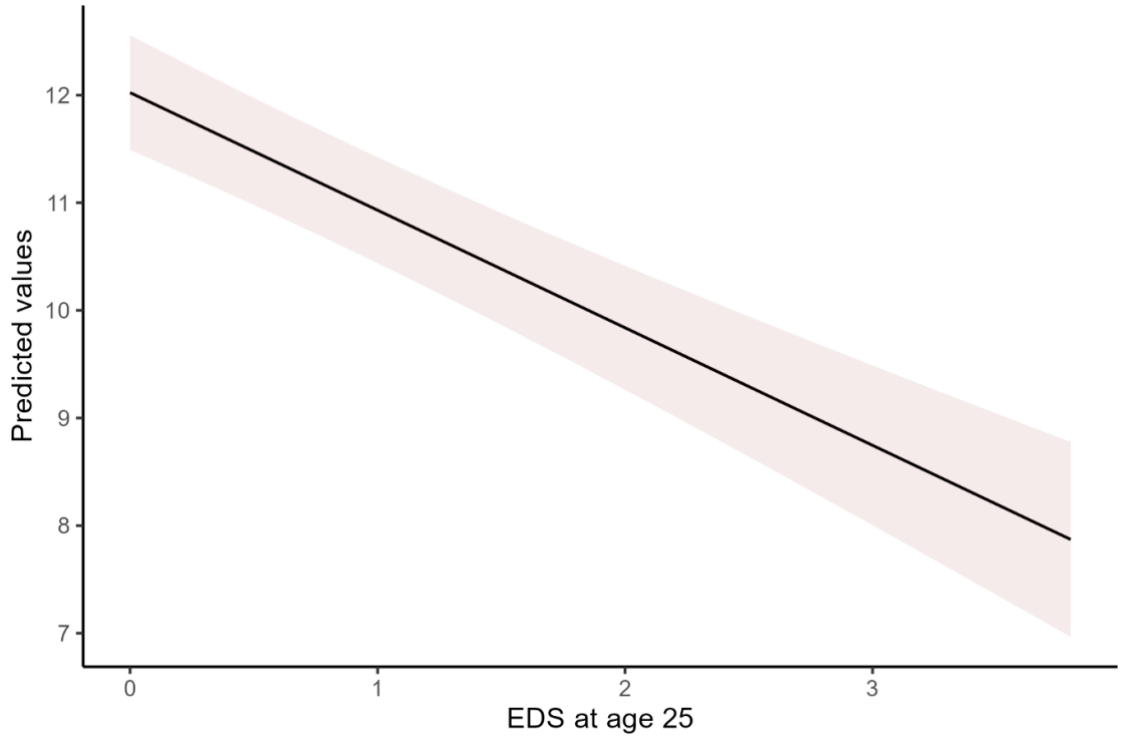
Source: Growing Up in Ireland Cohort '98 Waves 3 and 5.
Note: Estimated from model outlined in Table 4.1. Life satisfaction measured on 11-point scale from 0–10. The shaded area represents the 95 per cent confidence interval of the estimate.

4.3 Self-esteem

Self-esteem is measured using the Rosenberg Self-Esteem Scale. The same scale was implemented at age 17 and, as shown in Table 4.1, the level of self-esteem at the younger age is a statistically significant predictor of self-esteem at age 25. The control variables included in the model indicate significant differences also by sexual orientation, citizenship, ethnicity, leisure screen time, main economic activity, and educational attainment.

The EDS score at age 25 is also a significant predictor of self-esteem. An additional unit in the EDS scale corresponds to a reduction of one unit in the self-esteem scale, conditional on all the control variables and self-esteem at age 17. Figure 4.3, containing the predicted values of self-esteem by EDS scores, demonstrates the magnitude of this negative association between these two variables.

Figure 4.3 Predicted values of self-esteem by EDS scores at age 25



Source: Growing Up in Ireland Cohort '98 Waves 3 and 5.
Note: Estimated from model outlined in Table 4.1. Self-esteem measured on 11-point scale from 0–10. The shaded area represents the 95 per cent confidence interval of the estimate.

4.4 Depression

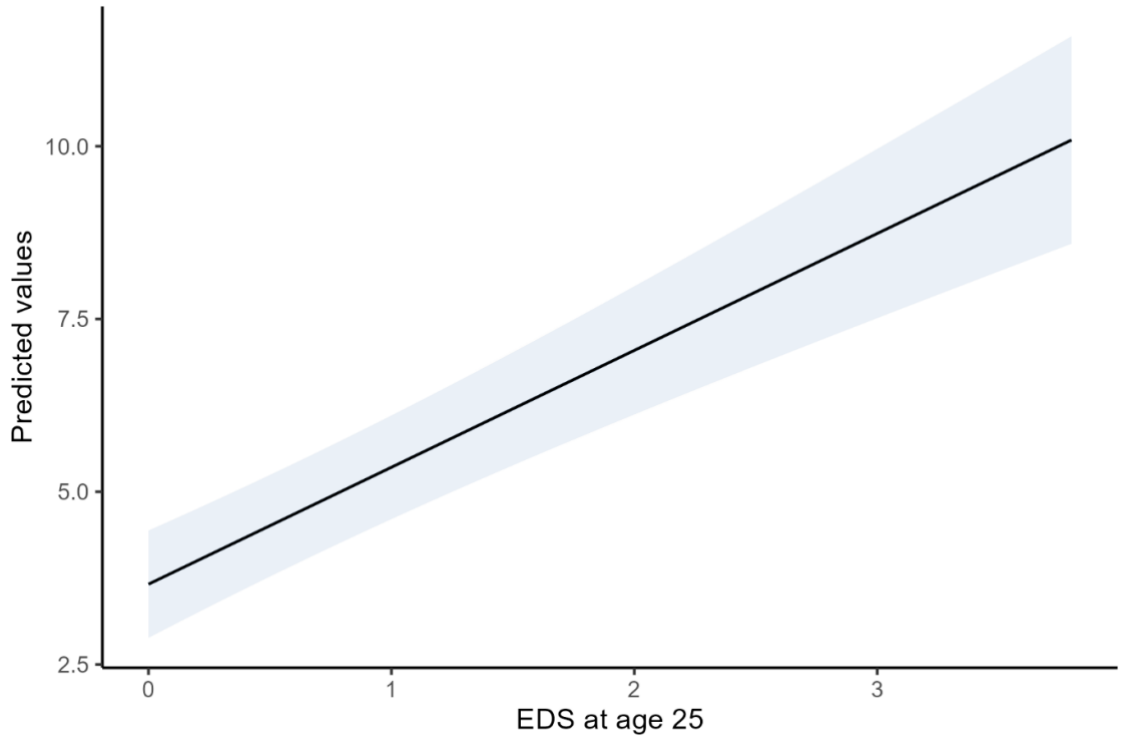
Discrimination can adversely affect mental health, particularly for young people when it occurs at a key stage of identity development. At age 25, depression is measured using the CES-D scale. Higher scores indicate worse levels of depression. In addition to the numeric score obtained from the scale (depression score), we also use the derived dichotomous variable that uses a cut-off point to separate those who are considered to have a 'clinically significant' level of psychological distress from the other participants of the study.

This scale was not implemented in the previous wave of the study when participants were 17 years old. Consequently, we use another measurement of mental health at age 17, the Short Mood and Feelings Questionnaire (SMFQ), which is a scale designed to provide a brief assessment of depressive symptoms in studies where depression was not the principal outcome. The estimates in Table 4.1 show that this

measurement is a significant predictor of both the depression score and the depression status at age 25. For each additional unit of the SMFQ scale at age 17, the model estimates 0.21 higher units in the depression score at age 25 and 11 per cent higher odds of having depression symptoms at this age.

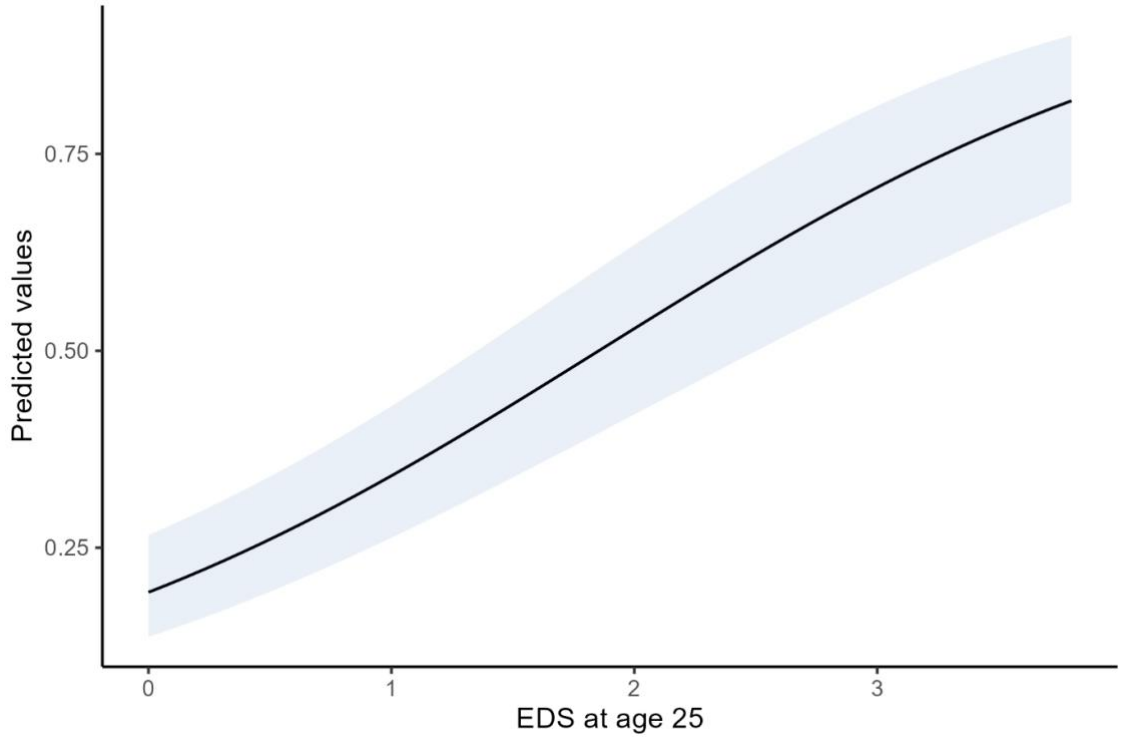
As shown in Figure 4.4, there is sharp increase in the model's predicted value of the depression score as the EDS values increase. A similar relationship is found for the predicted probability of having depression (Figure 4.5). For the latter, the average marginal effect derived from the model indicates that each additional unit of the EDS score is associated with a 12 per cent increase in the probability of having depression symptoms.

Figure 4.4 Relationship between EDS score at 25 and predicted depression score



Source: Growing Up in Ireland Cohort '98 Waves 3 and 5.
Note: Estimated from model outlined in Table 4.1. Depression score measured using CES-D scale. The shaded area represents the 95 per cent confidence interval of the estimate.

Figure 4.5 Relationship between EDS score at 25 and probability of depression status



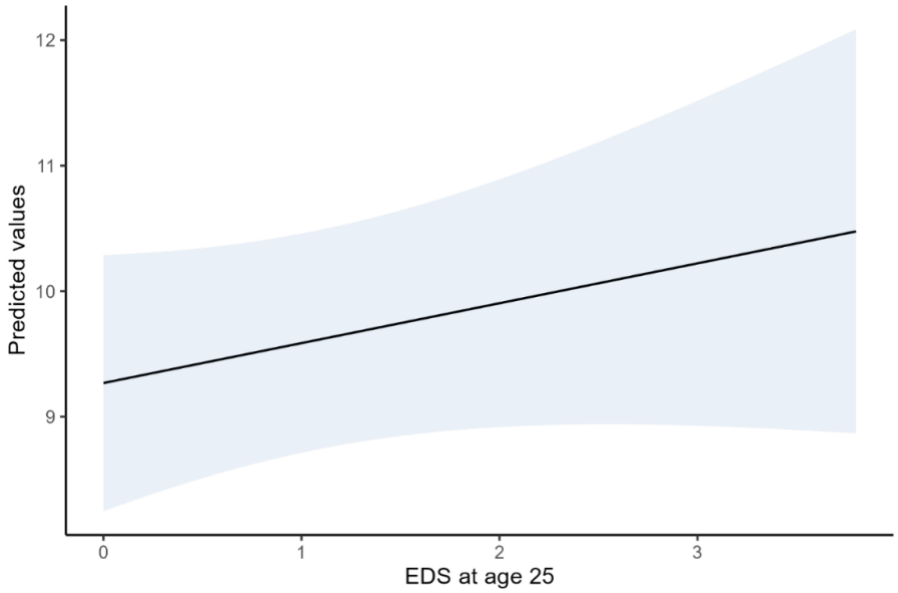
Source: Growing Up in Ireland Cohort '98 Waves 3 and 5.
Note: Estimated from model outlined in Table 4.1. Probability of 'clinically significant' depression status. The shaded area represents the 95 per cent confidence interval of the estimate.

4.5 Alcohol consumption (AUDIT score)

The final outcome examined in this chapter is problematic alcohol consumption as measured by the AUDIT score. Similar to what was observed in all previous models, the value of this outcome at age 17 is significantly correlated with the value at age 25. In addition, the following variables are also significant correlates in the model: sex, sexual orientation, religion, time online, social class, urban/rural, as well as disability status.

The model also suggests that there is a positive correlation between perceived discrimination and alcohol consumption, with individuals who report being discriminated more often also indicating higher alcohol consumption measured with the AUDIT scale.

Figure 4.6 Predicted values of AUDIT score at age 25



Source: Growing Up in Ireland Cohort '98 Waves 3 and 5.
Note: Estimated from model outlined in Table 4.1. The shaded area represents the 95 per cent confidence interval of the estimate.

4.6 Robustness checks

4.6.1 Any discrimination

As discussed in Chapter 2, the Everyday Discrimination Scale has been most often applied to racial/ethnic discrimination, and fewer studies have validated the scale for different discrimination types (e.g. due to age, disability, gender/sex, etc.). Therefore, as a robustness check, we conducted additional analyses using a simple dichotomous variable indicating whether the respondent reported having experienced any discrimination a few times a year or more, separating from those who did not report any discrimination. This dichotomous measure is less sensitive to any variation in responses to individual items in scale across social groups.

Table 4.2 shows the same models for the same outcomes included in Table 4.1, replacing the EDS variable with the referred indicator of experiencing any discrimination. The estimates show that those who experienced any discrimination are less likely to report 'very good' or 'excellent' general health, indicate lower life satisfaction, lower self-esteem, higher depression score and higher alcohol consumption. These are all in the same direction of the estimates observed using the EDS scale.

Table 4.2 Models of outcomes at age 25 including 'any discrimination'

	General health	Life satisfaction	Self-esteem	Depress score	Depress status	Audit score
Characteristic	OR	Beta	Beta	Beta	OR	Beta
(Intercept)	0.17***	5.4***	7.5***	1.6***	0.08***	7.7***
Any discrimination (ref: no)						
Yes	0.49***	-0.67***	-1.5***	2.1***	3.01***	1.1***
Health at 17	2.16***					
Life sat at 17		0.24***				
Self-esteem at 17			0.40***			
Depression score at 17				0.23***	1.12***	
Audit score at 17						0.36***
Sex at 17 (ref: male)						
Female	0.99	0.21**	-0.08	0.55**	1.26*	-1.5***
Transgender status (ref: cisgender)						
Transgender	0.65	0.31	1.2	-2.7*	0.33	0.98
Prefer not to say	0.73	0.41	0.19	-0.7	0.45	-2.2
Sexual orientation (ref: heterosexual)						
LGBA+	0.47***	-0.51***	-0.64***	1.1***	1.71***	1.0**
DK/Prefer not to say	0.44*	0.4	0.07	-0.25	1.02	-2.5*
Religion (ref: Catholic)						
No religion	0.93	0.09	0.33*	0.15	1.07	0.03
Other	0.52*	0.13	0.76*	-0.02	0.77	-2.5***
Religion missing	1.12	0.14	-0.03	0.12	0.99	-0.06
Citizenship (ref: Irish citizen)						
Not Irish citizen	1.65	0.22	2.9***	-2.7*	0.23*	-2.1
Time spent online outside of work (ref >3 hrs)						
<1 hr	1	0.18	0.34	-1.3**	0.31***	-1.2*
1–2 hrs	2.13***	0.32**	0.64***	-1.1***	0.58***	-1.1***
2–3 hrs	1.45**	0.24**	0.56***	-0.81***	0.61***	-0.58*
Ethnicity (ref: white Irish)						
White other	1.43	-0.11	-1.2*	0.35	1.15	-1.6
Ethnic minority	2.52**	-0.26	-0.43	1.7**	1.58	1.7
Missing	2.31	-1.9***	-3.9***	1.5	2.3	-0.19
Social class (ref: professional/managerial)						
Non-manual	1.07	-0.1	-0.17	-0.05	0.75*	-0.02
Skilled manual	0.60**	0.02	0.45*	-0.42	0.56**	-2.0***
Semi/unskilled	0.46***	-0.19	-0.37	0.74*	1.35	-0.46
No social class						
Urban/rural status (ref: urban)						
Rural	1.18	0.07	0.16	-0.07	1.02	-0.4
Missing	0.88	-0.16	-0.02	0.25	0.96	-1.3***
Disability status (ref: no disability)						
LLC not hampered		0.01	-0.06	0.2	1.25	0.34
Disability hampered		-1.1***	-1.9***	3.7***	4.63***	-0.90***

Source: GUI Cohort '98, Waves 3 and 5.

Notes: *p<0.05; **p<0.01; ***p<0.001. Variables measured at age 25 unless otherwise stated. Abbreviations: CI = confidence interval, OR = odds ratio, LLC = long-lasting condition.

4.6.2 Change in EDS

Considering that the EDS scale was implemented in the same manner to GUI participants both at age 17 and at age 25, it is possible to explore the association not only with perceived discrimination at age 25, as discussed previously in this chapter, but also consider the change in EDS between 17 and 25, as a secondary robustness check. We created a variable called 'EDS change' that is the result of the subtraction of the EDS at age 17 from the EDS at age 25. The EDS change variable records positive values for an increase in the EDS between these two time-points, or negative values if there was a decrease in the EDS score, with 0 for those who reported the same level for the EDS scale.

In the same direction of what was observed for the EDS score at age 25, an increase in EDS is associated with worse general health, lower life satisfaction, lower self-esteem, and higher depression score. The only difference compared to the models using the EDS scale at age 25 is that the relationship between EDS increase and problematic alcohol consumption is not statistically significant.

Table 4.3 Coefficients of all models of change in discrimination scores on outcomes

	General health	Life sat	Self-esteem	Depress score	Depress status	Audit score
Characteristic	OR	Beta	Beta	Beta	OR	Beta
(Intercept)	0.09***	4.6***	5.7***	3.2***	0.18***	8.5***
Change in EDS	0.85**	-0.33***	-0.69***	0.90***	1.53***	-0.1
General health at 17	2.18***					
Life sat at 17		0.28***				
Self-esteem at 17			0.45***			
Depression at 17				0.28***	1.15***	
AUDIT score at 17						0.36***
Sex at 17 (ref: male)						
Female	0.93	0.22**	-0.02	0.56**	1.28*	-1.4***
Transgender status at 17 (ref: cisgender)						
Transgender	0.67	0.35	1.3	-2.9*	0.35	0.82
Prefer not to say	0.56	0.06	-0.61	0.38	0.69	-2.1
Sexual orientation (ref: heterosexual)						
LGBA+	0.49***	-0.45***	-0.53**	0.80**	1.55**	0.98**
DK/prefer not to say	0.47*	0.44	0.09	-0.3	0.94	-2.7*
Religion (ref: Catholic)						
No religion	0.92	0.05	0.24	0.2	1.08	-0.04
Other	0.50*	0.05	0.69	0.16	0.83	-2.3**
Religion missing	1.14	0.13	-0.05	0.12	1	-0.08
Citizenship at 17 (ref: Irish citizen)						
Not Irish citizen	1.22	0.04	2.4**	-2.6*	0.31	-2.1
Time spent online outside of work (ref: >3 hrs)						
<1 hr	1.11	0.23	0.42	-1.4**	0.29***	-1.1
1–2 hrs	2.10***	0.30**	0.65***	-1.1***	0.60***	-1.1***
2–3 hrs	1.47**	0.25**	0.58***	-0.88***	0.62***	-0.51
Ethnicity (ref: white Irish)						
White other	1.21	-0.13	-1.4*	0.59	1.43	-1.8
Ethnic minority	2.58**	-0.15	-0.24	1.5*	1.39	1.6
Ethnicity missing	2.36	-1.8***	-3.7***	1.2	1.97	-0.24
Social class (ref: professional/managerial)						
Non-manual	1.07	-0.06	-0.11	-0.01	0.78	0.02
Skilled manual	0.62**	0.01	0.46*	-0.41	0.54***	-2.1***
Semi/unskilled	0.48***	-0.22	-0.38	0.79**	1.3	-0.36
No social class	0.72*	-0.05	-0.14	0.02	1	-2.5***
Urban/rural (ref: urban)						
Rural	1.25	0.12	0.23	-0.17	0.95	-0.57*
Urban missing	0.92	-0.16	-0.03	0.03	0.86	-1.3***
Disability status (ref: no disability)						
LLC not hampered		-0.1	-0.33	0.33	1.27	0.34
Disability hampered		-1.1***	-1.9***	3.7***	4.52***	-0.68*

Source: GUI Cohort '98, Waves 3 and 5.

Notes: *p<0.05; **p<0.01; ***p<0.001. Variables measured at age 25 unless otherwise stated. Abbreviations: CI = confidence interval, OR = odds ratio LLC = long-lasting condition.

4.7 Conclusion

This chapter explored the relationship between perceived discrimination and health and wellbeing outcomes for young people in Ireland. Using GUI longitudinal data, we constructed statistical models that assess the longitudinal conditional association of discrimination with different measurements of health and wellbeing, controlling for levels of these outcomes at age 17.

All the analyses point to a detrimental effect of perceived discrimination on several outcomes: self-reported general health, life satisfaction, self-esteem, depression and problematic alcohol consumption. These results are robust to different ways of measuring the perceived discrimination ('EDS scale' or 'any discrimination') as well as whether we consider the perceived discrimination at age 25 or the change in the levels of perceived discrimination from age 17 to age 25.

Chapter 5
Summary and conclusions

Previous research has highlighted that discrimination can have wide-ranging negative impacts in areas such as employment, housing, health, education and wellbeing. In this study, we focus on perceived discrimination, that is individuals' perception that they have been discriminated against. The measure used is the Everyday Discrimination Scale (EDS) (Williams et al., 1997). This scale captures the frequency with which individuals feel they have been treated with less respect, treated as if others were afraid of them, treated as if they are not smart, received poorer service, or been threatened or harassed. Those who experienced any such incidents at least a few times a year are also asked why they felt they were treated in this way. This measure treats discrimination as an accumulation of frequent negative experiences.

This measure of discrimination differs from the definition set out in Irish law, which specifies nine specific grounds of discrimination. These grounds do not include appearance, accent or socio-economic position, which are grounds that can be named in the EDS. Conversely, the EDS does not ask about membership of the Travelling community or family status. Notably, Irish legislation also excludes age-related discrimination where the individual is under the age of 18 years. Furthermore, discrimination covered by legislation refers to specific domains, namely employment and access to goods and services.

Previous research has routinely shown that perceived discrimination is strongly related to mental and physical health outcomes, including objective health outcome measures (see Chapter 1). While much of the previous research is cross-sectional, some longitudinal studies show a relationship between discrimination and health and wellbeing (Williams et al., 2019). The literature has focused mainly on racial discrimination and on adults. The current study is novel in its focus on young people and on perceived discrimination on the basis of a wide range of characteristics.

5.1 Summary of results

At age 17, three in four young people perceive discrimination at least a few times a year. By age 25, this fell to two in three young people. When they are aged 17, young people are most likely to identify age as the reason for their discrimination (usually alongside other reasons) followed by appearance. Perceived discrimination on the grounds of age and appearance became less common at 25, overtaken by gender as the most common ground for discrimination. The individual EDS items that were most common at both ages were being treated with 'less respect' and 'as if you were not smart'. People acting as if they were afraid of you was a more common experience at age 17 than at 25, but the proportion being threatened and harassed increased with age, particularly for women.

The perceived reasons for discrimination differed between young men and women at 17. Young men were more likely to perceive discrimination on the basis of ethnicity (skin colour/race), appearance and accent (controlling for other characteristics), while young women were more likely to perceive discrimination due to age and gender. There was no gender difference in disability, sexual orientation, or education/income-related discrimination. The majority of young people identify more than one ground of discrimination. This highlights the intersectionality of discrimination experience – each person occupies multiple roles and identities which shape their experiences (Crenshaw, 1989).

5.2 Predictors of perceived discrimination

At age 17, young people that are transgender experience higher levels of perceived discrimination than those who are cisgender, as do those who identify as LGBA+. Males report higher perceived discrimination than females at 17, which is driven by higher rates of males responding that they have experienced 'people acting as if they are afraid of you' and being threatened or harassed. This is likely to reflect the prevalence of stereotypes around young men as being aggressive or engaging in anti-social behaviour (Devlin, 2006). Such stereotypes may be even more prevalent to young men belonging to ethnic minorities (Cushion et al., 2011). Stereotypes influence interactions with young people and can be internalised by young people (Qu, 2023) but can be changed with counter-stereotyping intervention (ibid.).

Young people with a disability report higher levels of perceived discrimination, as do those of no religion compared to those that are Catholic.

Parental nationality and ethnicity are not significant predictors of perceived discrimination at age 17. These groups are relatively small and may have other unobserved characteristics that account for the unexpected positive result. The reliance on a parent's characteristics at this wave may also weaken the effects. Those 17-year-olds who are not Irish citizens are less likely to perceive discrimination at 17 compared to those who are Irish citizens.

Social background (as measured by family social class) is not significantly associated with EDS scores overall. However, those in less advantaged social classes are more likely to record discrimination on the grounds of ethnicity, disability, sexual orientation or appearance. Spending more than 3 hours online is associated with higher discrimination scores than spending medium/low amounts of time online during weekdays. However, spending no time online is associated with higher EDS scores than those who spend more than 3 hours online.

The predictors of perceived discrimination change somewhat at age 25. We also have a significantly smaller sample (circa 2,100), which means that smaller effects are less likely to be statistically significant at age 25. Most noticeably, at 25 the sex effect switches so that females now have higher discrimination scores than males. A higher proportion of women than men report being threatened or harassed, a reversal of the pattern seen at 17. LGBA+ individuals continue to have higher scores than heterosexuals, and this continues to be driven by higher scores of LGBA+ females. Ethnic minorities have higher discrimination scores at 25 years. This may arise because young people's awareness or experience of ethnic/racial discrimination has increased or their self-identity has become more established. It is important to note that at 25, ethnicity is collected directly from the young person while at 17, ethnicity was a parental variable. Those with a disability continue to have higher EDS scores at 25. Social class and religion are not significant predictors of discrimination at 25.

In terms of environmental/contextual factors, there is no difference between EDS scores for those in urban or rural locations. EDS scores

at 17 are significant, meaning an individual with high levels of discrimination at 17 will likely continue to experience this at 25. Time spent online is no longer significant. This may be due to the change in measurement with the 25-year measure not accurately picking up online exposure, or discrimination occurring in person rather than online. Young people at 25 may simply spend less time in online spaces where discrimination may occur.

5.3 Perceived discrimination and health and wellbeing outcomes

The study focused on four health and wellbeing outcomes at age 25: general health, self-esteem, life satisfaction and depression. Additionally, as health behaviour is a potential pathway through which discrimination influences health and wellbeing, the study also tests the relationship between discrimination and problematic alcohol consumption measured by the AUDIT scale. We examine this relationship using the EDS score at 25 and change in EDS score between 17 and 25.

We find a significant relationship between perceived discrimination at 25 and each of these outcomes at 25 years, while holding constant earlier measures of health and wellbeing at 17 years. Self-esteem scores are significantly lower for young people with higher discrimination scores at 25 years. Each one-point increase in the EDS is associated with a one-point reduction in self-esteem score (which is a continuous scale ranging from 1 to 4), which is greater than the coefficient for the LGBA+ group (-.58) but smaller than the effect of disability (-1.7), both factors that are usually significant correlates of wellbeing.

The increase in depression scores associated with each unit increase in EDS score (1.7) is also greater than the effect observed for sex (0.8 for female) or sexual orientation (0.9 for LGBA+). The effect of an increase in discrimination between age 17 and 25 is also significant (+0.9).

The effect of discrimination is somewhat weaker for life satisfaction. Each extra point on the discrimination scale is associated with just under half a point reduction in life satisfaction (measured on 11-point

scale) holding earlier life satisfaction constant. This coefficient is lower than that observed for those with disability (-1.0).

In the case of general health, those with higher discrimination scores at 25 are significantly less likely to be in good/excellent health than those with lower discrimination scores. It is similar to the odds ratio observed for skilled manual or semi/unskilled social class background compared to the professional/managerial class.

Higher discrimination scores at 25 years are also associated with higher problematic alcohol consumption measure by the AUDIT scale. The statistical model controlling for the AUDIT score at age17 indicated that each additional unit in perceived discrimination is associated with a 0.32 increase in the AUDIT score. However, this coefficient is smaller than the one observed for the LGBA+ group (+0.98), for instance.

5.4 Limitations

The measure of discrimination used in the study is limited in a number of ways. Firstly, the measure is self-reported, and the results may in part reflect different propensities of individuals to assess the same situation in a different manner. The study methods aim to limit the impact of such differences between individuals by focusing on the change in wellbeing at the individual level, and by considering the impact of individual level changes in perceived discrimination scores. Nevertheless, the measure relies on subjective reports and may not reflect the actions and intentions of the other actors. Moreover, the EDS is designed to capture experiences at an individual level and does not capture institutional discrimination that the individual may not observe directly.

The findings should be considered alongside the other evidence of discrimination using other methodologies (see Chapter 1). Each of these research designs have their own limitations (as discussed in Chapter 1; Bond et al., 2010), therefore it is important to consider the broad body of evidence of the experience and impact of discrimination.

The current study has demonstrated that the EDS is a useful scale for capturing the experiences of a nationally representative sample of young people occupying a range of different statuses, and finds a significant association with their health and wellbeing.

5.5 Policies to address discrimination

The findings of a strong relationship between perceived discrimination and reduced health and wellbeing of young people underlines the importance of tackling discrimination in Irish society. Given that this life period is one of significant psychological development and identity formation, the impacts of discrimination may be particularly harmful for young people (Marks et al., 2015; Benner et al., 2018).

There may also be wider societal implications. Studies have shown that the negative psychological effects of discrimination are also observed among bystanders and family members (Cheadle et al., 2020; Emmer et al., 2024; Wofford et al., 2019). More broadly, if the individuals who experience discrimination feel marginalised and excluded from society, this can incur additional costs to public health (Elias and Paradies, 2016) and undermine social cohesion (De Vroome et al., 2014).

It is concerning to see that the percentage of young females reporting that they are threatened or harassed increases between age 17 and age 25 and to see many 17-year-old males experience the same. Further research into where these threats or harassment occur would be important. For example, are young women experiencing harassment as they enter the workforce? This would inform the direction of policy response.

5.6 Legislative responses

There are strong legislative protections against discrimination in the workplace and labour market (Employment Equality Act), and in accessing goods and services (Equal Status Act). The public sector duty (IHREC, 2026) also requires all public organisations (and those in receipt of public funding) to protect the human rights and equality of staff and service users.

Despite this, many of the experiences captured by the EDS and found to have such detrimental consequences for the individual are unlikely to meet the threshold for a legal case. In many cases, the reasons for discrimination identified by the respondents in this study are not covered by the legislation. This includes appearance, accent and education or income, which were cited by a substantial proportion of

young people. Importantly, the legislation excludes age-related discrimination for individuals under the age of 18.[14] Excluding age-related discrimination would mean that 10 per cent of the young people recording perceived discrimination at 17 would be discounted.[15] While these occurrences are excluded from legislation, they clearly tap into meaningful experiences for the young people that have consequences for their wellbeing and health. The common identification by young people of their education, income and accent as reasons for perceived discrimination adds strength to calls for the inclusion of social background as an additional protected ground (IHREC, 2023).

Harassment and threats (which is one of the items in the scale) that are motivated by hatred for protected groups[16] are potentially covered by the Criminal Justice (Hate Offences) Act 2024 which allows for increased sentences for certain crimes.[17] However, the part of the legislation addressing hate speech (section on incitement to violence or hatred) was dropped prior to enactment.

Even amongst those whose experiences are likely to reach a legal threshold, very few will take a case, as doing so can be costly, stressful, complex and time-consuming (CSO, 2019; Russell et al., 2011). Such legal protections may best operate as a disincentive for organisations and individuals within them to discriminate against those they engage with (Bond et al., 2010).

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[14] Young people under 18 are protected against discrimination on the basis of other protected characteristics and there is specific employment legislation for those under 18, the Protection of Young Persons (Employment) Act 1996. This includes restrictions on the hours and scheduling of work. The National Minimum Pay Act 2000 allows for a payment of a lower minimum wage for those under 20 years.

[15] Among 17-year-olds who record perceived discrimination at least a few times a year, 10 per cent record only age as a reason for their experience, 54 per cent record age plus some other reason, and 36 per cent record only other reasons.

[16] The protected grounds named in the act are race, colour, nationality, religion, national or ethnic origin, descent, gender, sex characteristics, sexual orientation and disability.

[17] The crimes include ‘threatening, abusive or insulting behaviour in public place aggravated by hatred’.

5.7 National policy responses

At a policy level, there are a range of strategies that have amongst their objectives the prevention of discrimination. The National Action Plan Against Racism was published in 2023, which recognises that racism is a structural and individual issue. It outlines a range of policy actions to address ethnic and racial inequalities including addressing barriers, ensuring equal access to opportunities and rights, strengthening reporting mechanisms, enhancing responses to hate crime and hate speech, and collecting better data on ethnic discrimination. The actions have potential to address aspects of discrimination if fully implemented, but it is too early to assess the impact.

National strategies have been developed for other protected groups following consultation with those affected, these include the National Strategy for Women and Girls 2025–2030, the National LGBTIQ+ Inclusion Strategy II 2024–2028, and the National Human Rights Strategy for Disabled People 2025–2030. These strategies contain a myriad of actions and commitments, but the key issue will be resourcing and implementing. Another important strategy to potentially address discrimination in migrant integration has been delayed over a number of years. The previous Migrant Integration Strategy ended in 2021, and a final evaluation of that strategy has yet to be published.

The establishment of Coimisiún na Meán in 2023 on foot of the Online Safety and Media Regulation Act 2022 perhaps signals a more robust approach to the regulation of social media, and a shift away from self-regulation by the industry. An early action has been the introduction of the Online Safety Regulation Code 2024 for video-sharing platforms, which is backed by sanctions including fines of up to €20 million or 10 per cent of a platform's annual turnover. Measures to address racism and other forms of hate speech can have broader benefits for those consuming social media, not just those that are targeted.

5.8 Organisational policies

Policies at the organisational level are also important to address discrimination. While the EDS does not provide information on the organisational context of the experiences recorded (except with reference to shops and restaurants), it is likely that some of the experiences will have occurred within an educational setting, and are

likely to include experiences in the workplaces, especially at age 25 when the majority of the cohort have entered the labour market. Effective policies for work organisations include formalised recruitment, outreach activities to reach more marginalised groups, and mentoring and sponsorship within organisations (OECD, 2020; McGinnity et al., 2021).

In the educational setting, research has found that a whole-of-school approach is most effective for addressing bullying (Gaffney et al., 2019; Jiménez-Barbero et al., 2016) and it is likely that a similar approach is needed to address discrimination. A whole-of-school approach means that all members of the school community are involved (including staff, students and parents) to create an inclusive environment where the student voice is valued, and positive relations between students and staff are cultivated. The Department of Education has recently developed a new policy to address school-based and online bullying.[18] The recommendations of this policy include fostering a school culture where diversity is celebrated, encouraging peer support such as peer mentoring and empathy building, supporting bystanders to report, and implementing the Digital Media Literacy curriculum. While the policy focuses on bullying, these actions are also relevant to addressing interpersonal discrimination. The recent GUI study on bullying behaviours by Smyth and Darmody (2025, p.5) emphasises that these behaviours are embedded in broader social dynamics, and that anti-bullying policies should be introduced alongside 'broader measures to enhance the social climate in schools and other organisations working with young people'. The Department of Further and Higher Education can also play a role in continuing an emphasis on anti-discrimination policies as young people move into further and higher education.

High discrimination scores are reported by young people with a disability; this is consistent with findings for the adult population across multiple domains, including work, education and access to services (Költő et al., 2022; McGinnity et al., 2017). This suggests the need for further efforts to promote inclusion of young people with disabilities in education and other settings. Research by McCoy et al. (2025) point to the need for greater wellbeing and mental health supports, and careers support for young people with disabilities, and note the resource constraints faced by schools and youth mental

[18] The Cineáltas: Action Plan on Bullying.

health services in providing such support. In the workplace, accommodations by employers are important for addressing the substantial employment gap between those with and without a disability (Kelly and Maître, 2021). For young people at the beginning of their careers, recruitment practices and trainee/entry level supports that are inclusive of people with disabilities are particularly salient.

Finally, individual actions and words of those in the public domain are also important. Focus groups and interviews discussing online racism carried out as part of a study published by IHREC highlighted that 'examples set by public figures, the media, and the Garda Síochána can have a powerful effect on how victims of online abuse feel. Public commitment by a variety of key actors to counteract online racism and take racist incidents seriously can help minimise some of the toxic effects of online hatred.' (Siapera et al., no date, p.5)

5.9 Policies to reduce the impact of discrimination on mental health and wellbeing

While preventing discrimination occurring should be the primary goal, actions may also be taken to reduce the impact of discrimination on health and wellbeing. For example, increased wellbeing and mental health supports could be provided for young people and healthy coping strategies can be promoted in the school environment.

Ireland's approach to supporting wellbeing in schools is set out in its Wellbeing Policy Statement and Framework for Practice (2018). A recent report recommends a greater emphasis on equality, inclusion and diversity to address a reduced sense of belonging reported by marginalised students (Dempsey and McCoy, 2026). The report also recommends that policies distinguish between general supports for student wellbeing and targeted supports, with additional emphasis on understanding the needs of marginalised students. Crucially, Dempsey and McCoy recommend that children and young people be involved in the development of mental health and wellbeing supports.

There is also evidence that the wider health care supports for young people with mental health difficulties are under strain and require additional attention so that the needs of young people are met. The review of Child and Adolescent Mental Health Services (CAMHS), for example, noted that most services had staffing levels 50 per cent

below the recommended levels (Inspector of Mental Health Services, 2023).

5.10 Future research

This report represents the first study of the relationship between perceived discrimination and health and wellbeing outcomes in Ireland, applying a nationally representative and longitudinal methodology. Using the same data and methodology, there is scope for further exploring how the relationship between perceived discrimination and health and wellbeing might differ across demographic groups or depending on the ground of discrimination. In addition, there are still many gaps in our understanding of how discrimination impacts other outcomes of young people, including educational, housing and occupational outcomes.

The GUI provides a unique opportunity to investigate these processes in Ireland. It would be particularly useful if future waves collect additional information on the contexts in which perceived discrimination occurs, such as education or the workplace, as assessed by the CSO Equality and Discrimination Survey. Future research could also examine discrimination occurring in the '08 Cohort, who are reaching adulthood. The monitoring of these experiences over time across different cohorts also allows for studies on the impacts different contexts or public policies might have on perceived discrimination.

Understanding processes of discrimination and their relationship with health and wellbeing is also strongly dependent on collecting data on protected characteristics, of the types captured in GUI. The new National Equality Data Strategy aims to address the considerable gaps in the data. This is essential so that inequalities are monitored and the effectiveness of policy interventions can be assessed.

References

Aboud, F.E., and Amato, M. (2001). 'Developmental and socialization influences on intergroup bias', in R. Brown and S. Gaertner (Eds.), *Blackwell handbook in social psychology: Vol. 4*, *Intergroup processes* (pp.65–85), Oxford, UK: Blackwell.

Abrams, D., Swift, H., and Houston, D. (2018). *Developing a national barometer of prejudice and discrimination in Britain*, Equality and Human Rights Commission.

Al Ramiah, A., Hewstone, M., Dovidio, J.F., and Penner, L.A. (2010). 'The social psychology of discrimination: Theory, measurement and consequences', *Making equality count: Irish and international research measuring equality and discrimination*, Dublin, Ireland, The Equality Authority.

Allport, G.W. (1954). *The Nature of Prejudice*. Reading, MA: Addison-Wesley.

Alwan, N.A. (2026). 'The stigma of self-report in health research: Time to reconsider what counts as "objective"', *PLOS Glob Public Health*, Vol. 6, No. 1, e0005521, https://doi.org/10.1371/journal.pgph.0005521

Amaro, H., Sanchez, M., Bautista, T., and Cox, R. (2021). 'Social vulnerabilities for substance use: Stressors, socially toxic environments, and discrimination and racism', *Neuropharmacology,* Vol. 188, https://doi.org/10.1016/j.neuropharm.2021.108518

An Garda Síochána (2021). *An Garda Síochána – 2021 hate crime data and related discriminatory motives,* An Garda Síochána, https://www.garda.ie/en/about-us/our-departments/office-of-corporate-communications/news-media/news-archive/an-garda-siochana-2021-hate-crime-data-and-related-discriminatory-motives.html

An Garda Síochána (2024). *2024 hate crime data and related discriminatory motives,* An Garda Síochána, https://www.garda.ie/en/about-us/our-departments/office-of-corporate-communications/press-releases/2025/april/2024-hate-crime-data-and-related-discriminatory-motives.html

Angold, A., Costello, E.J., Messer, S.C., Pickles, A., Winder, F., and Silver, D. (1995). 'The development of a questionnaire for use in epidemiological studies of depression in children and adolescents', *International Journal of Methods in Psychiatric Research*, Vol. 5, No. 4, pp.237–249.

Arnett, J.J. (2014). 'Presidential address: The emergence of emerging adulthood: A personal history', *Emerging Adulthood*, Vol. 2, No. 3, pp.155–162.

Banks, J., Grotti, R., Fahey, É., and Watson, D. (2018). *Disability and discrimination in Ireland: Evidence from the QNHS Equality Modules 2004, 2010, 2014*, Dublin: ESRI and the Irish Human Rights and Equality Commission (IHREC), https://doi.org/10.26504/bkmnext363

Barkan, S.E. (2018). 'Measuring perceived mistreatment: potential problems in asking about "discrimination"', *Sociological Inquiry*, Vol. 88, No. 2, pp.245–53.

Bastos, J.L., Celeste, R.K., Faerstein, E., and Barros, A.J. (2010). 'Racial discrimination and health: A systematic review of scales with a focus on their psychometric properties', *Social Science & Medicine* (1982), Vol. 70, No. 7, pp.1091–1099. https://doi.org/10.1016/j.socscimed.2009.12.020

Bastos, J.L., and Harnois, C.E. (2020). 'Does the Everyday Discrimination Scale generate meaningful cross-group estimates? A psychometric evaluation', *Social Science & Medicine*, Vol. 265, https://doi.org/10.1016/j.socscimed.2020.113321

Benner, A., Wang, Y., Shen, Y., Boyle, A.E., Polk, R., and Cheng, Y. (2018). 'Racial/ethnic discrimination and well-being during adolescence: A meta-analytic review', *American Psychologist*, Vol. 73, No. 7, pp.855–883, http://dx.doi.org/10.1037/amp0000204

Bond, L., McGinnity, F., and Russell, H. (2010). *Making equality count: Irish and international research measuring equality and discrimination.* Dublin: The Liffey Press.

Bosman, J., Bayraktar, F., and d'Haenens, L. (2015). 'Children's digital media practices within the European family home: Does perceived discrimination matter?', *Journal of Children and Media*, Vol. 9, No.1, pp.77–94, https://doi-org.elib.tcd.ie/10.1080/17482798.2015.997099

Bratt, C., Abrams, D., Swift, H.J., Vauclair, C.-M., and Marques, S. (2018). 'Perceived age discrimination across age in Europe: From an ageing society to a society for all ages', *Developmental Psychology*, Vol. 54, No. 1, pp.167–180, https://doi.org/10.1037/dev0000398

British Red Cross and Co-op Foundation (2019). *Barriers to belonging: An exploration of loneliness among people from Black, Asian and minority ethnic backgrounds*, https://www.redcross.org.uk/about-us/what-we-do/we-speak-up-for-change/barriers-to-belonging#key-findings

Burns, S. (2025). 'Thousands take part in anti-immigration protest in Dublin', *The Irish Times*, https://www.irishtimes.com/ireland/dublin/2025/04/26/anti-immigration-protest-marking-easter-rising-gathers-crowds-in-dublin/

Carron-Kee, E., McGinnity, F., and Alamir, A. (2024). *Understanding attitudes to Travellers and Roma in Ireland,* ESRI Jointly Published Reports 9, https://doi.org/10.26504/jr9

Cassidy, C.M., Schmitz, N., and Malla, A. (2008). 'Validation of the alcohol use disorders identification test and the drug abuse screening test in first episode psychosis', *The Canadian Journal of Psychiatry / La Revue canadienne de psychiatrie*, Vol. 53, No, 1, pp.26–33.

Cave, L., Cooper, M.N., Zubrick, S.R., and Shepherd, C.C.J. (2020). 'Racial discrimination and child and adolescent health in longitudinal studies: A systematic review', *Social Science & Medicine (1982)*, Vol. 250, 112864, https://doi.org/10.1016/j.socscimed.2020.112864

Central Statistics Office (CSO) (2019). *Equality and discrimination,* Central Statistics Office, www.cso.ie/en/releasesandpublications/er/ed/equalityanddiscrimination2019

Central Statistics Office (CSO) (2025a). *Equality and discrimination 2024,* Central Statistics Office, www.cso.ie/en/releasesandpublications/ep/p-ed/equalityanddiscrimination2024

Central Statistics Office (CSO) (2025b). *Growing Up in Ireland: Cohort '98 at age 25 main results*, Central Statistics Office, www.cso.ie/en/releasesandpublications/ep/p-guic98/growingupinirelandcohort98atage25mainresults/societyandthewiderworld

Cheadle, J.E., Goosby, B.J., Jochman, J.C., Tomaso, C.C., Kozikowski Yancey, C.B., and Nelson, T.D. (2020). 'Race and ethnic variation in college students' allostatic regulation of racism-related stress', *Proceedings of the National Academy of Sciences*, Vol. 117, No. 49, pp.31053–31062, https://doi.org/10.1073/pnas.1922025117

Crenshaw, K. (1989). 'Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics', *University of Chicago Legal Forum*, Vol. 1989, No. 1, 8.

Cushion, S., Moore, K., and Jewell, J. (2011). 'Media representations of Black young men and boys', *Report of the REACH media monitoring project*.

de Freitas, D.F., Fernandes-Jesus, M., Ferreira, P.D., Coimbra, S., Teixeira, P.M., de Moura, A., Gato, J., Marques, S.C., and Fontaine, A.M. (2018). 'Psychological correlates of perceived ethnic discrimination in Europe: A meta-analysis', *Psychology of Violence*, Vol. 8, No. 6, pp.712–725.

De Vroome, T., Martinovic, B., Verkuyten, M. (2014). The integration paradox: Level of education and immigrants' attitudes towards natives and the host society', *Cultural Diversity and Ethnic Minority Psychology*, Vol. 20, No. 2, pp.166–175, http://dx.doi.org/10.1037/a0034946

Dempsey, C., and McCoy, S. (2026). *Supporting student wellbeing in school contexts: A narrative review*, ESRI Research Series 223, Dublin, Ireland: ESRI, https://doi.org/10.26504/rs223

Denise, E.J. (2012). 'Multiple forms of perceived discrimination and health among adolescents and young adults', *Journal of Health and Social Behavior*, Vol. 53, No. 2, pp.199–214, https://doi.org/10.1177/0022146512444289

Department of Children, Equality, Disability, Integration and Youth (DCEDIY) (2023). *Survey on people in Ireland's attitude towards diversity*. The Department of Children, Equality, Disability, Integration and Youth, https://assets.gov.ie/static/documents/survey-on-people-in-irelands-attitude-towards-diversity.pdf

Department of Education (2024). *Bí Cineálta: Procedures to prevent and address bullying behaviour for primary and post-primary schools*. https://assets.gov.ie/static/documents/bi-cinealta-procedures-to-prevent-and-address-bullying-behaviour-for-primary-and-post-.pdf

Devlin, M. (2006). *Inequality and the stereotyping of young people*, National Youth Council of Ireland, Dublin: The Equality Authority.

Elias, A., Paradies, Y. (2016). 'Estimating the mental health costs of racial discrimination', *BMC Public Health*, Vol. 16, 1205, https://doi.org/10.1186/s12889-016-3868-1

Emmer, C., Dorn, J., and Mata, J. (2024). 'The immediate effect of discrimination on mental health: A meta-analytic review of the causal evidence', *Psychological Bulletin*, Vol. 150, No. 3, pp.215–252, https://doi.org/10.1037/bul0000419

Essed, P. (1991). *Understanding everyday racism: An interdisciplinary theory* (Vol. 2), Sage.

EUFRA (2024a). *Being Black in the EU: Experiences of people of African descent*, European Union Agency for Fundamental Rights, Luxembourg: Publications Office of the European Union, https://fra.europa.eu/sites/default/files/fra_uploads/fra-2023-being-black_in_the_eu_en.pdf

EUFRA (2024b). *Being Muslim in the EU: Experiences of Muslims,* European Union Agency for Fundamental Rights, Luxembourg: Publications Office of the European Union, https://fra.europa.eu/sites/default/files/fra_uploads/fra-2024-being-muslim-in-the-eu_en.pdf

EUFRA (2024c). *LGBTIQ equality at a crossroads: Progress and challenges*, European Union Agency for Fundamental Rights, Luxembourg: Publications Office of the European Union, https://fra.europa.eu/sites/default/files/fra_uploads/fra-2024-lgbtiq-equality_en.pdf

EUFRA (2024d). *Fundamental rights report: 2024,* European Union Agency for Fundamental Rights, Luxembourg: Publications Office of the European Union, https://fra.europa.eu/sites/default/files/fra_uploads/fra-2024-fundamental-rights-report-2024_en.pdf

EUFRA (2025a). *EU survey on immigrants and descendants of immigrants*, European Union Agency for Fundamental Rights, Luxembourg: Publications Office of the European Union, https://fra.europa.eu/en/project/2022/eu-survey-immigrants-and-descendants-immigrants

EUFRA (2025b). *Rights of Roma and Travellers in 13 European countries: Perspectives from the Roma survey 2024*, European Union Agency for Fundamental Rights, Luxembourg: Publications Office of the European Union, https://data.europa.eu/doi/10.2811/9919091

European Commission (2023). *Discrimination in the European Union*, Special Eurobarometer 535, https://europa.eu/eurobarometer/surveys/detail/2972

European Commission (2025). *Acting against discrimination*, European Commission, https://commission.europa.eu/topics/justice-and-fundamental-rights/equality-and-inclusion/acting-against-discrimination_en

Fahey, É., McGinnity, F., and Grotti, R. (2019a). 'Irish attitudes to Muslim immigrants', *The Economic and Social Review, Vol.* 50, No. 3, pp.491–514.

Fahey, É., O'Brien, D., Russell, H., and McGinnity, F. (2019b). *European survey data on attitudes to equality and human rights*, ESRI Survey and Statistical Report Series 83, https://doi.org/10.26504/sustat83

Fanning, B. and Michael, L. (2018). 'Racism and anti-racism in the two Irelands', *Ethnic and Racial Studies*, Vol. 41, No. 15, pp.2656–2672, https://doi.org/10.1080/01419870.2017.1403641

Flage, A. (2018). 'Ethnic and gender discrimination in the rental housing market: Evidence from a meta-analysis of correspondence tests, 2006–2017', *Journal of Housing Economics*, Vol. 41, pp.251–273, https://doi.org/10.1016/j.jhe.2018.07.003

Gaffney, H., Farrington, D.P., and Ttofi, M.M. (2019). 'Examining the effectiveness of school-bullying intervention programs globally: A meta-analysis', *International Journal of Bullying Prevention*, Vol. 1, pp.14–31, https://doi.org/10.1007/s42380-019-0007-4

Gee, G.C., Pavalko, E.K., and Scott Long, J. (2007). 'Age, cohort and perceived age discrimination: Using the life course to assess self-reported age discrimination', *Social Forces*, Vol. 86, No. 1, pp.265–290.

Gilbert, P.A., and Zemore, S.E. (2016). 'Discrimination and drinking: A systematic review of the evidence', *Social Science & Medicine*, Vol. 161, pp.178–194, https://doi.org/10.1016/j.socscimed.2016.06.009

Government of Ireland (2026). *The National Equality Data Strategy 2026–2031,* https://assets.gov.ie/static/documents/c5b4afc0/The_National_Equality_Data_Strategy_2026-2031.pdf

Groos, M., Wallace, M., Hardeman, R., and Theall, K.P. (2018). 'Measuring inequity: A systematic review of methods used to quantify structural racism', *Journal of Health Disparities Research and Practice*, Vol. 11, No. 2, https://oasis.library.unlv.edu/jhdrp/vol11/iss2/13

Grotti, R., Russell, H., Maître, B., and Gritti, D. (2024). 'The experience of housing discrimination and housing deprivation across social groups in Ireland', *Social Indicators Research*, Vol. 175, pp.195–215, https://doi.org/10.1007/s11205-024-03438-0

Gusciute, E., Mühlau, P., and Layte, R. (2022). 'Discrimination in the rental housing market: A field experiment in Ireland', *Journal of Ethnic and Migration Studies*, Vol. 48, No. 3, pp.613–634, https://doi.org/10.1080/1369183X.2020.1813017

Hackett, R.A., Steptoe, A., and Jackson, S.E. (2019). 'Sex discrimination and mental health in women: A prospective analysis', *Health Psychology*, Vol. 38, No. 11, pp.1014–1024, https://doi.org/10.1037/hea0000796

Hackett, R.A., Steptoe, A., Lang, R.P., and Jackson, S.E. (2020). 'Disability discrimination and well-being in the United Kingdom: A prospective cohort study', *BMJ Open*, Vol. 10, No. 3, e035714, https://doi.org/10.1136/bmjopen-2019-035714.

Hardy, S., and Schraepen, T. (2024). *The state and effects of discrimination in the European Union*, OECD Papers on Well-Being and Inequalities, https://doi.org/10.1787/7fd921b9-en

Harnois, C.E., Bastos, J.L., Campbell, M.E., and Keith, V.M. (2019). 'Measuring perceived mistreatment across diverse social groups: An evaluation of the Everyday Discrimination Scale', *Social Science & Medicine*, Vol. 232, pp.298–306.

Harnois, C.E., Bastos, J.L., Shariff-Marco, S. (2022). 'Intersectionality, contextual specificity, and everyday discrimination: Assessing the difficulty associated with identifying a main reason for discrimination among racial/ethnic minority respondents', *Sociological Methods & Research*, Vol. 51, No. 3, pp.983–1013, https://doi.org/10.1177/0049124120914929

Heard-Garris N.J., Cale, M., Camaj, L., Hamati, M.C., and Dominguez, T.P. (2018). 'Transmitting trauma: A systematic review of vicarious racism and child health', *Social Science & Medicine*, Vol. 199, pp.230–240.

IHREC (2020). *The Equal Status Acts 2000–2018*, the Irish Human Rights and Equality Commission, www.ihrec.ie/app/uploads/2022/08/IHREC-Equal-Status-Rights-Leaflet-WEB.pdf

IHREC (2023). *New protected grounds necessary in equality law to tackle discrimination says commission*, the Irish Human Rights and Equality Commission, www.ihrec.ie/news-press/new-protected-grounds-necessary-in-equality-law-to-tackle-discrimination-says-commission

IHREC (2026). *Public sector duty*, the Irish Human Rights and Equality Commission, www.ihrec.ie/public-sector-duty

Inspector of Mental Health Services (2023). *Independent review of the provision of Child and Adolescent Mental Health Services (CAMHS) in the State,* Mental Health Commission.

IPSOS B&A (2024). *IPSOS LGBT+ Pride Report 2024: A 26-country IPSOS global advisor survey*, https://www.banda.ie/wp-content/uploads/2024/06/Pride-Report-FINAL-WITH-IRE-SUMMARY.pdf

Jigsaw (2026). *Jigsaw statement to the Oireachtas Committee on Health*, Jigsaw, https://jigsaw.ie/oireachtas-committee/

Jiménez-Barbero, J.A., Ruiz-Hernández, J.A., Llor-Esteban, B., and Pérez-García, M. (2016). 'Effectiveness of anti-bullying school programs: A meta-analysis', *Children and Youth Services Review*, Vol. 61, pp.165–175.

Kelly, E., and Maître, B. (2021). *Identification of skills gaps among persons with disabilities and their employment prospects*, ESRI Survey and Statistical Report Series 107, Dublin: ESRI, https://doi.org/10.26504/sustat107

Kessler, R.C., Mickelson, K.D., and Williams, D.R. (1999). 'The prevalence, distribution, and mental health correlates of perceived discrimination in the United States', *Journal of Health and Social Behaviour*, Vol. 40, No. 3, pp.208–230.

Költő, A., Gavin, A., and Nic Gabhainn, S. (2022). 'Perceived discrimination among adolescents in Ireland', *Health Education & Behaviour*, Vol. 50, No. 2, https://doi-org.elib.tcd.ie/10.1177/10901981221133301

Laurence, J., McGinnity, F., and Murphy, K. (2024). *Attitudes towards immigration and refugees in Ireland: Understanding recent trends and drivers*, Jointly-published Reports 5, Dublin: ESRI and the Department of Children, Equality, Disability, Integration and Youth, https://doi.org/10.26504/jr5

Lawrence, J.A., Kawachi, I., White, K., Bassett, M.T., Priest, N., Masunga, J.G., Cory, H.J., Mita, C., and Williams, D.R. (2022). 'A systematic review and meta-analysis of the Everyday Discrimination Scale and biomarker outcomes', *Psychoneuroendocrinology*, Vol. 142, https://doi.org/10.1016/j.psyneuen.2022.105772

Lee, H., and Turney, K. (2012). 'Investigating the relationship between perceived discrimination, social status, and mental health', *Society and Mental Health,* Vol. 2, No. 1, https://doi.org/10.1177/2156869311433067

Lippens, L., Vermeiren, S., and Baert, S. (2023). 'The state of hiring discrimination: A meta-analysis of (almost) all recent correspondence experiments', *European Economic Review*, Vol. 151, https://doi.org/10.1016/j.euroecorev.2022.104315

Maletta, R.M., Daly, M., Goodwin, L., Noonan, R., Putra, I.G.N.E., and Robinson, E. (2023). 'Prevalence of perceived discrimination and associations with mental health inequalities in the UK during 2019–2020: A cross-sectional study', *Psychiatry Research*, Vol. 322, 115094.

Marks, A.K., Ejesi, K., McCullough, M.B., and García Coll, C. (2015). 'Developmental implications of discrimination', *Handbook of Child Psychology and Developmental Science*, Vol. 3, pp.324–365.

McCoy, S., Carroll, E., and Ye, K. (2025). Disabled students' school and post-school careers, in Mooney, B. (Ed.), *Ireland's Education Yearbook 2004*, pp.39–42, Dublin: Phyllis Mitchell, www.esri.ie/publications/disabled-students-school-and-post-school-careers

McCoy, S., Ye, K., and Carroll, E. (2025). *Paths, tracks, gaps and cliffs: The post-school transitions of students with special educational needs*, Dublin: National Council for Special Education (NCSE), www.esri.ie/publications/paths-tracks-gaps-and-cliffs-the-post-school-transitions-of-students-with-special

McGinnity, F., Grotti, R., Kenny, O., and Russell, H. (2017). *Who experiences discrimination in Ireland? Evidence from the QNHS Equality Modules*, Dublin: ESRI and Irish Human Rights and Equality Commission, https://doi.org/10.26504/bkmnext342

McGinnity, F., Nelson, J., and Lunn, P. (2009). *Discrimination in recruitment: Evidence from a field experiment*, Economic and Social Research Institute.

McGinnity, F., Quinn, E., McCullough, E., Enright, S., and Curristan, S. (2021). *Measures to combat racial discrimination and promote diversity in the labour market: A review of evidence*, ESRI Survey and Statistical Report Series 110, Dublin: ESRI, https://doi.org/10.26504/sustat110

McNamara, E., Murphy, D., Murray, A., Smyth, E., and Watson, D. (2020). *Growing Up in Ireland National Longitudinal Study of Children: The lives of 17/18-year-olds*, Department of Children and Youth Affairs, www.growingup.gov.ie/pubs/GUI-lives-of-17-18-year-olds-web-ready.pdf

McNamara, E., O'Reilly, C., Murray, A., O'Mahony, D., Williams, J., Murphy, D., McClintock, R., and Watson, D. (2021). *Design, instrumentation and procedures for Cohort '98 (child cohort) at Wave 4 (20 years of age)*, Growing Up in Ireland, www.growingup.gov.ie/pubs/20Yr-Design-Report.pdf

Murphy, D., Williams, J., Murray, A. and Smyth, E. (2019). *Design, instrumentation and procedures for Cohort '98 at 17/18 years of age*, Growing up in Ireland Technical Series Number 2019–5, Dublin: Dept of Children and Youth Affairs.

Nelson, T.D. (Ed.) (2025). *Handbook of Prejudice, Stereotyping and Discrimination,* New York: Routledge.

O'Kelly, B. (2024). 'Inside the protests: Cameras capture moment Coolock site attacked', RTÉ, www.rte.ie/news/investigations-unit/2024/0919/1470768-inside-the-protests-cameras-capture-moment-coolock-site-attacked

OECD (2020). *Diversity at work: Making the most out of increasingly diverse societies*, OECD, www.oecd.org/content/dam/oecd/en/publications/reports/2020/09/diversity-at-work_6fd10f64/789cc27f-en.pdf

OECD (2025). *Combatting discrimination in the European Union*, OECD Publishing, Paris, https://doi.org/10.1787/29c2c36a-en

Olson, M.A., and Zabel, K.L. (2015). 'Measures of prejudice', in *Handbook of Prejudice, Stereotyping, and Discrimination* (pp.175–211), Psychology Press.

Paradies, Y.C. (2006). 'Defining, conceptualizing and characterizing racism in health research', *Critical Public Health*, Vol. 16, No. 2, pp.143–157, https://doi.org/10.1080/09581590600828881

Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., Gupta, A., Kelaher, M., and Gee, G. (2015). 'Racism as a determinant of health: A systematic review and meta-analysis', *PLOS One*, https://doi.org/10.1371/journal.pone.0138511

Pascoe, E.A., and Smart Richman, L.S. (2009). 'Perceived discrimination and health: A meta-analytic review', *Psychological Bulletin*, Vol. 135, No. 4, pp.531–554, https://doi-org.elib.tcd.ie/10.1037/a0016059

Philippe, K., Sloan, S., and Neville, R.D. (2025). *What we know from Growing Up in Ireland (GUI) 2008–2024: Key well-being factors for children and young people*. Department of Children, Disability and Equality, https://assets.gov.ie/static/documents/271b9f83/20251031_What_We_Know_GUI.pdf

Priest, N., Paradies, Y., Trenerry, B., Truong, M., Karlsen, S., Kelly, Y. (2013). 'A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people', *Social Science & Medicine*, Vol. 95, pp.115–127, https://doi.org/10.1016/j.socscimed.2012.11.031

Qu, Y. (2023). 'Stereotypes of adolescence: Cultural differences, consequences, and intervention', *Child Development Perspectives*, Vol. 17, pp.136–141, https://doi.org/10.1111/cdep.12489

Quillian, L. (2006). 'New approaches to understanding racial prejudice and discrimination', *Annual Review of Sociology*, Vol. 32, No. 1, pp.299–328, https://doi.org/10.1146/annurev.soc.32.061604.123132

Rose, C.A., and Tynes, B.M. (2015). 'Longitudinal associations between cybervictimization and mental health among U.S. adolescents', *Journal of Adolescent Health*, Vol. 57, No. 3, pp.305–312, https://doi-org.elib.tcd.ie/10.1016/j.jadohealth.2015.05.002

Rosenberg, M. (1965). Rosenberg Self-Esteem Scale (RSE), Acceptance and commitment therapy, Measures Package, 61, 52.

Russell, H., Watson, D., and Banks, J. (2011). *Pregnancy at work: A national survey*, Dublin: HSE Crisis Pregnancy Programme and the Equality Authority, www.esri.ie/publications/pregnancy-at-work-a-national-survey

Schmitt, M.T., Branscombe, N.R., Postmes, T., and Garcia, A. (2014). 'The consequences of perceived discrimination for psychological well-being: A meta-analytic review', *Psychological Bulletin*, Vol. 140, No. 4, pp.921–948, https://doi.org/10.1037/a0035754

Seabra, D., Gato, J., Nicola, P., Carreoras, D., Azevedo, J., Martins, L., and do Céu Salvador, M. (2024). 'Everyday Discrimination Scale: Dimensionality in a Portuguese community sample and specific versions for sexual and gender minority', *Current Psychology*, Vol. 43, pp.10850–10861.

Siapera, E., Moreo, E., and Zhou, J. (no date). *Hate track tracking and monitoring racist speech online*, IHREC and DCU.

Slemon, A., Susan Dahinten, V., Stones, C., Bungay, V., and Varcoe, C. (2022). 'Analysis of the social consequences and value implications of the Everyday Discrimination Scale (EDS): Implications for measurement of discrimination in health research', *Health Sociology Review*, Vol. 31, No. 3, pp.247–261, https://doi.org/10.1080/14461242.2021.1969980

Smyth, E., and Darmody, M. (2025). *Experience of bullying and bullying behaviours in childhood and adolescence*, ESRI Research Series 216, Dublin: ESRI, https://doi.org/10.26504/rs216

Suldo, S.M., and Huebner, E.S. (2004). 'Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence?', *School Psychology Quarterly*, Vol. 19, No. 2, pp.93–105.

Thornton, M., Williams, J., McCrory, C., Murray, A., and Quail, A. (2016). *Design, instrumentation and procedures for the Child Cohort at Wave 2 (13 years),* Technical Report Number 3, Dublin: Department of Children and Youth Affairs.

Timmons, S., Fox, C., Carron-Kee, E., Murphy, K., and Lunn, P. (2026). *The role of misperceptions in attitudes to immigration*, ESRI Research Series 225, Dublin, Ireland: ESRI, https://doi.org/10.26504/rs225

Timmons, S., McGinnity, F., and Carroll, E. (2023). 'Ableism differs by disability, gender and social context: Evidence from vignette experiments', *British Journal of Social Psychology*, Vol. 63, No. 2, pp. 637–657, https://doi.org/10.1111/bjso.12696

Urbanova, L.B., Holubcikova, J., Madarasova Geckova, A., van Dijk, J.P., and Reijneveld, S.A. (2020). 'Adolescents exposed to discrimination: Are they more prone to excessive internet use?', *BMC Pediatrics*, Vol. 40, 402.

Van Dyke, M.E., Kramer, M.R., Kershaw, K.N., Vaccarino, V., Crawford, N.D., and Lewis, T.T. (2022). 'Inconsistent reporting of discrimination over time using the Experiences of Discrimination Scale: Potential underestimation of lifetime burden', *American Journal of Epidemiology*, Vol. 191, No. 2, pp.370–378.

Verhaeghe, P.P. (2022). 'Correspondence studies', in: Zimmermann, K.F. (eds), *Handbook of Labor, Human Resources and Population Economics*, Springer: Cham, https://doi.org/10.1007/978-3-319-57365-6_306-1

Vogt Yuan, A.S. (2007). 'Perceived age discrimination and mental health', *Social Forces*, Vol. 86, No. 1, pp.291–311.

Weinstein, M., Jensen, M.R., and Tynes, B.M. (2021). 'Victimized in many ways: Online and offline bullying/harassment and perceived racial discrimination in diverse racial–ethnic minority adolescents', *Cultural Diversity & Ethnic Minority Psychology*, Vol. 27, No. 3, pp.397–407, https://doi-org.elib.tcd.ie/10.1037/cdp0000436

Williams, D.R., Lawrence, J.A., Davis, B.A., and Vu, C. (2019). 'Understanding how discrimination can affect health', *Health Services Research*, Vol. 54, No. S2, pp.1374–1388, https://doi.org/10.1111/1475-6773.13222

Williams, D.R., Yu, Y., Jackson, J.S., and Anderson, N.B. (1997). 'Racial differences in physical and mental health: Socioeconomic status, stress, and discrimination', *Journal of Health Psychology*, Vol. 2, No. 3, pp.335–351.

Wofford, N., Defever, A.M., and Chopik, W.J. (2019). 'The vicarious effects of discrimination: How partner experiences of discrimination affect individual health', *Social Psychological and Personality Science*, Vol. 10, No. 1, pp.121–130.

WRC (2025). *Employment Equality*, Workplace Relations Commission, www.workplacerelations.ie/en/what_you_should_know/equal-status-and-employment-equality/employment-equality/employment-equality

Appendix

Table A.1 EDS scores by protected characteristics (cross-sectional weighted)

	17 years	25 years
Male	1.315	1.086
Female	1.172	1.144
Heterosexual	1.205	1.084
LGBA+	1.571	1.29
DK/prefer not to say	1.233	1.064
No disability	1.219	1.037
Not hampered	1.272	0.897
Hampered	1.486	1.386
White Irish	*	1.106
White other	*	1.036
Minority ethnic group	*	1.508
Professional/managerial	1.269/1.278	1.102
Non-manual	1.220	1.107
Skilled manual	1.228	1.109
Semi/unskilled	1.253	1.076
No social class	1.201	1.208
Catholic	1.195	1.067
Protestant/other Christian	1.227	*
No religion	1.411	1.165
Other	1.255	1.260

Notes: *Not collected in survey wave.
Some characteristics were not included as the correspondent variable was not included in Wave 3 or data was not released in Wave 5.

Table A.2 Logit model of any discrimination (a few times a year or more) at age 17

Any discrimination a few times a year or more	Odds ratios
Sex (ref: male)	
Female	0.901
Transgender status (ref: not transgender)	
Transgender	4.657*
Prefer not to say	1.672
Sexual orientation (ref: heterosexual)	
LGBA+	1.669**
Don't know/prefer not to say	0.695
Disability status (ref: no disability)	
LLC not hampered	1.209
Disabled hampered	1.552*
Religion (ref: Catholic)	
No religion	1.287*
Other	1.225
Citizenship (ref: Irish citizen)	
Not Irish citizen	0.618
Parent ethnicity (ref: no parent is BAME)	
Either parent BAME	0.759
Parent birth country (ref: one or both parents born in IE)	
No parents born in IE	0.953
Household social class (ref: professional/managerial)	
Non-manual	0.844
Skilled manual	0.751*
Semi/unskilled	0.882
No social class	0.676**
Time online during weekdays (ref: >3hrs)	
None	0.567*
<1hr	0.488***
1–2hrs	0.759*
2–3hrs	0.789
DK but>0	0.842
Observations	6064

Source: Growing Up in Ireland Cohort '98 Data Wave 3. Authors' analysis.
Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

Table A.3 Logit models of any discrimination (a few times a year or more) at age 25 (odds ratios)

Any discrimination a few times a year or more	Odds ratios
Sex at 17 (ref: male)	
Female	1.966***
Transgender status at 17 (ref: not transgender)	
Transgender	1.378
Prefer not to say	4.706
Sexual orientation (ref: heterosexual)	
LGBA+	1.386
Don't know/prefer not to say	0.320*
Disability status (ref: no disability)	
LLC not hampered	1.081
Disability hampered	1.778*
Religion (ref: Catholic)	
No religion	0.725
Other	2.21
Citizenship (ref: Irish citizen)	
Not Irish citizen	2.973
Ethnicity (ref: white Irish)	
White other	1.078
Ethnic minority	1.412
Ethnicity missing	1.625
Household social class (ref: professional/managerial)	
Non-manual	0.928
Skilled manual	0.761
Semi/unskilled	0.456**
No social class	1.086
EDS score at 17	2.627***
Urban/rural status (ref: urban)	
Rural	0.882
Urban status missing	1.374
Time online during weekdays for leisure (ref: >3hrs)	
<1hr	1.019
1–2hrs	0.898
2–3hrs	0.864
Observations	1794

Source: Growing Up in Ireland Cohort '98 Data Wave 5. Authors' analysis.
Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

Table A.4 Variable differences between waves

Variable	Used in age 17 models	Used in age 25 models
Sex	Measured at 17 – filled in by parent in grid	
Transgender	Measured at 17: Would you describe yourself as transgender?	
Disability status	Are you hampered in your daily activities by this problem, illness or disability? (For up to four conditions listed)	Are you hampered in your daily activities by this problem, illness or disability? (Only for most severe)
Sexual orientation	How would you describe your sexual orientation? Note: Aggregated responses to three categories	How would you describe your sexual orientation? Note: Aggregated responses to three categories
Ethnicity	Parental ethnic status – either parent Black or minority ethnic What is your ethnic group/background? (Asked to both caregivers)	Young person ethnicity Question: What is your ethnic group/background?
Parent birth country	Measured at 17: One or more parents is born in IE Were you born in Ireland?	
Family social class	Measured at 17: Derived variable from caregiver occupation	
Citizenship	Measured at 17: What citizenship do you hold?	
Religion	Do you belong to any religion? What religion do you belong to?	Question: What religion do you belong to?
Time online	Question: How much time spent online (weekday)?	Question: On a typical weekday, how much screentime do you spend for leisure?
Urban rural status	Not used at 17	Classified using respondent Eircode
General health	How would you describe your general health?	How would you describe your general health?
Life satisfaction	How satisfied are you with your own life in general?	How satisfied are you with your own life in general?
Self-esteem score	Rosenberg Self-Esteem Scale total score	Rosenberg Self-Esteem Scale total score
Depression score	Total score Short Mood and Feelings Questionnaire (SMFQ)	Total score on CES depression scale
AUDIT score	AUDIT scale: 10 item screening of harmful alcohol consumption	AUDIT scale: 10 item screening of harmful alcohol consumption

Economic & Social Research Institute

Whitaker Square
Sir John Rogerson's Quay
Dublin 2

Telephone: +353 1 863 2000
Email: admin@esri.ie
Web: www.esri.ie

An Institiúid um Thaighde Eacnamaíochta agus Sóisialta

Cearnóg Whitaker
Cé Sir John Rogerson
Baile Átha Cliath 2

Teileafón: +353 1 863 2000
Ríomhphost: admin@esri.ie
Suíomh Gréasáin: www.esri.ie