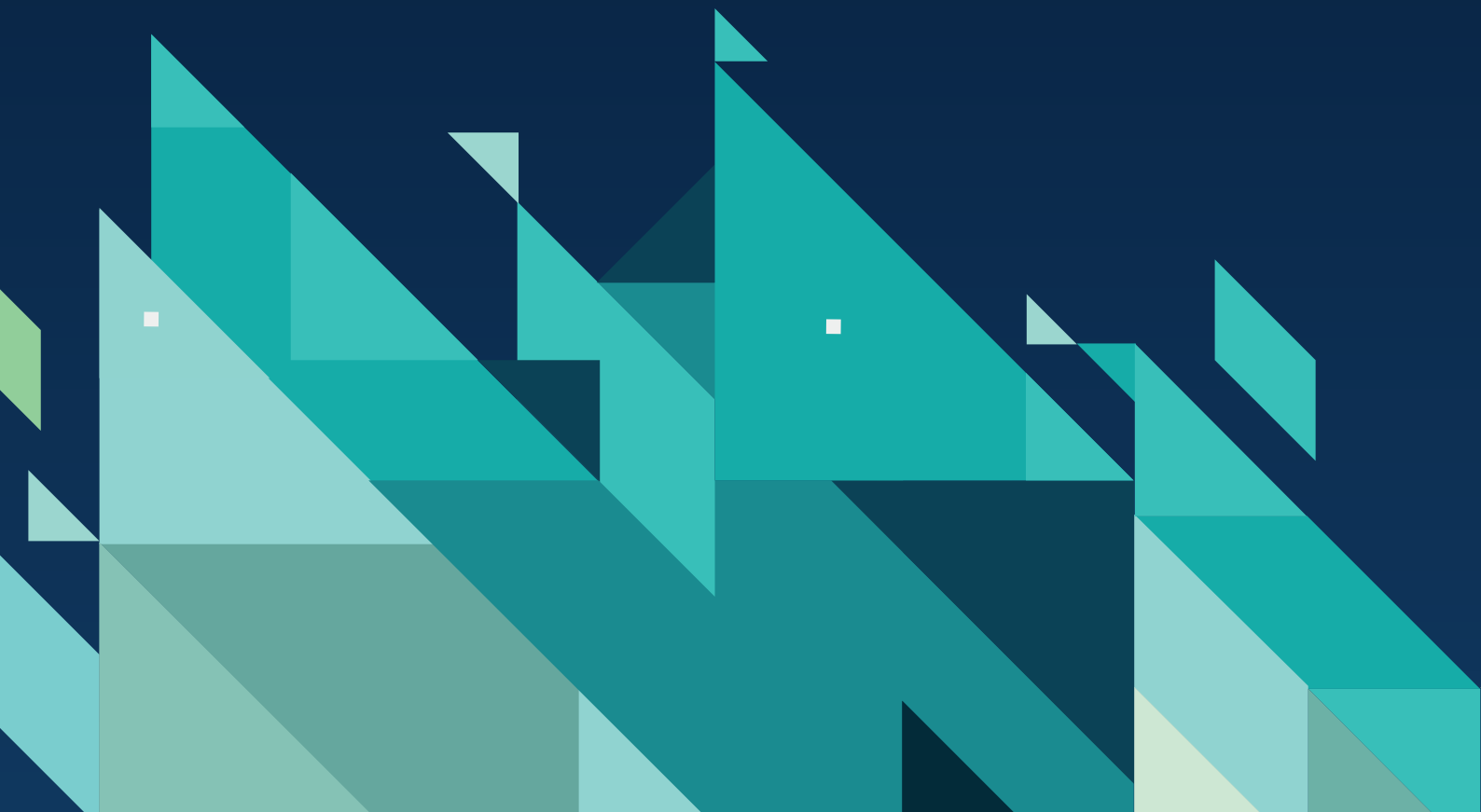
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Adolescent antisocial behaviour: Changes over time and across the lifecourse

EMER SMYTH, MERIKE DARMODY AND AISLING MURRAY



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Abbreviations

ACEs	Adverse childhood experiences
AL	Adolescent-limited
AO	Adolescent onset
ASB	Antisocial behaviour
ASBO	Anti-Social Behaviour Order
CAMHS	Child and Adolescent Mental Health Services
CAO	Central Applications Office
CES-D	Center for Epidemiological Studies Depression
CSO	Central Statistics Office
DCDE	Department of Children, Disability and Equality
DCYA	Department of Children and Youth Affairs
DEIS	Delivering Equality of Opportunity in Schools
EET	Employment, education and training
GUI	Growing Up in Ireland
GUS	Growing Up in Scotland
HSE	Health Services Executive
ILO	International Labour Organization
ISRD	International Self Report Delinquency Study
LCP	Life-course-persistent
MB	Migrant background
MST	Multi-systemic Family Therapy
MTF	Monitoring the Future
NFQ	National Framework of Qualifications
NGO	Non-Governmental Organisation
NVAB	Non-violent antisocial behaviour
SDQ	Strengths and Difficulties Questionnaire
SEN	Special educational needs
SES	Socio-economic status
SMFQ	Short Moods and Feelings Questionnaire
YDP	Youth Diversion Projects

Executive summary

Background to the study

Antisocial behaviour (ASB) in children and young people is a complex phenomenon, making it difficult to define consistently across different contexts and over time. It can generally be characterised by a range of behaviours, such as rule breaking, stealing and acts of aggression that run counter to social norms and potentially negatively impact on others. ASB can constitute a criminal offence, depending on the nature and severity of the behaviour. Involvement in ASB can reflect the turmoil of adolescent development, with such behaviour often limited to the early teenage years. However, for some, this behaviour may persist into later adolescence and early adulthood, with significant implications for educational outcomes, personal and social development, and in more serious cases, criminal sanctions. There has been a lack of large-scale empirical research in Ireland on the processes of change in ASB over the adolescent years and the consequences of such behaviour for later outcomes. Cohort '98 of the Growing Up in Ireland (GUI) study provides a unique opportunity to explore the prevalence of ASB, its drivers and consequences, while Cohort '08 allows us to explore the extent to which patterns of ASB among 13-year-olds have changed over a decade.

Cohort '98 was initially sampled at 9 years of age, on the basis of the school attended, and followed at 13, 17/18,[1] 20 and 25 years of age. At 13 and 17 years of age, young people were asked to report the frequency with which they had engaged in different kinds of ASB over the past year. Because violent behaviour in adolescence can be a predictor of later aggression and may already meet the threshold for a criminal offence, the study distinguishes between non-violent and violent ASB. Non-violent ASB comprised paying the incorrect bus/train fare, behaving badly in public, graffiti, and taking something without permission from home, school or a shop. Violent ASB comprised carrying a knife or other weapon and hitting, kicking or punching someone else.

The study addresses the following research questions:

[1] At this wave, some respondents were 18 years of age but, for convenience, this is referred to as the 17-year wave throughout this report.

1. Has the prevalence of ASB changed over time (that is, between Cohorts '98 and '08 at 13 years of age)? If so, has it changed for some groups more than others?

2. To what extent does ASB persist into later adolescence?

3. What consequences does this trajectory have for early adult outcomes, including education, health and wellbeing, labour market and social relationships?

The prevalence and profile of ASB

The study findings indicate that the level of ASB (as defined in this study) among young people in Ireland can be considered low. Around a fifth of 13-year-olds have taken something from home without permission or hit, punched or kicked another person while around a tenth have paid the incorrect bus/train fare, behaved badly in public or taken something from school. Looking at adolescents a decade apart, levels for boys have remained stable, although with a dip in 2021 which related to behaviour in 2020/2021 during the pandemic-related restrictions. In contrast, there has been an increase over time in non-violent and violent ASB among girls. For example, the proportion of 13-year-old girls who reported hitting, punching or kicking someone over the past year increased from 10 to 16 per cent over a decade. Looking at the period between 13 and 17 years, the vast majority (91 per cent) maintain no or only low levels of ASB; for 4 per cent, ASB is limited to their early teens while for 5 per cent, ASB persists and even increases as they grow older.

Family background in terms of social class, parental education and financial strain is not significantly related to ASB levels, though ASB is found to be higher among those from lone-parent families, those with more older siblings and those who experienced more conflict with their mother when they were younger. ASB is not strongly influenced by school characteristics, though levels of non-violent ASB are higher in fee-paying schools compared to non-fee-paying schools. Living in a city and in a disorderly neighbourhood (with the presence, for example, of public drinking or drug-taking) emerge as risk factors for both violent and non-violent ASB. Socialising with older peers is also associated with more involvement in ASB. ASB is strongly related to earlier externalising difficulties (conduct or hyperactivity problems) and to mental health issues (including depression and hearing voices) in adolescence. Increasing ASB among girls is found to be mostly related

to the increase in their mental health difficulties in the wake of the pandemic. Increasing ASB levels between 13 and 17 years of age are strongly related to the experience of adverse events, such as family separation, bereavement, parental depression and addiction.

The consequences of ASB involvement

The GUI study collected information from young people on whether they had been questioned by the police or been subject to a caution, took part in a youth diversion programme, were arrested or convicted of an offence.[2] A significant minority of young people have had some contact with the justice system, with over a fifth of them reporting having been questioned by police between the ages of 17 and 20 years. Not surprisingly, ASB involvement heightens the likelihood of early contact (pre-17) with the criminal justice system, in the form of being questioned by the police or incurring a formal sanction. Over and above ASB levels, working-class young men are more likely to have contact with the system, with sibling contact with the police also emerging as a significant risk factor.

Both ASB trajectory and contact with the justice system are found to make a difference to outcomes in early adulthood. Those who increased their ASB involvement between 13 and 17 received lower Leaving Certificate grades and were much less likely to achieve a degree by age 25. Those young people who had early justice contact received lower grades, even where their ASB levels had declined since age 13. At age 20, higher depression scores, lower life satisfaction, lower satisfaction with their social life and less trust in others are found among the increasing ASB trajectory group, though these effects diminish by age 25. Trust in others is found to be lower among those who had early contact with the justice system. There is little systematic relationship between ASB trajectory and labour market outcomes, though welfare receipt is more prevalent, and income levels lower, among young adults who had early contact with the justice system. Analyses indicate that those involved in ASB and those who have contact with the justice system are less likely than others to respond to the subsequent waves of GUI. The estimates of the impact of ASB and justice system contact are therefore likely to be lower bound estimates.

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[2] For convenience, these are referred to as a formal sanction in the remainder of the report.

Implications for policy

The findings of this study have implications for policy across a range of domains, including family support, mental health and wellbeing, justice, education and community development. Improved access to family support services could usefully help counter parent-child conflict and provide assistance at periods of change or crisis in family life in order to prevent ASB, as well as supporting those families whose children are already involved. Extending existing community development initiatives to foster local infrastructure and stronger neighbourhood bonds could yield significant dividends in terms of young people's involvement in ASB, with facilities for young people potentially playing an important role. The role of externalising difficulties in childhood along with mental health difficulties in adolescence in ASB highlights the need for improved access to a range of supports, from mental health promotion to specialist support for those with acute difficulties. Available evidence indicates the lack of adequacy of provision evidenced by lengthy waiting lists and understaffing within youth mental health services.

Youth justice policy in Ireland has focused on diverting young people away from criminal convictions, most notably through the Youth Diversion programme designed to support young people aged 12-17 who are involved in crime or antisocial behaviour, with full national coverage since 2025. However, working-class young men are more likely to have contact with the criminal justice system, even taking account of their ASB levels. Given such contact has a longer-term impact on their outcomes, the findings suggest the need to counter negative stereotyping which may lead to a self-fulfilling prophecy for some. Given the range of factors influencing ASB, the findings point to the need for further developing a joined-up and coordinated approach across government departments, state agencies and community organisations as well as the Youth Diversion Programme to address ASB and moderate its consequences.

Chapter 1
Introduction

1.1 Background to the study

Antisocial behaviour (ASB) is a term used to cover a range of behaviours ranging from graffiti to engaging in physical fights and is found to be relatively common in childhood and adolescence (Popli et al., 2025; Walsh, 2019). Evidence from Western societies shows that ASB can be characterised by a bell-curve age trend, with an increase in the prevalence of ASB incidents from late childhood, and then declining in the early 20s (Farrington, 1986). There is an extensive international literature that looks at the association between ASB in adolescence and later outcomes (see, for example, Popli et al., 2025; Tinner et al., 2021). A systematic review found that engaging in frequent and high-intensity ASB in childhood and adolescence adversely impacts on physical and mental health, educational, and social outcomes in adulthood (Bevilacqua et al., 2018). However, many existing studies examine the US context which is very different to Ireland, not least in its incarceration rate. There has been a lack of longitudinal studies in Ireland to trace the trajectory of engagement in ASB and its consequences. This study contributes to the national and international literature by using the rich longitudinal data available in Growing Up in Ireland (GUI) Cohort '98 to trace ASB at 13 and 17 years of age and its consequences for educational, labour market and wellbeing outcomes in the twenties.

Another strand in existing research points to some evidence suggesting that adolescent ASB has decreased over time across Western countries (see, for example, Sivertsson et al., 2025; Steffensmeier et al., 2025), although there is debate about the reasons for such trends. This study takes advantage of the two-cohort nature of GUI to compare the level of ASB among 13-year-olds a decade apart, building upon initial work by Murray and Smyth (2024). In particular, the analyses explore whether the profile of those engaged in ASB has changed in terms of gender and social background. The remainder of this chapter places the study in the context of previous international and Irish research, and outlines the measures and methodology used.

1.2 Review of the literature on antisocial behaviour

Over several decades, a growing number of studies in Europe and beyond have focussed on antisocial behaviour (ASB) in young people (Fitzsimons and Villadsen, 2021; Svensson and Oberwittler, 2021; McGee et al., 2011; Bor et al., 2007; Lu, 2024). Although the definitions of ASB tend to vary somewhat across studies due to their focus, disciplinary background and contextual differences in what constitutes this behaviour (Vaughan et al., 2022), this type of conduct generally involves actions that are upsetting, aggressive or frightening to other people – including breaking rules and engaging in harmful behaviour – and may be unlawful (Jahanshahi et al., 2023; Lu, 2024; Fitzsimons et al., 2018; Baumer et al., 2021; Bevilacqua et al., 2018; Carroll et al., 2023). In particular, ASB in youth may include disobedience, skipping school, substance abuse, property damage, vandalism, theft and violence, among others (Smart et al., 2004; Fitzsimons and Villadsen, 2021; Baumer et al., 2021; Svensson and Oberwittler, 2021; Laban et al., 2026). In other words, ASB tends to be conceptualised as conduct problems and behaviours that are not seen as acceptable in social contexts (Vaughan et al., 2022; Walsh, 2019). A review of the existing literature on ASB shows that this type of misconduct can also be differentiated by the severity and intensity of such actions, ranging from rule-breaking to physical assault (Walsh, 2019). Some evidence suggests that ASB may be interpreted differently by adults and young people (Hulley, 2014). This study from the UK showed that while there seemed to be a consensus among adults and young people on some types of actions (murder, assault, burglary and shoplifting) as being defined as ASB, there were notable differences regarding other types of behaviour (e.g. young people hanging around). Furthermore, ASB was specifically associated with young people by adults (ibid.).

ASB is relatively common in childhood and adolescence (Popli et al., 2025; Walsh, 2019). Much of the existing research on ASB focuses on adolescence – a period of transition between childhood and adulthood – a time that is characterised by social, biological, emotional and behavioural changes in young people's lives, that can sometimes lead to more impulsive behaviour and risk taking (Bonnie and Backes, 2019; Czech and Kemp, 2010). During adolescence, peer relationships and social interactions take centre stage, with young people also seeking more independence from parents as well as pursuing new experiences (Bell, 2016). Thus, ASB must be seen in the context of broader psychological development, with a rapid rise in sensation seeking

during adolescence while cognitive control continues to increase into early adulthood (Romer et al., 2017). The social and emotional rewards from problematic behaviour, coupled with fluctuating emotions, may make it more difficult for adolescents to control their impulses to engage in risky behaviour (Modecki et al., 2018). Risky activities, such as misconduct, have been found to increase sharply during adolescence (CLS, 2017). Farrington et al. (2008) point to a bell-curve age trend in ASB and/or crime, increasing from late childhood to a peak in the period 15 to 19 years, and then declining in the early 20s. This research builds on earlier work by Moffitt (1993), including her work with the Dunedin Multidisciplinary Health and Development Study, on the age-crime curve, attempting to explain the developmental processes that lead to the shape of the curve, indicating that ASB is most prevalent during adolescence. Moffit also differentiated between two types of antisocial offenders: life-course-persistent (LCP) antisocial offenders and adolescent-limited (AL) offenders. While the former group start exhibiting heightened levels of ASB (e.g. aggression and rule-breaking) already in early childhood, and continue this behaviour into adulthood, the latter group are more likely to engage in ASB only in adolescence, and desist as they mature (ibid.). Some authors have categorised ASB by severity levels: delinquent (common, low seriousness); reckless/ dangerous (moderately common, moderately serious); and serious (relatively rare, but serious) (Czech and Kemp, 2010).

Estimating the prevalence of ASB in youth across countries is difficult due to differences in the type of data collected and the definition of ASB. However, there is some evidence suggesting that adolescent ASB has decreased over time across Western countries (Sivertsson et al., 2025; Steffensmeier et al., 2025; Ball et al., 2023; Baumer et al., 2021, Bailey, 2020). Studies have attributed this decline to reduced alcohol consumption, especially binge drinking (Näsi et al., 2024; Sivertsson et al., 2025). There is also greater engagement among adolescents in online activities, which may have replaced face-to-face social activities and certain types of behaviour (Näsi et al., 2024). It has also been argued that the decrease in ASB in youth may be associated with a decrease in adolescent impulsive behaviour and an increase in their self-control (Loeber et al., 2013).

Reviews of research on ASB in youth indicate that there is a general consensus that such behaviour is likely to have a detrimental impact on individuals themselves, their families and communities, affecting

young people's wellbeing, and associated with considerable costs to the wider society (Vaughan et al., 2022; Walsh, 2019). For example, a systematic review and meta-analysis found that engaging in frequent and high intensity ASB in childhood and adolescence adversely impacts individuals' physical and mental health, educational, and social outcomes in adulthood (Bevilacqua et al., 2018). Furthermore, frequent and high intensity ASB during childhood is found to be associated with serious offending in later life (Walsh, 2019). ASB can cause considerable distress for the victims (Victims Commissioner, 2019). Data from the Home Office in the UK (2023) show that such behaviour has an emotional impact on people experiencing or witnessing ASB, including fear and anxiety, resulting in changes of their own behaviour in terms of avoiding certain areas and changing their travel habits. In addition to the cost of ASB for individuals, it has also been found that severe ASB involves a substantial economic cost to society in terms of the provision of support services and agencies that address ASB (Romeo et al., 2006).

1.2.1 Trends over time in the prevalence and persistence of ASB

A systematic review of literature on the development of ASB in youth over time and across contexts indicates that while a number of longitudinal studies have examined ASB, these studies vary considerably in the measures used (Carroll et al., 2023), thus making it difficult to compare countries in assessing the prevalence of ASB and change in conduct problems in youth over time.

Jahanshahi et al. (2023),[3] drawing on the Growing Up in Scotland longitudinal study, found that 26 per cent of 12-year-olds reported committing at least one act of ASB from a list provided to them, including assault, public disorder, shoplifting, vandalism and household theft. Longitudinal research from the UK, based on data from the Millennium Cohort Study, indicate that at the age of 14, rates of physical aggression (e.g. shoving, hitting, slapping or punching) were relatively high – admitted to by 41 per cent of boys and 21 per cent of girls (CLS, 2017). Drawing on the same study, but focussing on 17-year-olds, 36 per cent of males reported assaulting (pushed,

[3] The authors used 'child offending during the last year' as an outcome variable, as measured at age 12. In GUS, child offending encompasses the following types of behaviour: hitting, kicking or punching; being rowdy/rude in a public place; taking something from a shop without paying; deliberately damaged/destroyed property; carrying a knife or weapon for protection/needed in a fight; breaking into a locked place to steal something; stealing money or other things from school or home; graffiti; used force/threats/weapon to get money/something else from someone.

shoved, hit, slapped or punched) someone, compared to 13 per cent of females (Fitzsimons and Villadsen, 2021). Between ages 14 to 17, rates of vandalism had remained stable (3.6 per cent at 14 vs 2.9 per cent at 17), the prevalence of assault decreased (31.6 per cent at 14 vs 24.9 per cent at 17), use of a weapon remained stable (1.1 per cent at 14 vs 1.2 per cent at 17), while stealing from shops increased somewhat (3.6 per cent at 14 vs 6.9 per cent at 17)(ibid.). Overall, the authors found relatively little change in ASB between early (age 14) and later (age 17) adolescence, contrary to the theory of the age-crime curve which suggests rates of ASB tend to be low in childhood, increase in early adolescence, peak in later adolescence and fall in the early 20s. Also contrary to the age-crime curve theory, another study from the UK, drawing on data from the 1958 British birth cohort, showed that the mean ASB score decreased across childhood from ages 7 to 16, but was relatively stable across adulthood from ages 23 to 50 (Esposti et al., 2020).

There is some evidence that the rate of ASB has reduced over time. In the US, analysis of repeated cross-sectional data from the Monitoring the Future (MTF) study indicates that since the 1990s, there has been a notable reduction in youth offending (Baumer et al., 2021). The authors attribute this decline mainly to a decrease in unstructured socialising and alcohol consumption, but also to a decrease in youth preferences for risky activities, albeit to a lesser extent (ibid.). Interestingly, the prevalence of offending between 1991 and 2015 was not associated with changes in the level of school engagement, community involvement, or the level of parental supervision after school (ibid.). Another study from the US by Osgood (2023), drawing on various data sources from 1991 to 2015, has also found that changing rates of unstructured socialising and alcohol use may help to explain time trends in the fall of ASB in youth, with unstructured socialising accounting for 14 per cent of the trend, and alcohol use 19 per cent of the trend. A more moderate impact was associated with teenagers' employment and sensation-seeking (6 per cent), and parental supervision, school expectations and attachment, and community involvement (explaining less than 3 per cent of the trend) (ibid.).

A decline in youth ASB has also been found in European studies. For example, Svensson and Oberwittler (2021) in Sweden, drawing on eight repeated cross-sectional waves of a nationally representative school survey, found that youth crime (overall offending as well as minor delinquency, serious property damage, and violent offending) has

declined over time. The authors separately tested potential alternative mechanisms that might account for this trend and argue that this decline can be partially explained by an increase in parental monitoring and school engagement (explaining 40 per cent of its year-level variance). The analysis also shows that changing attitudes seem to have a strong effect, with negative attitudes toward crime explaining 57 per cent of the decline in delinquency (ibid.). Activities such as evenings with friends and unstructured activities explained 72 per cent of the decline in overall offending, while a reduction in binge drinking explained an even larger proportion of this decline (88 per cent) (ibid.). A Finnish study by Näsi et al. (2024) found that between-cohort changes in youth activities (e.g. a fall in risk taking, truancy, monthly alcohol use) may have played a role in the decline in violent offending and property-related offending. Using administrative data from Statistics Denmark, Andersen et al. (2016) report that the decline in youth offending can be observed in more recent birth cohorts, compared to earlier ones. The authors explain this by fewer young people experiencing contact with the criminal justice, but not by lower rates of criminal recidivism among youth with criminal justice contact (ibid.). Declining offending in youth is also reported by research from Spain, drawing on official data (police data, from 2001 to 2016) and an International Self Report Delinquency Study (ISRD) (Fernández-Molina and Bartolomé Gutiérrez, 2020).[4]

1.2.2 Factors associated with ASB in youth

Studies on ASB in youth suggest that such misconduct is shaped by factors at the individual (gender, special educational needs, ethnic/minority status) (Ly et al., 2023), the family (e.g. parenting practices, exposure to violence and family conflict) (Laban et al., 2026), peer (Brewer et al., 2020), neighbourhood (Hemphill et al., 2015), school and wider societal levels (Villafuerte-Díaz et al., 2024; Heerde et al., 2022a; Home Office, 2023), although some of the findings may be mixed (see below for a more detailed discussion).

[4] Other factors, such as changes in surveillance, including the use of CCTV, may also account for changes. A systematic review suggests that use of CCTV is significantly related to a decline in overall crime (Piza et al., 2019), though, to our knowledge, its impact on youth antisocial behaviour has not been examined. Available evidence, however, suggests that CCTV penetration is lower in Ireland than in many other European countries.

1.2.2.1 Gender

Much of the existing research on ASB in youth has found significant variation by gender. An influential study by Moffitt and colleagues from New Zealand notes that ASB is generally more common in males than in females (Moffitt et al., 2001). More recent longitudinal studies seem to largely support this finding, at least for some types of ASB. Research from Scotland shows that at the age of 12, the prevalence of ASB varied significantly by sex, with 34 per cent of boys reporting at least one offence, compared to 18 per cent of girls (Jahanshahi et al., 2023). The UK Millennium Cohort Study has shown that all types of risk-taking activities were more common among teenage boys than teenage girls (CLS, 2017). Boys were more likely to engage in physical aggression (41 per cent of boys and 21 per cent of girls) (ibid.). A similar pattern was found by another UK study which showed that at the age of 17 males reported a higher prevalence of all ASB activities in the past 12 months, and were more likely than females to report higher rates of graffitiing, vandalism, shoplifting, assault, and use of weapons compared to females (Fitzsimons and Villadsen, 2021). Furthermore, 36 per cent of males reported having assaulted someone (e.g. had pushed, shoved, hit, slapped or punched someone) compared to 13 per cent of females (ibid.). Another UK Millennium Cohort Study noted that girls' ratings of emotional difficulties increased with age (mid-adolescence), whereas ratings of emotional difficulties and conduct problems decreased for boys (Hartas and Kuscuoglu, 2020). This is in line with other research which has shown that internalising feelings such as stress and anxiety are more common among adolescent girls than their male counterparts who are more likely to externalise problems and engage in disruptive behaviour (Leadbeater et al.,1999; Dulmus and Hilarksi, 2006).

Has the gender gap in ASB in youth narrowed over time? Findings from the Dunedin Longitudinal Study, which followed a cohort of 1,000 New Zealand males and females over the first two decades of life, found no difference in the causes of ASB between the genders (Odgers et al., 2008). However, the more serious life-course-persistent (LCP) pattern of ASB was less common in females. Females who engage in ASB were also more likely to fit in the adolescence-limited (AL) category, with only a small group (7.5 per cent of the cohort) who began engaging in ASB in childhood continuing this into adolescence (ibid.). Gender differences can also be detected in the type of ASB. Drawing on various longitudinal sources, Steffensmeier et al. (2023) in the US found that

male adolescents were more likely to engage in violent behaviour; in cases of minor aggression, the gender gap tended to be fairly small but was larger for more serious forms (e.g. aggravated assault). Overall, however, the authors note that there have been similar declines in rates of youth violence among both genders, particularly since 2010 (ibid). A longitudinal study from Australia (Smart et al., 2004) showed that males had engaged significantly more often in various types of antisocial acts, including fighting.

However, other research alludes to a narrowing of the gender gap. Lu (2024), drawing on Monitoring the Future (MTF) in the US, notes that there has been a greater decline in offending among boys than girls, possibly attributed to declines in unstructured socialising and alcohol consumption which have been higher among boys, thus they suggest narrowing the gender gap. Furthermore, the narrowing of the gap could also be attributed to a slight increase in sensation seeking among females, compared to stable, albeit higher, levels among boys (ibid.). Examining female delinquency in Portugal, Duarte and de Carvalho (2017) found that in some cases such behaviour emerged as a result of trying to manage negative feelings and anxiety or coping with experiences of trauma and maltreatment. In other cases such behaviour was associated with seeking thrill and adventure (ibid.). Fernández-Molina and Bartolomé Gutiérrez (2020) highlight gender differences in the overall crime drop in the youth population in Spain: the decline is not detected among lower socio-economic status (SES) girls and immigrant youth, while the rates have fallen among male youth from higher socio-economic backgrounds.

1.2.2.2 Special education needs/disabilities

Some studies have pointed towards an association between offending behaviour and having special educational needs (SEN)/disabilities. Day (2025) notes that in the UK children with special educational needs and disabilities (SEND) and neuro-divergent children are over-represented among school exclusion cases and youth justice populations. Previous research has indicated that compared to their peers, young people with SEN tend to be more likely to exhibit problem behaviour (Schwab et al., 2015; Fauth et al., 2014; Dekker et al., 2002). Young people with disabilities have been found to be more likely to experience victimisation and engage in problem behaviour compared to their peers, with this remaining constant over time (Rose and Gage, 2016). A longitudinal study in the UK, focussing on self-injury,

aggression and destruction among children between 2 and 12 years with severe intellectual disability, found that such behaviours were persistent (69 per cent, 57 per cent and 58 per cent respectively), and had remained stable over time (Davies and Oliver, 2016).

Drawing on the longitudinal research project *Attitudes Toward Inclusion of Students with Disabilities related to Social Inclusion* (ATIS-SI) of primary and secondary school students in Austria, Schwab and colleagues (2021) found that students with SEN were more likely to be excluded from friendship groups than their non-SEN peers, in line with Mamas et al. (2020). Being rejected by their peers is likely to contribute to feelings of loneliness of students with SEN (Pavri and Luftig, 2000). The quality of relationships with peers and teachers have also been found to be associated with behaviour difficulties by a longitudinal study in the UK (Oldfield et al., 2017). In Portugal, a study of adolescents with special needs by Simões et al. (2012) showed that students' disruptive behaviour was associated with negative life events acting as a risk factor, while protective factors included emotional and social competencies.

Having a SEN has also been associated with more serious offences. Data from the UK indicate that young people (14-16 years of age) who were cautioned or sentenced for any offence were more likely to have SEN, compared to the rest of the cohort (80 per cent vs 20 per cent) (Department of Education and Ministry of Justice, 2022).[5] They were also more likely to engage in serious violent offence (e.g. assault, robbery using threat or force, homicide) (87 per cent vs 13 per cent) and more likely to fall into the 'prolific offenders' category (95 per cent vs 5 per cent) (ibid.). Fuller and McNally (2023) in the UK found that having a support plan in place matters. Compared to all children, those who were cautioned or sentenced for serious violence offence (violence against a person, robbery, possession of weapons) were more likely to be issued with an EHC plan[6] for their SEN needs at an older age. The association with being cautioned or sentenced for a serious violence offence was weaker, however, when these systems of support were in place for children for higher needs.

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5 However, these figures do not capture whether the pattern reflects a difference in behaviour and/or differential contact with the criminal justice system.

6 An EHC plan is a legally binding document for children and young people up to age 25 who need extra support for educational, health, and social care needs beyond standard SEN support.

1.2.2.3 Ethnic minorities

International research on ethnic minority/migration-origin young people and risk-taking behaviour has been mixed, possibly reflecting differences in the migration history and profile of migrants across countries. One US study (see Laban et al., 2026) found that, based on latent class analysis, Hispanic White and Asian ethno-racial categories were more likely to fall into the 'rule-abiding class' (never offending); the non-Hispanic Black ethno-racial categories were more likely to be in the 'infrequent-disobedient class' (sometimes offending); while those with an Hispanic ethno-racial identity were under-represented in the 'frequent-delinquent class'. In the Greek context, Motti-Stefanidi (2019) found that after controlling for families' social adversity, migrant-origin adolescents had significantly worse conduct problems compared to their non-immigrant Greek peers. Furthermore, being accepted by Greek peers, but not by immigrant peers, was associated with more positive outcomes for immigrant youth (ibid.). A longitudinal study by Schulz et al. (2025) in Germany compared children with and without a migrant background (MB) at three assessment points over 18 years regarding mental health problems. The results showed that those with an MB reported both significantly more frequent behavioural problems and higher current psychological stress compared to young adults without an MB.

Looking at the role of neighbourhood risk and maternal and paternal involvement on multiple forms of prosocial behaviours among recent immigrant US Latino/a adolescents, Davis et al. (2021) found that parental involvement by migrant parents, particularly mothers, resulted in positive outcomes for their teenage children. The authors found no direct links between perceived neighbourhood problems and prosocial behaviours, suggesting that positive parenting may act as a protective factor against negative neighbourhood influence.

While findings on the level of antisocial behaviour by ethnicity/race have varied across contexts, a substantial body of research points to differences in arrest rates. In the US, Black and Hispanic young people are significantly more likely to be arrested and subject to punitive measures, even controlling for levels of antisocial behaviour (Lehmann and Meldrum, 2024; Raphael and Rozo, 2019). Furthermore, significant racial disparities have been found in the number of young people subject to 'stop and search' by the police in England and Wales (Medina-Ariza, 2014).

1.2.2.4 Environmental systems

Bronfenbrenner's ecological systems theory indicates that the development of a young person is shaped by dovetailing environmental systems, ranging from immediate – e.g. family, friends, school, to broader societal influences.

Family SES, parental education and income

A global systematic review and meta-analysis by Piotrowska et al. (2015) shows that lower family socio-economic status (SES) has been found to be associated with higher levels of ASB in children and adolescents. However, the strength of this relationship largely depends on the type of ASB explored by the researchers and the nature of the study design (ibid.). Furthermore, the relationship between SES and ASB may also vary by the type of informant, with stronger relationships found when ASB was reported by parents or teachers (ibid.).

Turning to longitudinal research, various studies on ASB in youth have utilised variables on family socio-economic background, parental qualifications and family income. In the UK, data from the Millennium Cohort Study show that, at the age of 14, with some exceptions, rates of ASB did not vary by parental educational levels (CLS, 2017). The only exception was shoplifting, where the prevalence was higher among teenagers whose parents had degree-level qualifications or above (9.1 per cent) compared to parents with below degree-level (5.3 per cent) (Fitzsimons and Villadsen, 2021). Using the same dataset, O'Connell (2023) highlighted the weak association between SES and ASB and pointed to the importance of other factors such as personality traits. In the US, a longitudinal study (fMRI sub-study) showed that adolescents from high and low SES backgrounds showed similar levels of risk-taking behaviour overall (Armstrong-Carter et al., 2025).

Other UK studies have shown that household income (negatively) predicted interaction with the police (O'Connell, 2023); decreased financial hardship increased the odds of being in the rule-abiding class relative to the infrequent-disobedient class (Laban et al., 2026); while the ease of paying the rent was associated with a lower likelihood of ASB (Stevens, 2018). Another UK study showed that as levels of family income and parent education decreased, ratings of social, emotional and behavioural difficulties increased, whereas ratings of prosocial behaviour decreased (Hartas and Kuscuoglu, 2020). Family income

showed a strong gradient in the development of participation in violent convictions also in Sweden (Sivertsson et al., 2025). These authors also note that while the share of violent offenders from the least well-off families has increased across the studied birth cohorts in Sweden, it is not the case in Finland (Sivertsson et al., 2025).

Parenting and family dynamics

The exploration of the association of parenting and family dynamics and ASB has produced mixed results. Baumer et al. (2021) in the US, drawing on the Monitoring the Future (MTF) study, argue that parental supervision and their educational expectations for their children seem to have had a modest impact on the reductions in prevalence of ASB in youth. While parental control was only seen to have a moderate effect on young people's behaviour in Finland, the opposite has been found in other research (see Svensson and Oberwittler, 2021 for Sweden). Data from the youngest cohort of the International Youth Development Study from Victoria, Australia showed that low involvement in family activities was a predictor of ASB (Hemphill et al., 2015).

Some studies have highlighted an association between maternal mental health and ASB in youth. In the US, absence of parental mental health difficulties increased the likelihood of being in the rule-abiding group (never engaging in ASB) compared to other categories (infrequent disobedient group (minor involvement) by 64 per cent and the frequent-delinquent group (significant involvement) by 94 per cent) (Laban et al., 2026). In the same vein, Stevens (2018) found that mothers' mental health during their children's primary school was related to children's later ASB. Other factors relating to family climate were also important. Laban et al. (2026) found that decreased family conflict increased the odds of being in the rule-abiding class relative to the infrequent-disobedient class by 9 per cent. Increased parental warmth increased the odds of being in the rule-abiding class relative to the infrequent disobedient class by 5 per cent, but this was not significantly associated with being in the frequent-delinquent class (Laban et al., 2026). Elsewhere, in the UK, mothers' reduced hostility towards their child appeared to have enduring associations with children's later antisocial and criminal behaviour (Stevens, 2018). Neglect and physical abuse were significantly associated with ASB among UK youth at all ages, with children and young people who experienced such maltreatment having higher levels of ASB; child maltreatment was associated with an increased risk of ASB from

childhood (7 years) to adulthood (50 years), and this risk was independent of a range of biological, family, and social characteristics (Esposti et al., 2020). Jahanshahi et al. (2023), drawing on the Growing Up in Scotland longitudinal study and investigating the maternal transmission of offending among a cohort of 12-year-olds, found that intragenerational maternal offending after the birth of their child is a significant predictor of offending among daughters but not sons.

School environment, teachers and peers

The school environment plays an important role in shaping students' learning experiences, influencing their socio-emotional development and helping to develop important life skills. Schools provide opportunities for developing good behaviour but can also address behaviour challenges. School environment and engagement play an important role in shaping the trajectories of ASB during adolescence (Halls and Edwards, 2025).

Existing research has highlighted a link between school attachment and student behaviour (Dornbusch et al., 2001, US). Longitudinal research from the US has shown that school protective factors, such as enjoyment and connection to school, increase the likelihood of being in the rule-abiding class, while decreased school attachment is associated with patterns of serious ASB (e.g. threatening behaviour, fighting, stealing and police contact) (Laban et al., 2026). Decreased school attachment may lead to school suspension. Hemphill et al. (2013) in Australia examined the impact of school suspension on non-violent antisocial behaviour (NVAB) across a 12-month period, noting that school suspension per se did not predict NVAB over and above other influences, especially association with antisocial peers. The predictors of NVAB included previous student NVAB, current alcohol and tobacco use, poor family management, association with antisocial friends, and low commitment to school (ibid.).

Truancy can form a base for a variety of offending behaviours due to lack of supervision and the unstructured nature of activities (Näsi et al., 2024, Finland). Using a longitudinal survey of Australian children (LSAC), Halls and Edwards (2025) noted that truancy, suspension/ expulsion and school avoidance all have a strong impact on student behaviour.

Furthermore, the quality of the relationship with teachers also matters. Student–teacher relationships were found to both directly and

indirectly influence levels of ASB in Australia (Halls and Edwards, 2025), while in China, the relationship between close teacher-student relationship and prosocial behaviour was bidirectional, with closer relationships fostering more prosocial behaviour which in turn enhanced the closeness of the relationship (Wu and Zhang, 2022). Furthermore, the positive effect of close teacher-student relationships and the negative effect of teacher-student conflict on adolescents' prosocial behaviour were mediated by the extent to which young people felt their social needs were being satisfied (Wu and Zhang, 2022). Another study showed a clear association between ASB and teacher-student conflict (Wilkinson et al., 2021).

During adolescence, relationships with peers are increasingly important in shaping social norms, behaviour and group dynamics. These relationships can be either positive or negative, depending on who young people form friendships with, based on similar behaviours and attitudes (Veenstra, 2026). In Australia, having antisocial peers was seen to increase the likelihood of ASB (Hemphill et al., 2013). In their review of the literature on social network modelling and peer influence on ASB, Sijtsema et al. (2018) note that indirect aggression (such as gossiping or exclusion) tends to be adopted from friends, whereas a peer effect is not found in direct aggression (such as physical violence). The authors also found that peer influence was most notable in the development of delinquency and weapon carrying, possibly in order to gain certain social status and a need to belong among the peers. Such social mimicry may result in more problematic issues later on, such as involvement in gangs (ibid.).

Neighbourhood and homelessness

The neighbourhood where a young person lives has been found to strongly influence their likelihood of engaging in ASB, with higher prevalence in areas with high levels of deprivation (Jung, 2023). Australian research has demonstrated an association between high neighbourhood disorganisation and antisocial behaviour (Hemphill et al., 2015), and found that homelessness is also linked to antisocial behaviours (e.g. stealing) (Heerde et al., 2022a). In the UK, Midouhas et al. (2021) found that young people living in unsafe areas at the age of 11 exhibited more problem behaviour at the age of 14. The authors also noted that problem behaviour at 11 predicted greater likelihood of them perceiving the area as unsafe at 14, thus highlighting the reciprocal relationship between young people's neighbourhood safety

perception and their emotional and behavioural problems. The effect of area safety on problem behaviour was stronger than the effect of problem behaviour on area safety (ibid.). Perceiving the neighbourhood as unsafe has been found to have a negative impact on adolescents' mental health. A study by Goldman-Mellor et al. (2016) has shown that young people who viewed their neighbourhood as unsafe were 2.5 times more likely to experience psychological distress, compared to their peers living in safe neighbourhoods. Having positive feelings about the neighbourhood has been found to be associated with a lower likelihood of antisocial behaviour in the UK (Stevens, 2018).

1.2.3 ASB and adult outcomes

A review of the literature has shown that the relationship between ASB in youth and adult outcomes is complex and multi-faceted, with some sources identifying an increase of ASB in adolescence with a drop-off in adulthood, whereas others find the relationship more nuanced, depending on personal characteristics and environmental variables (Carroll et al., 2023). Another review of existing research by Loeber et al. (2013) shows that persistence in ASB from adolescence into adulthood can be explained by factors such as individual differences in childhood (e.g. self-control), behavioural risk factors (e.g. disruptive behaviour and delinquency), individuals' exposure to social risk factors (family, peers, school), delayed brain maturation, and interaction with the justice system, among others.

Findings regarding ASB in youth and adult outcomes have been mixed, often depending on which ASB group one belongs to. McGee et al. (2011) in Australia found that both *life course persistent* (LCP) and *adolescent onset* (AO) ASB had the highest risk for early school leaving as well as being indicative of poor outcomes at age 21. The LCP group was at the highest risk of not being in paid employment. Furthermore, ASB in youth was also found to negatively affect personal relationships for females later in life (ibid.). Another Australian study (Bor et al., 2007) shows that adults who exhibited persistent and serious ASB in childhood and adolescence had the poorest mental and physical health, personal relationships, and more notable economic problems. Similar patterns have been found in the UK, whereby adolescents with conduct issues, especially severe behavioural problems, spent less time in paid employment, education and training (EET) between age 17 and 42 than their peers who did not experience conduct problems (Parsons et al., 2021). Drawing on the 1970 British Cohort Study, Popli et al. (2025) observed that the ASB groups experienced significantly

more disadvantageous mid-life outcomes compared to the non-ASB group, including caution and conviction and many social, economic, and health difficulties. Interestingly, educational attainment does not seem to fully mediate the effects of adolescent ASB (ibid.). Baker et al. (2026) in the US noted that while officially recorded arrest in adolescence hinders college completion, there were no statistically significant differences across any subgroups, such as ethnicity, gender, cohort, and SES, arguing that an arrest in youth has a detrimental impact on post-school education across all groups.

In their meta-analysis on the impact of different protective factors for antisocial behaviour in youth, Gubbels et al. (2024) noted that the highest impact was found for higher levels of conservativeness (valuing tradition, conformity, and security), self-transcendence (valuing the welfare of others; individual values), life satisfaction, involvement in romantic relationships, the capacity to reflect or mentalise, peer relationship quality, prosocial peers, prosocial values, agreeableness, school self-esteem, parental control, general resilience, and social skills. Analyses revealed that the impact of some of the 77 domains was moderated by the youth's age (five domains) and gender (four domains) as well as the severity of antisocial behaviour they exhibit (two domains), indicating that the impact of these domains differs across subgroups of antisocial youth. Overall, the results revealed that multiple individual-, family-, extrafamilial-, community- and school-related factors are protective against antisocial behaviour. Moreover, protective domains related to individual characteristics (e.g. higher levels of conservativeness, self-transcendence, life satisfaction, the capacity to reflect or mentalise, and prosocial values) had significant and large or medium effects on antisocial behaviour (ibid.).

A review of the existing literature shows that most ASB tends to be low intensity and low risk, with some types of behaviour being considered high intensity and high risk (Walsh, 2019). While many young people desist from misconduct over time due to a decrease in impulsive behaviour and increased self-control (Loeber et al., 2013), youth with a life-course persistent trajectory of ASB are likely to continue with this behaviour into adulthood (Moffitt, 2018). Persistent ASB in youth may lead to adult offending, with young men particularly vulnerable (Walsh, 2019; Czech and Kemp, 2010). Longitudinal research from the UK has shown that groups engaging in ASB are more likely to have negative mid-life outcomes such as caution and conviction (Popli et al., 2025). The relationship between age and crime is well established, with the

most crime-prone group in the US being young people 15-24 years of age (Ulmer and Steffensmeier, 2014). In England and Wales, young adults between 18 and 25 years of age accounted for 36 per cent of those prosecuted for breach of ASB powers: Dispersal Power, Community Protection Notice and Public Spaces Protection Order[7] (Mills and Ford, 2018). The authors note that the most frequently identified behaviours for which young adults were sanctioned for included drug-related ASB and neighbourhood disturbance (ibid.). In terms of youth arrests, data from Ireland show that poverty and low income seem to be strong factors predicting arrest, although the link between these two variables is not straightforward and not necessarily causal (CSO, 2022).[8]

ASB, youth crime and multiple risk behaviour are often associated with coming from a socio-economically disadvantaged background (Home Office, UK, 2023; Kipping et al., 2015; Piotrowska et al., 2015). However, some researchers argue that early intervention to tackle involvement in youth crime is necessary at all socio-economic levels as this behaviour also concerns affluent young people (Czech and Kemp, 2010). There seems to be a significant link between mental health and ASB in youth (Home Office, UK, 2023). A scoping review by Matar et al. (2024) shows that for some young people from *higher* socio-economic status groups there may be a link between mental health and certain types of behaviour, such as alcohol consumption. The authors found that other mental health concerns among this group include externalising and risk behaviours, bullying, depression, anxiety and stress. Higher SES youth with mental health concerns were found to fall into the following categories: adolescents residing in boarding schools, those with high subjective social status (e.g. popular) or low academic performance (ibid.). Contextual factors seem to play a role: for example, parental pressure for high academic performance of their children was found to be a risk-factor for substance use, depression and anxiety (ibid.).

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7 Dispersal Power (a police-only power to exclude individuals from a specified area for up to 48 hours); Community Protection Notice (CPN)(enables councils, the police and housing providers to give notices to individuals and businesses prohibiting them from doing, and/or requiring them to do, certain things); Public Spaces Protection Order (PSPO) (allows local councils to prohibit or require specific behaviours in public places).

8 https://www.cso.ie/en/releasesandpublications/hubs/p-cyp/childrenandyoungpersonshub/society/crime/

1.2.4 Irish data and research

This section explores the prevalence of crime and ASB in Ireland and existing research on the topic. There seems to be limited research in Ireland on antisocial behaviour in youth, particularly longitudinal studies.

Before exploring the prevalence of ASB among young people, it is useful to consider crime among the adult population. A survey of the adult population in Ireland (18 years and over) regarding the impact that crime has on their lives has shown that a large portion of respondents (75 per cent) felt safe walking in their local area at night (Central Statistics Office, 2020).[9] Feelings of safety varied by gender, with females less likely to report feeling safe than males (64 per cent vs 87 per cent). Levels of area deprivation seemed to play a role in feelings of safety, with people feeling less safe in less affluent areas. The rates of having experienced personal crime (e.g. violent theft, attempted theft, assault, fraud) were broadly similar among males and females (10 per cent vs 9 per cent). People aged 18-29 were more likely to report experiences of personal crime, compared to older age groups. In terms of area characteristics, those from very affluent areas were more likely to report personal crime (14 per cent) than people from more disadvantaged areas. A small number of households had been the victim of burglary or vandalism, or attempt thereof, with a similar prevalence of household crime reported by very affluent or very disadvantaged areas (both 5 per cent).

Research on the nature and reach of the key criminal/ASB networks within Dublin South Central (Connolly, 2019) showed that these networks vary from loosely organised to well organised, especially in specific areas or flat complexes. Members of these networks are often admired, and some young people may see them as role models. The networks may also provide material gain for young people, thus acting as an incentive for their initial involvement. Furthermore, adverse community environments and neglect may facilitate young people's involvement in crime and ASB. This is in line with other research which found that criminal networks in an area encourage young people to become engaged in criminal behaviour (Department of Children and Youth Affairs, 2016).

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9 https://www.cso.ie/en/releasesandpublications/ep/p-syi/statisticalyearbookofireland2020/soc/crimeandvictimisation/

Insights into the prevalence of ASB among young people can be gained from various statistical reports in Ireland. The Youth Diversion Programme is an initiative that redirects young people who commit low-level offences or are at risk of offending away from formal criminal justice processes toward supportive interventions aimed at preventing reoffending. There were 15,813 referrals to this programme in 2023, which represents an increase of 1 per cent compared to 2022 (15,719 referrals). Some 71 per cent (5,534) of children referred to the Diversion Programme in 2023 were referred only once (Garda National Youth Diversion Bureau, 2024). The majority of the referrals in 2023 concerned 'Theft and Related Offences', accounting for 31 per cent (4,902) of referrals. There were 4,971 'Theft and Related Offences' referrals, an increase of 5 per cent compared to 2022 (4,719 referrals). The Burglary offence category had the highest increase in referrals from 450 referrals in 2022 to 643 referrals in 2023, an increase of 43 per cent (ibid.). Drugs offence categories had the highest decrease in referrals from 1,881 in 2022 to 1,607 in 2023. This is a 15 per cent decrease. The 'Public Order Offence' category also had a decrease of 13 per cent in referrals in 2023, from 2,626 in 2022 to 2,284 in 2023 (ibid.). Road Traffic offences accounted for over 10 per cent (1,679) of total referrals in 2023. Road safety is crucial for young people as they are among the most vulnerable road users due to their inexperience and propensity for risk-taking behaviour (ibid.). The proportion of children referred for the first time in 2023 decreased as their age increased. Some 74 per cent of children referred to the Diversion Programme in 2023 were male (ibid.).

Young people aged 18-24 are over-represented in the Irish criminal justice system; with a high rate of reoffending within a year after having been imprisoned (Gorman et al., 2022).[10] The number of young people

[10] However, of note, in recent years there has been a significant change in the age profile of those in the Irish adult prison system. Historically, the number of people in prison in their 20s was higher than the number of those in their 30s. This pattern, however, has reversed, with fewer people in prison entering the system in their 20s and 30s, and the largest cohort being older men in the 40-plus bracket. The marked decline in the number of people aged 18 to 24 in the prison population is illustrated by the fact that those in that age group accounted for 11 per cent of the prison population in 2023, while accounting for 21 per cent in 2014. This may reflect the successful outcomes stemming from more young people being engaged in the Youth Diversion Programme network which has expanded its reach and services considerably following substantial increase in funding over the last decade.

under 18 suspected of more serious offences (such as assaults) has declined from 1,209 in 2018 to 955 in 2024.[11]

Drawing on Growing Up in Ireland data for Cohort '98, and exploring factors associated with adolescent behaviour patterns, Smyth and Darmody (2021) found that behaviour difficulties among 17-year-olds can be considered relatively generally low. The study highlighted gender differences in behaviour, with externalising, antisocial and school (mis)behaviour more likely to be exhibited by males than their female peers, who were more likely to internalise their difficulties. In terms of other factors, behaviour difficulties were also associated with having special educational needs (SEN), coming from families with lower levels of education, lone parents and separated families, families that experienced financial strain during the last recession that started in 2008, and families with parent-child conflict. The association between family background and school-based antisocial behaviour was less clear. School context seemed to play a role, with young people attending DEIS schools more likely to exhibit more behaviour difficulties compared to their peers in non-DEIS schools, even when controlling for individual social background. Having more negative attitudes to school was predictive of greater involvement in ASB. With regard to peers, trust in friends tended to have a positive impact on students' behaviour. In terms of neighbourhood, the environment seemed to have an impact – living in disorderly neighbourhoods (as reported by mothers) was associated with behaviour difficulties. Furthermore, student-teacher relationships also played a role in students' behaviour, with positive relationships acting as a protective factor. This finding is in line with another study which found that students who were frequently reprimanded by their teachers were more likely to exhibit conduct problems, especially if the teacher's reaction was considered inconsistent or unfair (Smyth, 2016).

A small-scale qualitative study has highlighted the importance of youth clubs and extracurricular activities in deterring young people from engaging in ASB and crime (Kenny, 2021). Furthermore, the author notes that intergenerational transmission of delinquency and antisocial behaviour cannot be underestimated, as well as pointing towards the need to provide mental health support for young people, who may be 'acting out', not knowing how to seek help. In their

[11] https://data.cso.ie/table/RCD09

evaluation of the Bail Supervision Scheme (BSS), an initiative that seeks to reduce remand places for young people, Naughton et al. (2019) highlight the importance of adopting a holistic approach in tackling problem behaviour in youth by encouraging positive change in the home and community. Efforts to reduce ASB in youth and youth offending can contribute to reducing the influence of criminal networks in youth offending and improving the prosocial outcomes of children involved in such networks as shown by the Greentown study (Department of Children and Youth Affairs, 2016).

1.3 Approaches to addressing ASB

1.3.1 International evidence on approaches to addressing ASB

In order to address ASB in young people, the policies and interventions utilised by different jurisdictions have focussed on a) the needs of victims and prevention of misbehaviours; or b) the needs of individuals engaging in ASB (Hughes, 2011), thus resulting in a different focus of the interventions. Furthermore, a review of international literature – mostly from the US – by Ross et al. (2011) highlights a focus on different dimensions of interventions: family-focussed prevention (parent training, home-based interventions, clinic-based interventions), school-focussed intervention (student grouping, classroom and school-wide strategies) and community-based intervention (mentoring, after-school activities). The authors argue that approaches that mainly focus on surveillance and control; individual counselling (not based on cognitive behavioural approaches); unstructured life skills training; military style boot camps; community service activities; short-term non-residential training programmes, summer jobs or subsidised work programmes; or where at-risk young people are brought together in an unstructured way tend to be less effective (ibid.). Interventions tend to be more effective if they utilise an approach based on cognitive behaviour therapy aimed at changing young people's behaviour; and programmes that target at-risk populations rather than more general programmes, with approaches mainly focussing on discipline and deterrence being less successful (ibid.).

Furthermore, Kim et al. (2015) argue that when designing prevention programmes, it is important to consider both risk and protective factors, with a special consideration given to shared risk factors, as different types of risky behaviour tend to co-occur. The authors also highlight the importance of a strategic and coordinated approach

across multiple relevant sectors to tackle ASB and delinquency. In order to have an impact, this multi-sectoral approach should include a common vision (e.g. reducing problem behaviour); a shared approach to assessment (establishing risk and protective profile of communities, assessment of implementation and outcomes); mutually reinforcing actions; continuous communication; and coordinated training and support (ibid.). In order to have an impact, interventions must also consider the broader context and challenges. For example, in discussing evidence-based approaches to preventing youth crime and violence, Axford and Humayun (2026) note that more attention needs to be paid to financial and material disadvantage, greater engagement with children, young people and their families, criminal exploitation, greater investment in intervention and design and delivery, as well as improved multi-agency collaboration. Kim et al. (2015) identify two cases of good practice in the US: PROSPER (a partnership model and a delivery system of evidence-based preventative interventions), and Communities that Care (a locally owned and operated preventative system).

Rather than just focusing on young people engaging in ASB, work with parents has had positive outcomes. For example, a meta-analysis of international studies on the effects of parent training programmes (PTP) on ASB in children and adolescents has shown that such programmes have a notable short-term effect on ASB in children and adolescents (Beelmann et al., 2023). In particular, such training programmes have resulted in positive outcomes regarding ASB in children through a reduction in parental stress, the promotion of parent-child interactions and relationships, a reduction in negative parental behaviour, and a strengthening of parental competencies (e.g. praise, reward, supervision, effective limit setting) (ibid.). While some studies have found Functional Family Therapy (FFT) – a family-based intervention – to be effective in reducing behavioural problems among young people (Graham et al., 2014, Ireland), a review of research indicates that this approach is not consistently more (or less) effective than other approaches (Littell et al., 2023). Another intervention, Multi-systemic Family Therapy (MST), is designed to address ASB in adolescents. It is a home-based measure for young people with psychosocial and behavioural issues. Tan and Fajardo (2017) found that MST showed a reduction in ASB. However, this intervention, compared to other types of interventions, has produced inconclusive

results in relation to emotional and behavioural problems among 10- to 17-year-olds (Littell et al., 2005).

The evaluation of initiatives is crucial in determining whether certain approaches 'work' or not. Drawing on local case studies of responses to ASB in England and Wales, Bullock (2011) notes that interventions often lack systematic evaluation of their effectiveness. However, systematic analysis of ASB may be difficult, due to the often undefined nature of ASB. In some cases, ASB can be under-reported as some instances may be considered too trivial to report or may not be seen as ASB; under-reporting may also be linked to a lack of response from local agencies or not knowing how to report (ibid.). If data collection and analysis of prevalence of ASB are not systematic, it may prevent implementation of appropriate prevention practices in local areas, as issues around ASB may differ between communities (ibid.).

1.3.2 The Irish legislative and policy context

Ireland's approach to addressing antisocial behaviour among children and young people has evolved over time. The first national youth diversion programme was initially established in 1963 as the non-statutory Garda Liaison Scheme aimed at diverting less serious young offenders from their activities and was later given statutory powers under Part 4 of the Children Act 2001 (Cambell, 2005). **The Criminal Justice Act 2006** included provisions for addressing ASB among children 12-18 years of age, enabling An Garda Síochána to issue behaviour warnings in writing to the child's parents or guardians. In cases where this behaviour continues, An Garda Síochána can apply to the court for an Anti-Social Behaviour Order (ASBO), prohibiting such behaviour.[12] The Act also allows for implementation of a 'good behaviour contract', if the child and the parents agree to address the ASB. The Act also highlights the importance of community involvement and the role of An Garda Síochána in combating ASB, by introducing various interventions (The Criminal Justice Act, 2006). In 2008 the National Youth Justice strategy was launched, providing a framework for a coordinated implementation of the Children Act 2001. One of the goals of this strategy was to reduce youth offending by diverting them from such behaviour, while focussing on the rights and needs of young people (Redmond, 2005). The strategy also highlighted the importance of strengthening public confidence in the youth justice system, making

[12] The use of ASBOs in Ireland has remained low (Youth Work Ireland, 2022).

greater use of community sanctions and initiatives, providing a safe environment for detained children and assisting their reintegration into the community, as well as strengthening information sources in the youth justice system in order to inform policies and strategies (ibid.: 136).

In line with previous strategies, at national level, the **Youth Justice Strategy 2021-2027**[13] aims to promote positive behaviour among young people at risk of engaging in ASB. The strategy focusses on collaboration and communication across all government sectors and relevant agencies to provide wrap-around support to young people and supporting families and communities. Furthermore, the YJS highlights the importance of data sharing between various agencies and research organisations in embedding youth justice policies and interventions in empirical evidence.

Similar to other countries, Ireland has adopted a number of approaches to address ASB in children and young people. At national level, An Garda Síochána has a remit to deal with ASB among children and young people. The approaches include: issuing ASB warnings (applicable to 12- to 18-year-olds); organising meetings to discuss a child's antisocial behaviour; requesting a child and their parents or guardian to enter into a good behaviour contract, and applying to the courts for an ASBO in respect of a child.[14] The Children's Court addresses ASB by children; it allows for community sanctions and provides a structured legal process for dealing with such cases. Provided for in the Children Act, the Garda Youth Diversion Programme is supported by a network of Youth Diversion Projects (YDPs), that seek to divert young people aged 12 to 17 years away from ASB and crime. Their remit has been expanded to include early intervention work with 8- to 11-year-olds and with the families of participants, and coverage of the programme has been nationwide since late 2025. Oberstown Children Detention Campus, under the remit of DCDE, provides care and education to young people on detention or remand orders, with 50 young people in occupancy in March 2026.[15] The Probation Service provides in-reach support for young people in the Campus, working together with other agencies. The probation service also focusses on

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13 https://assets.gov.ie/static/documents/youth-justice-strategy-2021-2027.pdf

14 The issuing of ASBOs for children in Ireland over the years has been rare.

15 https://www.oberstown.com/clipart/publications/03_Occupancy_FME%2031%20March%202026.pdf

Young Persons Probation (YPP), offering mentoring to young people. The Youth-Joint Agency Response to Crime (Y-JARC) is aimed at young people who have engaged in a notable number of offences, and involves a multi-agency approach to managing and addressing high levels of offences by young people. Another multi-agency response to youth crime is the Diamond project aimed at 12- to 24-year-olds and their families in the North Dublin Inner City (The Probation Service, 2024). The total referrals of young people referred to the Probation Service has increased somewhat: from 702 individuals in 2022 to 764 in 2024 (ibid.).

While not directly addressing ASB in children and young people, **Children First: National Guidance for Protection and Welfare of Children (2011)** outlined best practices for protecting children and young people from child abuse, including antisocial behaviour, and for addressing issues relating to children's welfare. The document highlights the importance of inter-agency collaboration and information sharing to safeguard children.[16]

In response to the government's commitment to addressing the negative impact of ASB on communities, a Forum on Anti-Social Behaviour[17] was established in 2020, involving various state agencies and community representatives to address issues around ASB. The Forum included representatives from Government Departments, An Garda Síochána, the Probation Service, Tusla, researchers, business groups and Non-Governmental Organisations (NGOs). Approaches included giving new powers to An Garda Síochána and putting in place additional interventions to support the parents of offenders.[18]

The National Policy Framework for Children and Young People 2023-2028 focusses on the rights of children and young people, and is aimed at improving outcomes for all children and young people. The document highlights the importance of prevention and early

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16 See: https://www.gov.ie/en/department-of-children-disability-and-equality/publications/children-first-national-guidelines-for-the-protection-and-welfare-of-children-2017/

17 The Forum was wound down in 2025 with formation of the new Government, and its role and functions were subsumed by other functional units, including the then newly created National Office of Community Safety established under the Policing Security and Community Safety Act 2024.

18 See: https://www.gov.ie/en/department-of-justice-home-affairs-and-migration/publications/forum-on-anti-social-behaviour/

intervention strategies, as well as enhancing systems and services that support children and young people.[19]

Recognising the importance of combating ASB, **the Anti-Social Behaviour Strategy for 2025-2029 South Dublin County Council**[20] includes broader mechanisms for reducing ASB in communities, ensuring and increasing safety for residents. The aims of this strategy include raising understanding among residents of ASB and how to report it by developing links with the community, working together with An Garda Síochána to operate ASB Clinics across the county to combat ASB, and engaging in a series of projects and initiatives. The Strategy does not explicitly mention ASB among children and young people.

Cineáltas: Action Plan on Bullying and Bí Cineálta provides guidelines on how the whole education community and society can collaborate in preventing and addressing bullying in schools. Tusla, the Children and Family Agency, provides guidance and support for child protection and welfare practices, ensuring that children's needs are being prioritised. Clúid Housing[21] have developed a 3-year antisocial behaviour strategy. While not specifically targeted at children, it includes measures for addressing ASB, which can also apply to children. In addressing issues around ASB, Clúid collaborates with a range of other organisations, such as youth justice programmes, Gardaí, community groups, child and family support organisations, youth workers, juvenile liaison officers, among others. The annual reports provide insights into different community initiatives, some of which engage children (e.g. the FEAST initiative).

1.4 Data and methodology

1.4.1 Data

The analyses of the relationship between ASB and adult outcomes use data from Cohort '98 of the GUI study. This cohort was initially sampled at 9 years age, on the basis of the school attended, and

19 See: https://whatworks.gov.ie/about/young-ireland/

20 https://www.sdcc.ie/en/services/community/south-dublin-local-community-safety-partnership/antisocial-behaviour/113386-sdcc-asb-policies-and-procedures-2025-2029-v5-online.pdf

21 https://www.cluid.ie/asb-policy/

followed at 13, 17/18,[22] 20 and 25 years of age; response rates were 89 per cent, 76 per cent, 62 per cent and 49.5 per cent respectively (McNamara et al., 2021).[23] The data used in this study have been reweighted to take account of non-response and attrition. Weights were derived by the GUI Study Team; the first wave was reweighted to account for school and family non-response while weights for later waves adjusted for attrition between waves. The weights adjust for a number of factors, including family size and composition as well as household socio-economic status (McNamara et al., 2021).

The study also takes advantage of the multiple-cohort nature of GUI to compare 13-year-olds a decade apart. Fieldwork for Cohort '98 at 13 took place over the period August 2011 to February 2012 and involved face-to-face interviews with young people and their parent(s). More sensitive questions were administered by interviewers on a self-completion basis during the interview visit to the home. The period of fieldwork initiation for Cohort '08 at 13 years of age (July 2021 to June 2022) was one of continuing public health restrictions, a situation which necessitated a change in the mode used. The decision was taken to shift to a telephone survey with the self-complete element administered via an online platform hosted by the Central Statistics Office (Murray et al., 2023). As respondent burden would be greater over the phone, a number of questions and/or scale items initially planned for inclusion had to be dropped. This included some of the items on antisocial behaviour (see Section 1.3.2). At age 13, the response rate for Cohort '08 was 78 per cent of the valid sample (Murray et al., 2023). Weighting is used to make the two samples representative of the population as a whole.

1.4.2 Measures and methodology for analysing the long-term consequences of antisocial behaviour for later outcomes

1.4.2.1 Antisocial behaviour

For Cohort '98, at both 13 and 17 years, young people were asked to report the frequency with which they had engaged in different kinds of antisocial behaviour (with responses including 'never', 'once', '2-5 times' and '6 or more times'), using questions developed for the Edinburgh Study of Youth Transitions (Smith and McVie, 2003). These

[22] At this wave, some respondents were 18 years of age but, for convenience, this is referred to as the 17-year wave throughout this report.

[23] Growing Up in Ireland: Cohort '98 at age 25 Main Results - Central Statistics Office.

ranged in seriousness from not paying the correct fare on a bus to kicking or punching someone to injure them. The only difference between the two waves was the inclusion of an item on hurting animals at age 17 so this item is not used in the scales constructed. The proportion who engaged in this behaviour at least once in the previous year is given in Table 1.1. Young people may be reluctant to admit to such behaviours, leading to an underestimate of the true prevalence of ASB. However, the self-completion nature of the questions on ASB may mitigate social desirability bias in responses.

Chapter 1 has shown that violent behaviour in adolescence is predictive of more serious offences into adulthood. The measures therefore distinguish between non-violent ASB and violent ASB (see Table 1.1).[24] The items outlined in Table 1.1 were recoded into never, once and two or more times, and then summed to provide measures of non-violent and violent ASB. The non-violent ASB items all loaded on the same factor with a reliability of 0.7 at 13 and 17 years. The scale for violent ASB had poorer reliability (0.44) at 13 but a reliability of 0.6 at 17 years. The scale is still used as a summary measure given that some of the items have small numbers reporting that behaviour, especially at 13, so cannot be analysed separately. Non-violent ASB increases between 13 and 17 years while violent ASB remains stable (Table 1.2).

[24] See also Hemphill et al. (2013) for use of the term non-violent antisocial behaviour.

Table 1.1 Measures of antisocial behaviour for Cohort '98

	Item included at 13 years	Item included at 17 years	Responding 'yes' one or more times at 13 years %	Responding 'yes' one or more times at 17 years %
Non-violent ASB				
Taken something from a shop or store without paying for it	✓	✓	7.1	12.4
Not paid the correct fare on a bus or train	✓	✓	13.2	33.2
Behaved badly in public so that people complained and you got into trouble	✓	✓	10.3	11.5
Stolen or ridden in a stolen car or a van or on a stolen motorbike	✓	✓	*	1.4
Taken money or something else that did not belong to you from school	✓	✓	5.5	5.9
Deliberately damaged or destroyed property that did not belong to you (e.g. windows, cars, streetlights)	✓	✓	3.6	4.7
Broken into a house or building to steal something	✓	✓	*	1.1
Written things or sprayed paint on things that do not belong to you (for example, a phone box, car, building, bus shelter)	✓	✓	5.6	4.7
Taken money or something else that did not belong to you from your home without permission	✓	✓	13.7	12.9
Broken into a car or van to steal something from it	✓	✓	*	0.6
Violent ASB				
Carried a knife or weapon with you in case it was needed in a fight	✓	✓	2.5	3.7
Used force, threats or a weapon to get money or something else from somebody	✓	✓	1.0	0.8
Deliberately set fire or tried to set fire to someone's property or a building (e.g. school or shed)	✓	✓	0.6	0.9
Hit, kicked or punched someone on purpose in order to hurt or injure them	✓	✓	16.2	13.5
Been involved in a serious physical fight where someone got badly hurt or needed to see a doctor	✓	✓	2.8	4.8
Purposely hurt or injured a bird or an animal		✓		

Source: GUI Cohort '98; weighted to 17 year longitudinal weights; * cannot be reported.

Table 1.2 Means and standard deviations for scales of non-violent ASB and violent ASB at 13 and 17 years, Cohort '98

	Non-violent ASB at 13	Violent ASB at 13	Non-violent ASB at 17	Violent ASB at 17
Mean	0.81	0.34	1.31	0.34
Standard deviation	1.79	0.88	2.12	0.99

Source: GUI Cohort '98. N =5,970.

Because of the constraints of phone and online administration for Cohort '08, the number of items on antisocial behaviour was reduced to eight; six covering non-violent ASB and two covering violent ASB (Table 1.1). The response categories were condensed to 'never', 'once' and '2 or more times'. It is considered unlikely that the change in mode between the two cohorts will have affected the responses on ASB as these questions were answered on a self-complete basis for both cohorts. In the cross-cohort analysis, the measures are reduced and recoded for Cohort '98 to allow comparability. At ages 20 and 25, respondents were not asked about antisocial behaviour or criminal acts due to the risk of self-incrimination and requirements around the reporting of crime by adults. However, they were asked about contact with the criminal justice system (see below).

1.4.2.2 Contact with the criminal justice system

At age 17, a measure of contact with the criminal justice system was derived based on whether the young person had ever been in trouble with the Gardaí, ever cautioned, participated in a youth diversion programme[25] or appeared in court (not as a witness). Unfortunately, the numbers in these different categories are too small to be identified separately. The measure was recoded into a measure of 'no contact', 'trouble with the police (but no formal consequence)' and 'formal consequence'. Fourteen per cent of the young people had had some contact with the criminal justice system by age 17 (Table 1.3). At age 20, a similar measure was derived based on experiences since the previous survey at age 17. Contact was more common at this age, with almost a third of young adults having some contact, usually being questioned by the police. At age 25, the question wording was somewhat different, so the measure distinguishes between no contact (since the age of 20), having been stopped and questioned by the Gardaí, and having been arrested, appeared in court or found guilty of a

[25] Unfortunately, the numbers who taken part in a youth diversion programme are too small to be identified separately.

crime. Over one-in-six had had some contact with the justice system in their early twenties.

Table 1.3 Measures of contact with the criminal justice system at ages 13, 17, 20 and 25 years, Cohort '98

	%
13 years of age:	
Parent(s) ever in trouble with the police or in prison	5.0
17 years of age:	
Parent(s) ever in trouble with the police or in prison	4.4
Sibling(s) ever in trouble with the police or in prison	3.5
Young person:	
Contact with the system by age 17:	
No contact	86.2
Questioned by police	2.8
Formal sanction	11.0
Contact with the system between 17 and 20:	
No contact	68.9
Questioned by police	21.8
Formal sanction	9.4
Contact with the system between 20 and 25:	
No contact	83.0
Questioned by police	13.0
Formal sanction	4.0

Source: GUI Cohort '98.

1.4.2.3 Outcome variables

The richness of GUI data allows us to capture several dimensions of outcomes in early adulthood, including educational attainment, labour market position and take-up of social welfare payments, and health and wellbeing.

Educational outcomes include Leaving Certificate performance (measured in terms of Central Applications Office (CAO) points), captured at the 20-year wave, and a measure of educational attainment by age 25. This was measured in terms of National Framework of Qualifications (NFQ) levels; because of small numbers, the variable was recoded to range from level 4 or lower (junior cycle or less, or Leaving Certificate Applied) to level 9 or higher (Master's/PhD).

Labour market status was measured in terms of status at age 25, using the International Labour Organization (ILO) measure distinguishing between employed, unemployed (and actively seeking work) and economically inactive. Matched administrative data included in the GUI dataset by the Central Statistics Office were used to derive an

indicator of whether the respondent had received a social welfare payment in 2021 and/or 2022. Similarly, income decile in 2022 was based on matched data.

At ages 20 and 25, respondents completed the Center for Epidemiological Studies Depression (CES-D) scale, with respondents asked to indicate how often they experienced each of eight symptoms of depression within the previous seven days. Higher scores mean more depressive symptoms but do not necessarily indicate that they meet the clinical criteria for depression. Respondents were also asked to rate their level of satisfaction with life at both timepoints, with responses ranging from 0 (extremely unsatisfied) to 10 (extremely satisfied). They were also asked about satisfaction with their social life at age 20. At 20 and 25 years, respondents were asked to indicate their level of trust in other people, with responses ranging from 0 (you can't be too careful in dealing with people) to 10 (most people can be trusted). A self-reported measure of overall health was collected at 25 years of age, with responses comprising 'very healthy, no problems', 'healthy, but a few minor problems' and 'sometimes quite ill or almost always unwell'. At age 20, respondents completed the Reactive-Proactive Aggression Questionnaire scale, which contains 23 items, and captures the extent of involvement in physical fighting and quickness to anger.

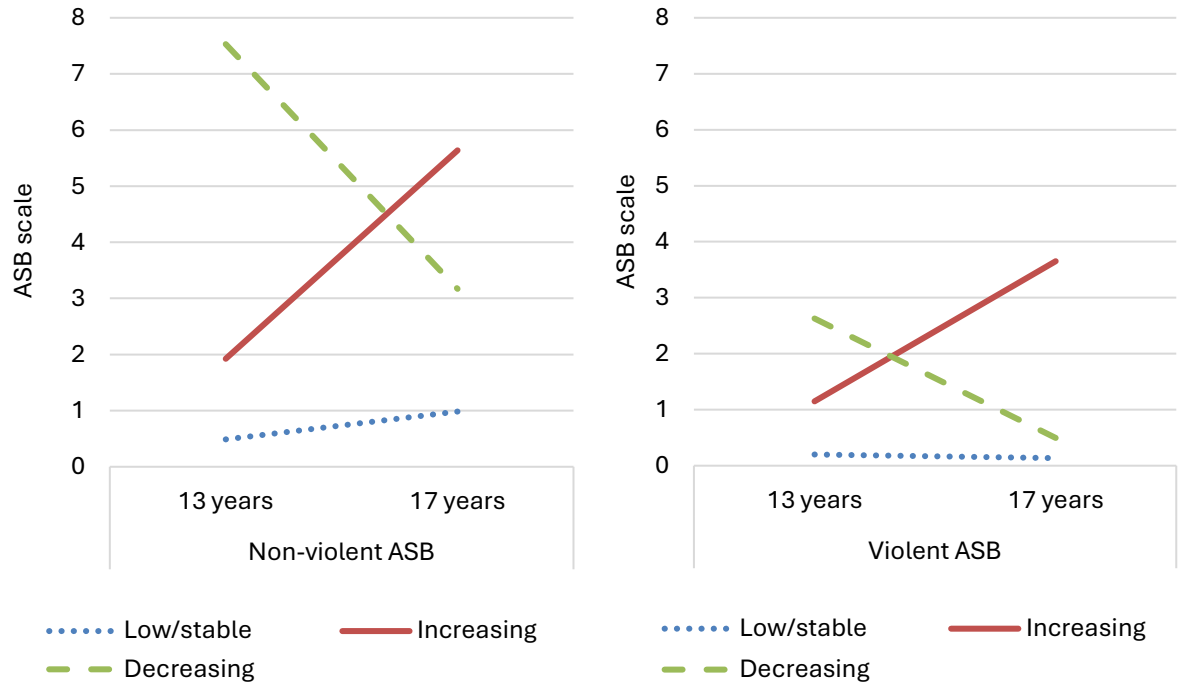
1.4.2.4 Methodology

A central issue highlighted by previous research relates to whether antisocial behaviour is confined to adolescence or persists into adulthood, with behaviour limited to adolescence seen as less consequential for later outcomes (see Moffitt, 2018). The analyses therefore take account of the longitudinal nature of GUI to capture trajectories of ASB between the ages of 13 and 17, distinguishing between non-violent and violent behaviour (see Table 1.1). Latent class analysis (LCA)[26] was used to identify the main groups of trajectories. A three-group classification provided the best fit, with the groups comprising those with no or only low incidents of ASB (91 per cent), those for whom ASB increased between 13 and 17 (5 per cent), and those for whom ASB level decreased between 13 and 17 (4 per cent)

[26] Latent class analysis is a statistical technique used to identify clusters of individuals with particular shared characteristics and is often used in research on child and adolescent development (Lanza and Cooper, 2016).

(see Figure 1.1 for the levels of ASB for each group). Non-violent behaviour is much more common than violent ASB. It is worth noting that even the low/stable group shows some increase in non-violent behaviour between 13 and 17 years (see also Table 1.2). The models look at the relationship between adolescent ASB trajectory and a range of outcomes at ages 20 and 25, before looking at whether any effects found are mediated by contact with the criminal justice system.

Figure 1.1 Levels of non-violent and violent ASB among the three trajectory groups



Source: GUI Cohort '98 at 13 and 17 years.

1.4.3 Measures and methodology for cross-cohort analysis of ASB at 13 years of age

1.4.3.1 Antisocial behaviour

Because of the constraints of phone and online administration for Cohort '08, the number of items on antisocial behaviour was reduced to eight, six covering non-violent ASB and two covering violent ASB (Table 1.4). In the cross-cohort analysis, the measures are reduced and recoded for Cohort '98 to allow comparability. As with the Cohort '98 analysis (see Section 1.4.2), items were summed to give scales of non-violent and violent ASB. The reliability for non-violent ASB is 0.7 and 0.6 for Cohorts '98 and '08 respectively.[27] The reliability for violent

[27] The reliability for Cohort '98 changes because of the reduction in the number of items used.

ASB is much poorer but is used as a summary measure because the small number of cases in some categories means these items cannot be looked at separately.

Table 1.4 Measures of antisocial behaviour in Cohorts '98 and '08

	Cohort '98 13 years	Cohort '08 13 years
Non-violent ASB		
Taken something from a shop or store without paying for it	✓	✓
Not paid the correct fare on a bus or train	✓	✓
Behaved badly in public so that people complained and you got into trouble	✓	✓
Stolen or ridden in a stolen car or a van or on a stolen motorbike	✓	
Taken money or something else that did not belong to you from school	✓	✓
Deliberately damaged or destroyed property that did not belong to you (e.g. windows, cars, streetlights)	✓	
Broken into a house or building to steal something	✓	
Written things or sprayed paint on things that do not belong to you (for example, a phone box, car, building, bus shelter)	✓	✓
Taken money or something else that did not belong to you from your home without permission	✓	✓
Broken into a car or van to steal something from it	✓	
Violent ASB		
Carried a knife or weapon with you in case it was needed in a fight	✓	✓
Used force, threats or a weapon to get money or something else from somebody	✓	
Deliberately set fire or tried to set fire to someone's property or a building (e.g. school or shed)	✓	
Hit, kicked or punched someone on purpose in order to hurt or injure them	✓	✓
Been involved in a serious physical fight where someone got badly hurt or needed to see a doctor	✓	

Source: GUI Cohorts '98 and '08.

1.4.3.2 Explanatory variables

For the cross-cohort comparison, the analyses take account of a range of individual, family, school, neighbourhood and relationship factors to predict patterns of antisocial behaviour at age 13. The individual and family background factors, measured at age 13, include gender, household social class, parental education (taking the higher level if two parents are present), whether the household was experiencing financial strain (i.e. having difficulties making ends meet), whether it was a two- or lone-parent family and whether it was a migrant-origin

family.[28] Family background factors differ significantly across cohorts, with higher levels of parental education and social class, lower levels of financial strain and more migrant-origin families in Cohort '08 than in Cohort '98 (Table A1.1).[29]

At the school level, a proxy for school social mix was derived distinguishing between schools taking part in the Delivering Equality of Opportunity in Schools (DEIS)[30] programme, non-DEIS and fee-paying schools. The analyses also took account of school gender mix and school size. Young people from Cohort '08 were much more likely to attend coeducational and larger schools (Table A1.1). At neighbourhood level, a measure of population density is used, ranging from large cities to open country, village or small town, with a slight growth in urbanisation between cohorts. Mother reports of a series of items on the local neighbourhood (such as public drinking or drug-taking) is used to capture neighbourhood disorder.

Relationships with others can be a driver of antisocial behaviour (see Section 1.2). The analyses take account of the conflict subscale of the Pianta Parent-Child Relationship Scale, based on mother reports at age 13,[31] with a decline in conflict levels between cohorts. Also considered is the number of close friends the young person has, based on their own report, and whether some, most or all of these friends are a year or two older than them, previously a predictor of exposure to risky behaviour (Smyth and Darmody, 2021). Members of Cohort '08 had smaller and more homogenous friendship groups than those in Cohort '98.

Previous research has pointed to early puberty as a risk factor for antisocial behaviour (see, for example, Michielsen et al., 2020). The analyses therefore take account of stage of pubertal development, with puberty occurring earlier in Cohort '08 (Table A1.1).[32] In order to

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28 GUI does not collect information on the young person's ethnicity at ages 13 or 17. The analyses therefore cannot explore potential ethnic differences in ASB and its consequences.

29 It should be noted that the cross-cohort patterns shown in Table A1.1 differs somewhat from those included in Smyth (2024). This reflects limiting the sample to those who answered the questions on antisocial behaviour via the online survey for Cohort '08.

30 The DEIS programme provides additional resources and supports to schools serving socio-economically disadvantaged populations.

31 Information on father-child conflict is available for resident fathers but is not used here in order to retain lone-parent families in the analyses.

32 For girls, early refers to menstruation starting at or before 11; medium to menstruation starting at 12 or 13; and late to not having started menstruation by 13 years of age. For boys, early refers to their

assess whether antisocial behaviour in adolescence reflects earlier behaviour difficulties, the analyses take account of the Strengths and Difficulties Questionnaire measures of internalising difficulties (emotional and peer problems) and externalising difficulties (conduct and hyperactivity) at both 9 and 13 years as well as whether the young person has a disability, that is, an illness or condition that hampers them, at least to some extent, in their day-to-day life. At age 13, young people were asked to complete the Short Moods and Feelings Questionnaire (SMFQ) and a question on whether they had 'ever heard voices or sounds that no-one else can hear' (with responses comprising 'No, never', 'Maybe' and 'Yes, definitely'). The prevalence of a disability increases significantly between cohorts (see also Smyth and Russell, 2024). The prevalence of externalising difficulties at age 13, depression scores and the proportion who had heard voices increased significantly, especially for girls (Table A1.1).

1.4.3.3 Methodology

The multiple-cohort nature of GUI is used to compare 13-year-olds a decade apart, using an approach previously adopted in Smyth (2022; 2024). The analyses distinguish between those surveyed in 2021 and in 2022 because responses in 2021 refer to the 12 months prior to the survey, including the period of pandemic-related restrictions. The first set of models looks at the relationship between cohort and the outcome in question. The nested models then take account of the groups of explanatory variables outlined in Section 1.4.3.2, namely individual and family factors, school factors, neighbourhood factors, social relationships, prior behaviour and mental health. This allows us to explore whether any changes between cohorts are due to the shifting profile of young people and their families. The analyses then explore whether the relationship between factors like gender and antisocial behaviour has changed over time, that is whether the gender gap has increased or narrowed, by testing interactions between cohort and gender. Models are derived separately for non-violent and violent antisocial behaviour.

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voice having fully broken; medium to voice being partially broken; and late to voice not yet broken at age 13.

1.5 Attrition

Like other longitudinal studies, GUI has experienced attrition over survey waves. Weights adjust for attrition on the basis of factors such as socio-economic profile, but this will not necessarily adjust for other characteristics such as involvement in ASB and/or contact with the criminal justice system. It might be expected that attrition would be greater for those with higher involvement in ASB or crime due to terms in prison or broader underlying characteristics such as opposition to authority. To assess the scale of potential impact, non-response at 17, 20 and 25 was analysed by prior involvement in ASB and contact with the criminal justice system (Table 1.5). ASB levels at age 13 are predictive of non-response at age 17, with a half of a percentage point increase in non-response for each unit increase in ASB. Having received a formal sanction (having been arrested, cautioned or prosecuted) by age 17 is linked to a predicted 8 percentage point reduction in response rates at age 20. Furthermore, both contact with the police and formal sanction by age 20 are linked to lower response rates at age 25 (by 6 and 8 percentage points respectively). These patterns indicate the need for some caution in interpreting the estimates of the impact of ASB and contact with the criminal justice system on adult outcomes presented in Chapter 3. Given the attrition patterns, these are likely to be lower-bound estimates of the persistence of criminal behaviour and its consequences.

Table 1.5 Logistic regression models of non-response by prior ASB and contact with the criminal justice system, Cohort '98 (average marginal effects)

	Non-response at age 17	Non-response at age 20	Non-response at age 25
ASB level at age 13	0.005**		
ASB level at age 17		0.002	0.009**
Contact with the system by age 17:			
Questioned by police		0.012	0.035
Formal sanction		0.083***	0.028
Contact with the system by age 20:			
Questioned by police			0.063**
Formal sanction			0.079**
R^2	0.001	0.004	0.007
N	7,171	6,136	4,746

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

1.6 Outline of the report

Chapter 2 compares 13-year-olds a decade apart in their level of ASB, identifying the factors associated with such behaviour and whether patterns by gender and social background have changed over time. Chapter 3 looks at the relationship between involvement in ASB in adolescence and a range of outcomes at ages 20 and 25, including education, labour market, welfare payment receipt, health, wellbeing and social trust. Chapter 4 summarises the main findings of the study and explores the implications for policy development.

Chapter 2

Cross-cohort changes in adolescent antisocial behaviour

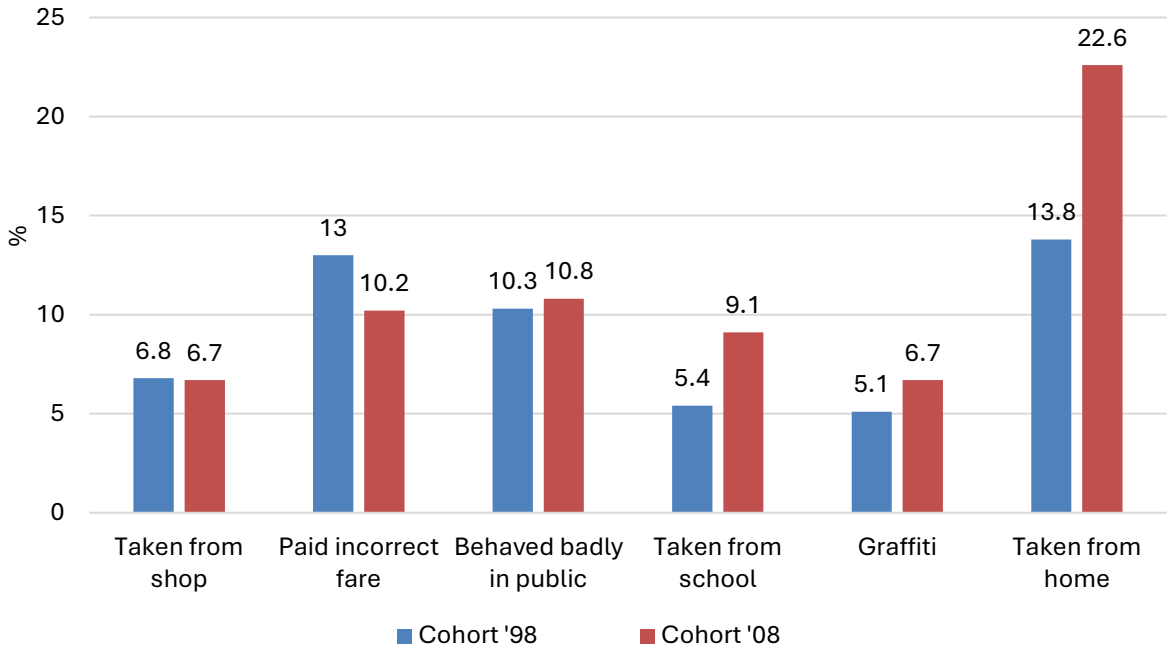
2.1 Introduction

The analyses in this chapter take advantage of the multiple-cohort nature of the Growing Up in Ireland data to document changes in the level and pattern of antisocial behaviour among 13-year-olds a decade apart. This was a period of marked social change, including greater digital engagement among young people, more democratic relationships between parents and children, and the impact of the pandemic (see Smyth, 2024). However, broader legislation and policy in youth justice remained largely consistent, with an emphasis on diverting young people away from the formal justice system (see Chapter 1). As indicated in Chapter 1, a shorter set of items was included in the Cohort '08 survey, so the reduced set is used for both cohorts to ensure comparability. This chapter presents analyses of the factors associated with antisocial behaviour separately for non-violent and violent behaviours.

2.2 Non-violent antisocial behaviour

Figure 2.1 shows that the most common types of non-violent behaviour were taking something from home without permission and paying the incorrect bus or train fare. Taking something from home increased markedly over time, while there were also significant increases in the prevalence of taking something from school and graffiti. Behaving badly in public and taking something from a shop were stable over time while paying the incorrect fare declined between cohorts. Additional analyses were conducted to explore whether patterns for Cohort '08 changed between 2021 and 2022 in response to the easing of pandemic-related restrictions. Behaving badly in public and taking something from school were found to increase significantly between 2021 and 2022. The following section groups non-violent behaviour into an overall scale to look at the factors predicting its prevalence.

Figure 2.1 **Type of non-violent ASB by cohort (percentage one or more times in the past year)**



Source: GUI Cohorts '98 and '08 at 13 years.

Note: Paying the correct fare, something from school, and taking something from home changed at the p<.001 level. Graffiti changed at the p<.01 level. Taking something from a shop and behaving badly in public did not change significantly over time.

2.2.1 Factors associated with non-violent antisocial behaviour

Table 2.1 presents a series of nested models exploring the relationship between individual, family, school, neighbourhood, relationship and prior behaviour factors and non-violent ASB at age 13. A negative binomial regression model is used because of the skewed nature of the scale distribution, with a predominance of low values.[33] The results are presented in terms of average marginal effects and can be interpreted as the predicted increase (or decrease) in non-violent incidents. For Cohort '08, the reference period for those interviewed in 2021 for reporting ASB covered the period of pandemic restrictions. The analyses distinguish between those surveyed in 2021 and those surveyed in 2022 and compare them with ASB levels among members of Cohort '98 surveyed a decade previously. Model 1 shows a decline in non-violent ASB in 2021, with the reference period covering pandemic-related restrictions, but overall stability between Cohort '98

[33] The authors acknowledge that the grouping of 'two or more times' means that the measure is not a true count variable. Using an ordered logit or probit model would create difficulties in interpretation but, more importantly, the number of cut-offs means violating the parallel slopes assumption. Using OLS regression models results in similar estimates to those presented here. Earlier work (Murray and Smyth, 2024) grouped ASB levels into low, medium and high. Multinomial logit models of this outcome yielded similar estimates to those shown here.

and patterns in 2022. Later models will explore whether there have been changes for some groups rather than others. In keeping with previous research (see Chapter 1), girls have significantly lower levels of ASB than boys, and this gap is robust to the inclusion of other factors. There is very little systematic variation by social class, financial strain or parental education, though being from a graduate family is significant and positive in several model specifications. No difference is found between migrant-origin and other young people. The only significant family background factor is the higher incidence of ASB among young people living in lone-parent families (about 0.4 of an incident, Model 2), with some of this difference related to neighbourhood factors (compare the coefficients in Models 3 and 4).

The pooled model indicates higher rates of non-violent ASB among those in fee-paying schools than in non-DEIS, non-fee-paying schools. Those attending a DEIS school do not differ significantly from those in non-DEIS schools. There is no systematic variation in non-violent ASB levels by gender mix of the school. There is a relationship between ASB and school size, but this is not linear; the main divide is between small schools (those with fewer than 400 students) and all others. Non-violent ASB is more prevalent among those living in disorderly neighbourhoods and in large cities. Neighbourhood disorder is no longer significant when mother-child conflict and the nature of the peer network are included in the model (compare Models 4 and 5). Thus it appears that living in a disorderly neighbourhood increases mother-child conflict and the size and composition of the peer group, which in turn influence levels of non-violent ASB.

Non-violent ASB is more prevalent where there is greater conflict between the mother and child, where the young person has more older siblings, where they have two or more friends and where they have a friendship group made up of older friends (Model 5). Model 6 takes account of pubertal development, prior socio-emotional difficulties and whether the young person has a disability. Young people who are experiencing puberty later than others (that is, have not yet started menstruating or their voices have not broken by the age of 13) have lower levels of non-violent ASB. ASB levels do not differ significantly by disability status. They are higher where young people had greater externalising difficulties at age 9 and lower where they had high levels of internalising difficulties. The effect of other factors remains robust to the inclusion of prior behaviour.

Table 2.1 **Negative binomial regression models of the factors associated with non-violent antisocial behaviour, Cohorts '98 and '08 (Average marginal effects)**

	Cohort (M1)	Family background (M2)	School (M3)	Neighbourhood (M4)	Social relationships (M5)	Socio-emotional wellbeing (M6)	Mental health (M7)
Cohort '08: 2021	-0.153**	-0.165**	-0.149*	-0.122±	0.166	0.073	-0.129±
2022 (Ref. Cohort '98)	0.107	0.121	0.115	0.117	0.465***	0.379***	0.153
Female		-0.238***	-0.197**	-0.202**	-0.266**	-0.180**	-0.288***
Class group:							
Professional		0.143	0.033	-0.002	-0.009	-0.004	-0.009
Managerial		0.160±	0.092	0.080	0.104	0.088	0.053
Other non-manual		0.054	0.042	0.037	0.063	0.050	0.043
Skilled manual		0.105	0.117	0.134	0.191	0.146	0.120
Non-employed		-0.004	-0.024	-0.030	-0.093	-0.075	-0.108
(Ref. semi/unskilled)							
Parental education:							
Leaving Certificate		-0.022	-0.039	0.028	0.064	0.036	0.040
Post-secondary		-0.047	-0.080	-0.020	-0.029	-0.017	-0.028
Degree or higher		0.171±	0.129	0.194*	0.264*	0.220*	0.194*
(Ref. Junior Cert. or lower)							
Financial strain		-0.017	0.007	-0.006	-0.059	-0.039	-0.030
Lone-parent family		0.442***	0.470***	0.346***	0.356***	0.320***	0.284**
Migrant background		0.007	0.030	0.090	0.100	0.076	0.065

Contd.

Table 2.1 Continued

	Cohort (M1)	Family background (M2)	School (M3)	Neighbour-hood (M4)	Social relationships (M5)	Socio-emotional wellbeing (M6)	Mental health (M7)
School social mix:							
DEIS			0.077	-0.033	-0.021	-0.021	0.071
Fee-paying (Ref. Non-DEIS)			0.652***	0.348**	0.393**	0.327**	0.319**
School gender mix:							
Boys'			0.133±	-0.008	-0.012	-0.009	0.050
Girls' (Ref. Coeducational)			0.028	-0.093	-0.098	-0.072	-0.073
School size:							
400-599			0.176**	0.227**	0.287**	0.216**	0.239**
600-799			0.153*	0.160**	0.202*	0.136*	0.145*
800+ (Ref. <400)			0.231**	0.229**	0.291**	0.216**	0.196**
Population density:							
Towns/cities 10,000+				-0.496***	-0.598***	-0.539***	-0.494***
Medium towns (3,000-9,999)				-0.440**	-0.565***	-0.527***	-0.522***
Open country/village/ small town (Ref. Large cities)				-0.553***	-0.706***	-0.608***	-0.574***
Neighbourhood disorder				0.024*	0.016	0.010	0.010
Mother-child conflict at 9					0.035***	0.026***	0.018***
Older siblings					0.066**	0.057**	0.058**
No. of close friends:							
2 or 3					0.279*	0.181*	0.262***
4 or 5					0.1273*	0.172*	0.290***
6 or more (Ref. 0 or 1)					0.363**	0.252**	0.408***
Some, most or all of friends a year or two older					0.572***	0.446***	0.340***

Contd.

Table 2.1 Continued

	Cohort (M1)	Family background (M2)	School (M3)	Neighbourhood (M4)	Social relationships (M5)	Socio-emotional wellbeing (M6)	Mental health (M7)
Puberty: (Ref. Early)							
Medium						-0.074	-0.039
Late						-0.252***	-0.195**
SDQ externalising difficulties at 9: (Ref. Low)							
Medium						0.162*	0.080
High						0.098	-0.058
SDQ internalising difficulties at 9: (Ref. Low)							
Medium						0.014	0.024
High						-0.191*	-0.168*
Disability						0.054	0.041
SDQ externalising difficulties at 13: (Ref. Low)							
Medium							0.077
High							0.397***
SDQ internalising difficulties at 13: (Ref. Low)							
Medium							-0.247***
High							-0.311***
Depression score							0.072***
Hears voices:							
Maybe							0.243***
Definitely							0.385**
Pseudo R^2	0.001	0.008	0.013	0.022	0.036	0.039	0.067

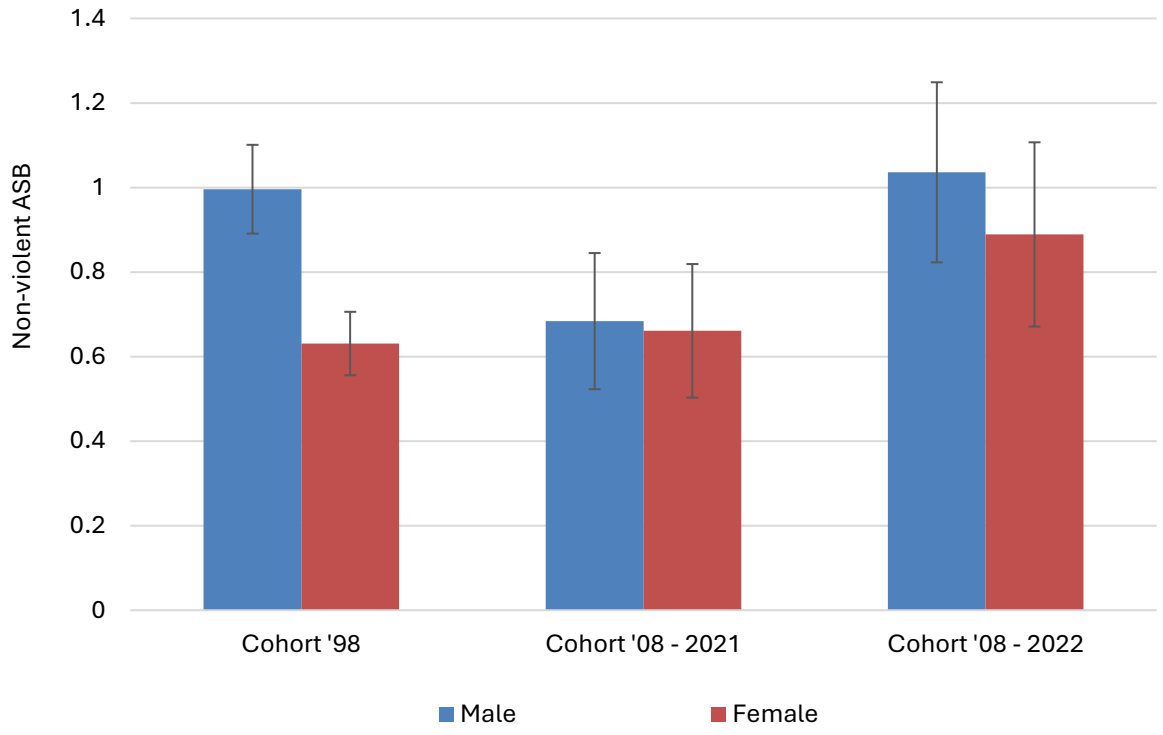
Source: GUI Cohorts '98 and '08 at age 13.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 9,000.

Model 7 includes measures of health and wellbeing at age 13. The direction of the relationship should be interpreted with caution as they are measured at the same time as non-violent ASB. Nonetheless, the patterns do point to risk factors for ASB involvement. Not surprisingly, levels of involvement increase with higher externalising difficulties. Those with more internalising difficulties at age 13, as reported by their mothers, are less involved in antisocial behaviour. However, higher self-reported depression scores are a risk factor for involvement, as is hearing voices that other people do not hear.

Table A2.1 in the Appendix presents the results of a series of models testing whether the effects of the factors explored in Table 2.1 differ between the two cohorts. The results are presented in terms of relative risk ratios, with a value above 1 indicating a positive relationship and a value below 1 indicating a negative relationship.[34] For ease of interpretation, the interaction between cohort and the variable in question is tested separately. If the interaction term is significant, this indicates that the relationship between the factor in question and ASB has changed between cohorts. Model 1 shows a significant interaction between gender and cohort, depicted in Figure 2.2 for ease of interpretation. The figure shows very different patterns for males and females: males have a reduction in non-violent ASB in 2021, reflecting pandemic-related restrictions, before going back to Cohort ’98 levels by 2022. In contrast, female non-violent ASB remains stable between Cohort ’98 and Cohort ’08 in 2021 but increases into 2022. Thus for Cohort ’08, there is no longer a significant gender gap in levels of non-violent ASB.

[34] Average marginal effects cannot be calculated for interaction effects.

Figure 2.2 Levels of non-violent ASB by gender and cohort



Source: GUI Cohorts '98 and '08 at 13 years.

Models 2 to 6 in Table A2.1 show no changes between cohorts in non-violent ASB by any dimension of family social background. There is little variation by school characteristics between cohorts, though 2021 saw a greater drop in ASB in DEIS than in non-DEIS schools (Model 7). Furthermore, there is some decline in the gap between very large schools and other schools in 2022 (Model 9). The effect of neighbourhood disorder does not change over time but the gap between urban and other areas narrowed in 2021 before going back to Cohort '98 levels in 2022 (Model 10).

The effects of mother-child conflict do not change significantly over time (Model 12). The gap in ASB between those with no or only one friend and others is larger in 2022 than previously (Model 13). In addition, the impact of having older friends lessens for Cohort '08 (Model 14). The effects of disability, internalising and externalising difficulties, pubertal development, depression or hearing voices do not change significantly over time (Models 16 to 21).

2.2.2 The changing gender gap in non-violent antisocial behaviour

Section 2.2.1 indicated differing trends in nonviolent ASB over time for boys and girls. In this section, we run separate models for males and females to explore whether the trends found are explained by (a) the

main effects of the family, school, neighbourhood, relationship and behaviour factors analysed above or (b) the changing effect of these factors between cohorts.

Table 2.2 shows the relationship between cohort membership and level of non-violent ASB, taking account of the factors examined in Table 2.1. Girls in Cohort '08 have significantly higher levels in 2021 than those in Cohort '98, taking account of family, school and neighbourhood factors. A larger increase for 2021 and a significant increase for 2022 is evident when we take account of social relationships, with girls having almost one incident (0.8) of ASB more, controlling for their level of conflict with their mother, the number of older siblings and the size and age composition of their friendship network. Part of this increase is explained by the greater incidence of mental health difficulties among girls in Cohort '08 (compare the coefficients in Models 6 and 7).

The effects of these factors do not change markedly over time, with some exceptions (Appendix Table A2.2). The increase in non-violent ASB for girls is greater for those living in disorderly neighbourhoods, those who have higher levels of conflict with their mothers and those who have higher externalising or internalising difficulties at the age of 9. The impact of socialising with older friends reduces over time. Girls from a migrant background have less of an increase in ASB over time than other girls.

Table 2.2 **Negative binomial regression models of the factors associated with non-violent antisocial behaviour, separately for males and females, Cohorts '98 and '08 (average marginal effects)**

	Females	Males
Model 1:		
Cohort '08 – 2021	0.148	-0.406***
Cohort '08 – 2022	0.155	-0.098
Model 2 (Family factors):		
Cohort '08 – 2021	0.201*	-0.418***
Cohort '08 – 2022	0.183	-0.125
Model 3 (School):		
Cohort '08 – 2021	0.233*	-0.389***
Cohort '08 – 2022	0.173	-0.069
Model 4 (Neighbourhood):		
Cohort '08 – 2021	0.252*	-0.358***
Cohort '08 – 2022	0.169±	-0.072
Model 5 (Social relationships):		
Cohort '08 – 2021	0.883***	-0.253*
Cohort '08 – 2022	0.669***	0.124
Model 6 (Prior behaviour):		
Cohort '08 – 2021	0.831***	-0.309**
Cohort '08 – 2022	0.676***	0.042
Model 7 (Mental health):		
Cohort '08 – 2021	0.338*	-0.369***
Cohort '08 – 2022	0.417**	-0.108

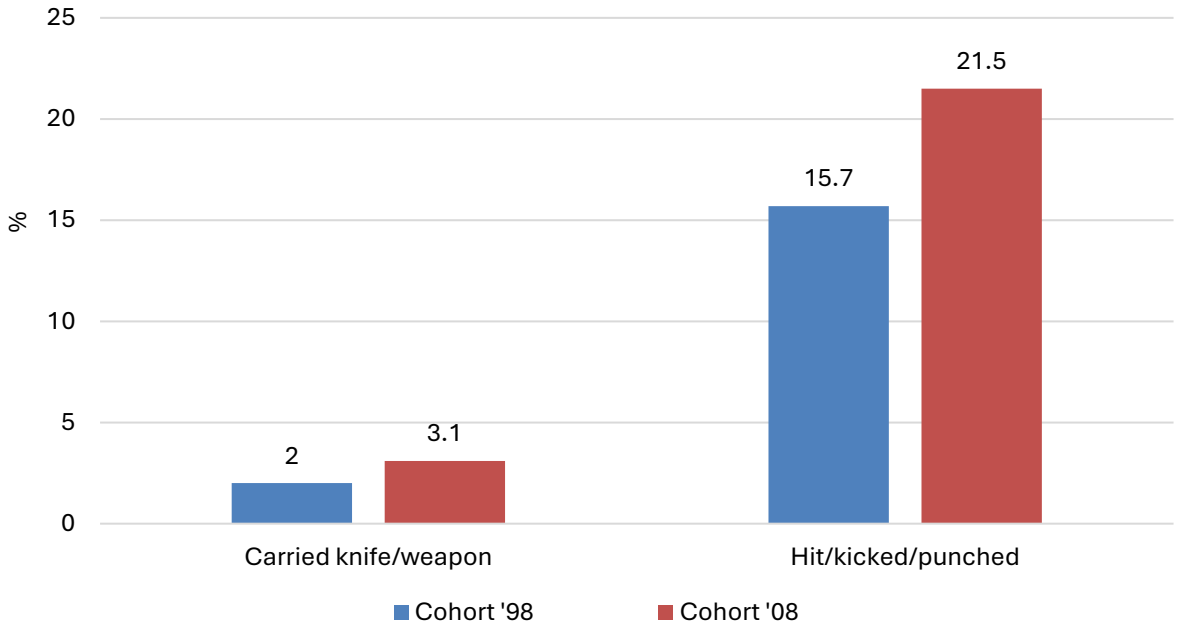
Source: GUI Cohorts '98 and '08 at age 13.
Note: The factors included in these models are specified in Table 2.1; *** p<.001, ** p<.01, * p<.05, ± p<.10.

The pattern for boys is one of a temporary drop in ASB levels in 2021, with 2022 levels matching those for Cohort '98. This drop in male ASB levels is not explained by any of the factors in the models (Table 2.2), suggesting that pandemic restrictions removed the social context, and larger friendship networks, within which male non-violent ASB tends to occur. There is very little change over time for particular groups of boys. The gap between smaller and larger schools reduces somewhat over time while the impact of socialising with older friends reduces (Table A2.2).

2.3 Violent antisocial behaviour

Figure 2.3 shows a significant increase over time in both types of violent ASB – hitting, kicking or punching someone and carrying a knife or other weapon, though the latter is a rare behaviour.

Figure 2.3 **Type of violent ASB by cohort (percentage one or more times in the past year)**



Source: GUI Cohorts '98 and '08 at 13 years.

2.3.1 Factors associated with violent antisocial behaviour

This section replicates the models presented in Section 2.2 in relation to violent antisocial behaviour. The pooled model shows a dip in violent ASB between Cohort '98 and Cohort '08 in 2021, but a return to Cohort '98 levels in 2022 (Table 2.3); later analyses will explore potential differences across subgroups. As with non-violent ASB, girls have significantly lower levels of violent behaviour than boys. There is little variation by family background, with only those in lone-parent families found to have higher levels. Those attending DEIS schools have higher levels of violent ASB (Model 3), even taking account of family background, though this seems at least partly related to living in a more disorderly neighbourhood (Model 4). Violent ASB does not vary by school gender mix and only very large schools (800 or more students) are found to have higher levels of violent behaviour. Violent ASB is less prevalent among those living in open country, villages or small towns than in cities, and among those in less disorderly neighbourhoods.

As with non-violent ASB, violent behaviour is more prevalent where there is mother-child conflict. It is not related to the size of the friendship group but socialising with older friends emerges as a risk factor. Violent ASB is less common among those who have not yet reached puberty (Model 6). It is more common among those with more

externalising difficulties at age 9 and less common among those with internalising difficulties. There is no significant relationship between disability status and violent ASB. Violent ASB is more common among those with more externalising difficulties at age 13, those with higher depression scores and those who report hearing voices (Model 7).

Table 2.3 **Negative binomial regression models of the factors associated with violent antisocial behaviour, Cohorts '98 and '08 (Average marginal effects)**

	Cohort (M1)	Family background (M2)	School (M3)	Neighbourhood (M4)	Social relationships (M5)	Socio-emotional wellbeing (M6)	Mental health (M7)
Cohort '08 – 2021	-0.075*	-0.032	-0.031±	-0.054	0.058	0.039	-0.043
Cohort '08 – 2022	-0.020	0.017	-0.013	-0.013	0.135**	0.097*	-0.000
(Ref. Cohort '98)							
Female		-0.289***	-0.272***	-0.272***	-0.287***	-0.284***	-0.357***
Class group:							
Professional		-0.059	-0.055	-0.063	-0.036	-0.051	-0.052
Managerial		-0.048	-0.045	-0.045	-0.019	-0.043	-0.069
Other non-manual		-0.082	-0.072	-0.069	-0.039	-0.049	-0.069
Skilled manual		-0.051	-0.048	-0.045	-0.003	-0.035	-0.051
Non-employed		-0.116±	-0.103	-0.113±	-0.095	-0.095	-0.117±
(Ref. semi/unskilled)							
Parental education:							
Leaving Certificate		-0.061	-0.051	-0.027	-0.027	-0.036	-0.060
Post-secondary		-0.089±	-0.066	-0.038	-0.052	-0.046	-0.079
Degree or higher		-0.018	0.010	0.040	0.032	0.042	0.016
(Ref. Junior Cert. or lower)							
Financial strain		0.060	0.058	0.043	0.006	0.006	0.012
Lone-parent family		0.220**	0.200**	0.183**	0.154**	0.114**	0.093*
Migrant background		-0.030	-0.018	-0.019	-0.015	-0.006	-0.045

Contd.

Table 2.3 Continued

	Cohort (M1)	Family background (M2)	School (M3)	Neighbourhood (M4)	Social relationships (M5)	Socio-emotional wellbeing (M6)	Mental health (M7)
School social mix:							
DEIS			0.128*	0.103±	0.057	0.003	0.023
Fee-paying (Ref. Non-DEIS)			0.014	-0.007	-0.026	-0.037	-0.055
School gender mix:							
Boys'			0.016	0.005	-0.001	-0.011	0.010
Girls' (Ref. Coeducational)			-0.051	-0.065	-0.048	-0.040	-0.057
School size:							
400-599			0.033	0.042	0.037	0.025	0.043
600-799			0.047	0.050	0.044	0.031	0.049
800+ (Ref. <400)			0.133*	0.132**	0.142**	0.108*	0.122**
Population density:							
Towns/cities 10,000+				-0.073±	-0.095*	-0.098*	-0.084*
Medium towns (3,000-9,999)				0.014	-0.033	-0.078±	-0.062
Open country/village/ small town (Ref. Large cities)				-0.070*	-0.097**	-0.099**	-0.075*
Neighbourhood disorder				0.016**	0.011*	0.009±	0.009±
Mother-child conflict					0.015***	0.012***	0.010***
Older siblings					0.020±	0.022±	0.024±
No. of close friends:							
2 or 3					-0.065	-0.071	-0.005
4 or 5					-0.071	-0.069	0.012
6 or more (Ref. 0 or 1)					0.000	-0.014	0.070
Some, most or all of friends a year or two older					0.217***	0.207***	0.170***

Contd.

Table 2.3 Continued

	Cohort (M1)	Family background (M2)	School (M3)	Neighbourhood (M4)	Social relationships (M5)	Socio-emotional wellbeing (M6)	Mental health (M7)
Puberty:							
Medium						-0.036	-0.026
Late						-0.139***	-0.122**
SDQ externalising difficulties at 9:							
Medium						0.048	0.014
High						0.114**	0.028
SDQ internalising difficulties at 9:							
Medium						0.040	0.062±
High						-0.093	-0.086*
Disability						0.055	0.061
SDQ externalising difficulties at 13:							
Medium							0.078
High							0.132*
SDQ internalising difficulties at 13:							
Medium							-0.122***
High							-0.135***
Depression at 13							0.032***
Hears voices:							
Maybe							0.107***
Definitely							0.323***
Pseudo R^2	0.001	0.024	0.027	0.030	0.048	0.055	0.090
N	9,742	9,721	9,711	9,709	9,563	9,471	9,000

Source: GUI Cohorts '98 and '08 at age 13.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

The analyses explored the factors associated with violent ASB separately for males and females. The 'raw' model shows no significant difference in violent ASB among girls by cohort (Table 2.4). However, girls have somewhat higher levels of violent behaviour than might be expected given the more advantaged profile of Cohort '08 (higher parental education and social class as well as lower levels of financial strain), though this difference is only significant at the 10 per cent level (Model 2). The cohort gap is larger when social relationships are taken into account; in other words, girls have more violent behaviour than might be expected given their level of conflict with their mother, their number of older siblings and the size and age composition of their friendship group (Model 5). This increase in violent ASB among girls is explained by their (mother-reported) externalising behaviour as well as their self-reported depression scores and hearing voices (Model 7). Analyses indicate that the increase in violent ASB among girls does not vary systematically by family, school or neighbourhood characteristics, though the increase is somewhat greater in DEIS schools and less for girls from a migrant background (Table A2.3).

Looking at type of behaviour, the prevalence of hitting/punching was stable over time for boys but increased for girls from 10 to 16 per cent. Carrying a knife/weapon declined for boys (from 4.1 per cent to 2.7 per cent) but increased for girls (from 1 per cent to 3.6 per cent).

Table 2.4 **Negative binomial regression models of the factors associated with violent antisocial behaviour, separately for males and females, Cohorts '98 and '08 (average marginal effects)**

	Females	Males
Model 1:		
Cohort '08 – 2021	0.022	-0.199***
Cohort '08 - 2022	0.025	-0.078
Model 2 (Family factors):		
Cohort '08 – 2021	0.068±	-0.202***
Cohort '08 - 2022	0.082±	-0.068
Model 3 (School):		
Cohort '08 – 2021	0.055	-0.217***
Cohort '08 - 2022	0.058	-0.081
Model 4 (Neighbourhood):		
Cohort '08 – 2021	0.058	-0.204***
Cohort '08 - 2022	0.064	-0.084
Model 5 (Social relationships):		
Cohort '08 – 2021	0.258**	-0.120*
Cohort '08 - 2022	0.246**	0.046
Model 6 (Prior behaviour):		
Cohort '08 – 2021	0.236**	-0.137*
Cohort '08 - 2022	0.211***	0.010
Model 7 (Mental health):		
Cohort '08 – 2021	0.074	-0.160*
Cohort '08 - 2022	0.091	-0.064

Source: GUI Cohorts '98 and '08 at age 13.
Note: The factors included in these models are specified in Table 2.1; *** p<.001, ** p<.01, * p<.05, ± p<.10.

For males, as for non-violent ASB, violent ASB dips somewhat in the period of ongoing pandemic restrictions before moving back to Cohort '98 levels by 2022 (Table 2.4). This decline is partly explained by reduced mother-son conflict and smaller and more age-homogenous friendship networks (with the coefficient for the decline in violent ASB narrowing between Models 4 and 5).

2.4 Conclusions

This chapter takes account of the multiple-cohort nature of the GUI study to compare 13-year-olds a decade apart, a period of considerable social change including greater digital engagement, more democratic parent-child relations and the effects of the pandemic (see Smyth, 2024). Trends are found to be very different for boys and girls. For boys, we see a decline in the prevalence of both non-violent and violent behaviour during the period of pandemic-related restrictions in

2020/2021, with levels in 2022 comparable with those a decade earlier. Among girls, we see a very different pattern, with an increase in non-violent ASB and, taking account of some of their characteristics, in violent ASB. Much of this shift appears to relate to greater mental health difficulties among girls, in terms of depression, hearing voices and externalising behaviour, in the wake of the pandemic.

International research has yielded contradictory findings on the relationship between young people's socio-economic circumstances and their level of ASB (see Chapter 1). In this study, ASB does not vary by social class, parental education or financial strain, but analyses presented in Chapter 3 will look at background differences in contact with the criminal justice system. Only living in a lone-parent family emerges as a risk factor, over and above other aspects of family background. School and neighbourhood context do appear to play a role, with more non-violent ASB found among those attending fee-paying schools, perhaps reflecting the fact that these families have more possessions so young people may be more likely to take something from school or home, and somewhat more violent ASB among those attending DEIS schools. Levels of ASB are somewhat higher in urban neighbourhoods, characterised by more disorderly environments, though the urban-rural gap has declined somewhat over time. Social relationships emerge as important, with mother-child conflict, having older siblings and socialising with older peers emerging as risk factors, though the impact of older friends seems to have declined over time. Mental health and socio-emotional difficulties are found to play a significant role, with greater externalising difficulties at age 9 having an influence into adolescence. Furthermore, higher depression scores and hearing voices at age 13 are linked to both violent and non-violent ASB.

Chapter 3

The long-term outcomes of adolescent antisocial behaviour and contact with the criminal justice system

3.1 Introduction

This chapter looks at trajectories of adolescent antisocial behaviour; as discussed in Chapter 1, latent class analyses identified three distinct groups on the basis of the non-violent and violent ASB scales: those with no or only low levels of ASB (91 per cent), those for whom ASB increased between 13 and 17 (5 per cent), and those for whom ASB level decreased between 13 and 17 (4 per cent). This chapter explores whether trajectories of adolescent antisocial behaviour have consequences for education, labour market, health and wellbeing at 20 and 25 years of age. In particular, it examines whether later outcomes differ between those who persist (or even increase) their involvement in ASB compared to those for whom it was a temporary phase. The chapter also explores the factors associated with contact with the criminal justice system and whether any consequences of adolescent ASB are related to that contact. It might be expected that outcomes may be different between young people who engaged in ASB but had no police contact and those who had police contact, with this labelling potentially impacting on later outcomes such as likelihood of further justice contact as well as wellbeing.

3.2 Factors associated with antisocial behaviour trajectory

Before looking at the relationship between ASB trajectory and outcomes into early adulthood, it is worth looking at the factors that predict the type of trajectory taken. This builds upon the models presented in Chapter 2 to look at what is related to *change* in behaviour over time. The analyses use the same explanatory variables as in Chapter 2 but add in experience of adverse childhood experiences (ACEs), such as bereavement, family separation or parental mental health difficulties, at ages 13 and 17, experiences that might be expected to impact on the young person and their behaviour. The full model is presented in Table A3.1. Among the individual and family background factors, only gender and disability make a significant difference to the trajectory of ASB. Girls are much less likely to fall into either ASB group while those with a disability are more likely

to fall into the decreasing ASB group. Those in both ASB groups have higher levels of conflict with their mothers and, not surprisingly, more externalising behaviour. The strongest driver of change in ASB trajectory is adverse childhood experiences (ACEs) between 13 and 17 years of age. The analyses focus on the number of ACEs experienced rather than the type of ACE.

This relationship is made clearer in a simplified model presented in Table 3.1, which looks at the factors predicting the level of change in ASB between 13 and 17 years.[35] ASB levels are found to increase with the number of ACEs experienced. Those with three or more ACEs are much more likely to increase their ASB levels than those who experienced no ACEs over this time period. This pattern takes account of prior level of ASB at age 13. Additional analyses show that the relationship differs for males and females, with males much more reactive to the impact of ACEs than females (Figure 3.1).

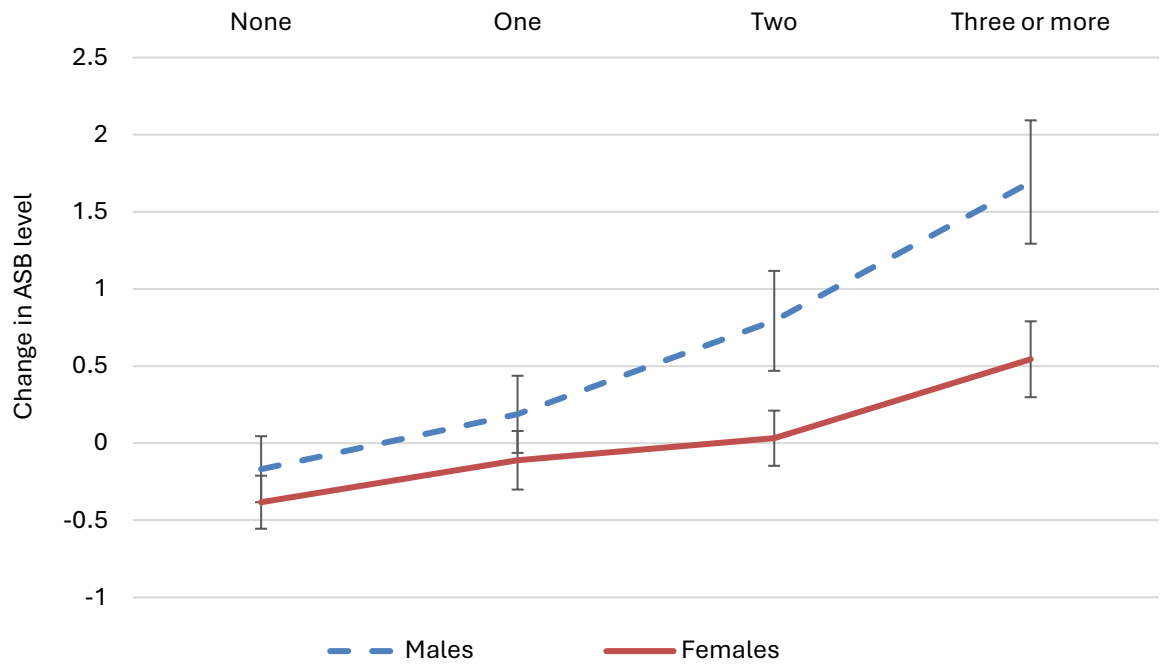
Table 3.1 OLS regression model of the relationship between selected factors and change in ASB level between 13 and 17 years, Cohort '98

	Model 1	Model 2
Female (Ref. Male)	-0.670***	-0.214±
Externalising behaviour at age 13	0.037±	0.036±
Internalising behaviour at age 13	-0.030	-0.027
Disability	-0.037	-0.005
ASB levels at age 13	-0.709***	-0.710***
ACEs between 9 and 13:		
One	-0.137	-0.145
Two or more (Ref. None)	-0.153	-0.156
ACEs between 13 and 17:		
One	0.329**	0.356*
Two	0.712***	0.963***
Three or more (Ref. None)	1.403***	1.862***
ACES*female interaction:		
One*female		-0.084
Two*female		-0.547*
Three or more*female		-0.935**
R^2	0.361	0.366

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,521.

[35] Those with higher levels of ASB at age 13 have lower rates of growth in ASB levels between 13 and 17 years.

Figure 3.1 **Relationship between change in ASB level between 13 and 17 years and experience of adverse childhood experiences (ACEs), showing the interaction between gender and ACEs**



Source: GUI Cohort '98.
Note: Derived from Model 2, Table 3.1.

3.3 Contact with the criminal justice system

Before looking at the relationship between ASB and education, labour market and health outcomes, it is worth looking at the profile of young people who have contact with the criminal justice system and the extent to which this is related to levels of non-violent and/or violent ASB. As indicated in Chapter 1, the analyses distinguish between those who have been 'in trouble' or questioned by the police and those who have received a formal sanction (caution, arrest or prosecution). An ordered logit model is used to compare these groups to those who have had no contact with the justice system.

Table 3.2 Ordered logit models of the factors associated with contact with the criminal justice system by 17 years of age, Cohort '98 (odds ratios)

	Model 1	Model 2	Model 3
Female	0.525***	0.524***	0.548***
Social class: (Ref. Professional)			
Managerial	1.596**	1.595**	1.613**
Other non-manual	1.489*	1.488*	1.533*
Skilled manual	2.565***	2.561***	2.298***
Semi/unskilled manual	2.029**	2.028**	2.023**
Non-employed	2.407**	2.407**	2.280**
Migrant background	0.924	0.923	0.884
Disability	1.110	1.112	1.030
Urban area	1.397**	1.396**	1.198
Family contact with police (age 13)		1.061	1.041
Non-violent ASB at 13			1.251***
Violent ASB at 13			1.069
Pseudo R^2	0.025	0.025	0.060

Source: GUI Cohort '98.

Note: *** p<.001, ** p<.01, * p<.05, ± p<.10. Outcome variable is coded as 0 no contact, 1 questioned by police and 2 formal sanction. Cuts for Model 1 are 2 and 2.3; for Model 2, 2 and 2.3; for Model 3, 2.2 and 2.5. N = 4,692.

Table 3.2 presents models looking at the factors associated with contact with the criminal justice system by 17 years of age. Females are much less likely, about half as likely, to have such contact and this gender difference is not explained by differences in levels of ASB (compare Models 1 and 3). There is a social class gradient in contact, with the lowest levels found among those from professional backgrounds and the highest levels among those from working-class families (manual or non-employed). These differences are robust to the levels of ASB at age 13.[36] Contact with the justice system is more evident in urban areas but this is due to differences in levels of ASB. Level of contact does not vary significantly by migrant background, disability or whether one or both parents had been in contact with the system themselves. Contact is more common among those with higher levels of non-violent ASB, so engaging in more frequent behaviour(s) may bring the young person to the attention of the police. There is no significant relationship with violent ASB, but this may be due to the relatively small numbers involved in violent activity as well as the co-occurrence of non-violent and violent ASB.

[36] Additional analyses showed no significant interaction between social class and non-violent ASB levels.

Table 3.3 Ordered logit models of the factors associated with contact with the criminal justice system between 17 and 20 years of age, Cohort '98 (odds ratios)

	Model 1	Model 2	Model 3
Female	0.257***	0.255***	0.303***
Social class: (Ref. Professional)			
Managerial	1.131	1.103	1.069
Other non-manual	1.163	1.158	1.170
Skilled manual	1.958***	1.187***	1.889***
Semi/unskilled manual	1.471*	1.366±	1.439±
Non-employed	1.637*	1.501±	1.316
Migrant background	0.671±	0.674±	0.627*
Disability	0.778	0.778	0.763
Urban area	1.280**	1.251*	1.070
Family contact with police (age 13)		1.049	1.117
Parental contact with police (17)		1.341	1.176
Sibling contact with police (17)		2.555***	2.155**
Non-violent ASB at 13			1.098*
Violent ASB at 13			1.059
Non-violent ASB at 17			1.178***
Violent ASB at 17			1.395***
Pseudo R^2	0.062	0.069	0.117

Source: GUI Cohort '98.

Note: *** p<.001, ** p<.01, * p<.05, ± p<.10. Cuts for Model 1 are 0.4 and 1.9; for Model 2, 0.4 and 1.9; for Model 3, 2.2 and 2.5. N = 4,697.

Table 3.3 shows similar analyses for contact with the justice system between 17 and 20 years of age. As at 17 years, females have much lower levels of contact, with the gender gap being larger than previously. Young adults from working-class backgrounds are significantly more likely to have had justice system contact than their middle-class peers, a difference that is partly, but not wholly, due to differences in levels of ASB at 13 and 17.[37] As at 17, there is an urban-rural gap in contact, attributable to differences in ASB levels. Young adults from a migrant background are less likely to have contact, even taking account of ASB levels. More information was collected on family contact with the criminal justice system in the survey undertaken at age 17. There is no significant relationship between parental and own contact. However, those whose siblings have been in trouble with the police are much more likely to have had contact with the system themselves, and this difference holds even taking account of ASB

[37] The interaction between class and non-violent ASB at 17 is not significant.

incidence. Contact is more frequent among those who have had more involvement in non-violent ASB at 13 and 17 and violent ASB at 17.

Table 3.4 Ordered logit models of the relationship between ASB trajectory and contact with the criminal justice system between 17 and 20 years of age, Cohort '98 (odds ratios)

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)
ASB trajectory:			
Increasing	7.486***	4.585***	3.622***
Decreasing	3.252***	2.067*	1.767*
(Ref. None/low)			
Contact with the system by age 17:			
Questioned by police		3.895***	3.943***
Formal sanction		7.881***	7.420***
R^2	0.038	0.109	0.154

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. Cuts for Model 1 are 0.8 and 2.3; for Model 2, 1.1 and 2.8; for Model 3, 0.7 and 2.5. N = 4,665.

Table 3.4 shifts attention to the trajectory of ASB involvement rather than the levels. It shows that those who increased their ASB involvement between 13 and 17 years had much higher levels of contact with the criminal justice system by age 20 (Model 1). However, even those who had reduced their involvement had more contact than those with no or only low ASB levels. Model 2 indicates that some of this relationship is mediated by earlier contact (up to age 17). Contact by age 17, especially receiving a formal sanction (caution, arrest or being referred to a diversion programme), is predictive of later contact. However, over and above contact by age 17, both ASB groups are more likely to have contact by age 20. Model 3 takes account of gender, social class, migrant status, disability and urban/rural location to assess whether contact might be driven by other factors. The findings for ASB trajectory and contact with the justice system are robust to the inclusion of background factors, though the coefficients reduce somewhat for the two ASB groups and for the formal sanction group. Additional analyses looked at the relationship between ASB and justice contact by gender (Table A3.2). The effect of being questioned by police on later contact was slightly weaker for females, though the coefficient was large for both genders.

Table 3.5 Ordered logit models of the relationship between ASB trajectory and contact with the criminal justice system by 25 years of age, Cohort '98 (odds ratios)

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (contact at 20)
ASB trajectory:				
Increasing	3.763***	2.857***	2.341**	1.508
Decreasing	2.645**	3.068**	2.299**	1.867
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		2.170*	2.317**	1.370
Formal sanction		2.469***	2.295***	1.311
Contact with the system by age 20:				
Questioned by police				2.964***
Formal sanction				5.859***
R^2	0.019	0.036	0.086	0.128

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. Cut-points for Model 1 are 1.6 and 3.5; for Model 2, 1.7 and 3.6; for Model 3, 1.2 and 3.1; for Model 4, 1.6 and 3.6. N = 2,581.

Table 3.5 repeats this analysis looking at contact with the criminal justice system by age 25 as an outcome. The raw relationship (Model 1) is not as strong as for contact by age 20, indicating some diminution of the effects of adolescent ASB involvement by the mid-twenties. Some of the effect of increasing ASB is mediated by contact with the system by age 17 (Model 2). However, the effect of decreasing involvement becomes somewhat larger when contact is taken into account. The effect of being in the decreasing ASB group is weaker for women than for men (Table A3.2). Both being questioned by police and receiving a formal sanction are predictive of later contact by age 25. These patterns are largely robust to the inclusion of background factors (Model 3), though part of the longer-term impact of being in the decreasing ASB cluster is related to the socio-economic profile of this group. Model 4 shows that any effects of ASB levels and criminal justice contact in adolescence are mediated by the nature of contact by age 20. The relationship between being questioned by the police by age 17 and later contact at age 25 is found to be slightly weaker for women than for men. However, the relationship between being questioned at age 20 and contact at 25 is somewhat stronger for women, though sizeable for both genders (Table A3.2).

Table 3.6 OLS regression models of the relationship between ASB trajectory and aggression at 20 years of age, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)
ASB trajectory:			
Increasing	4.887***	4.303***	3.946***
Decreasing	2.199*	1.866±	1.679±
(Ref. None/low)			
Contact with the system by age 17:			
Questioned by police		1.084±	1.026±
Formal sanction		1.696***	1.517***
R^2	0.054	0.071	0.087

Source: GUI Cohort '98.

Note: The aggression measure ranges from 0 to 23. Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,650.

Respondents were not asked about antisocial or criminal behaviour at ages 20 and 25, because of the risk of self-incrimination. The aggression scale, administered in the 20-year wave, can be used as a proxy for the likelihood of being involved in physical fights. Levels of aggression at age 20 are much higher among those in the increasing trajectory but are also significantly higher among the decreasing group (Model 1, Table 3.6). The latter pattern is largely explained by contact with the criminal justice system, though the relationship between increasing ASB and aggression remains strong (Model 2) and robust to the inclusion of background variables (Model 3). Men have significantly higher aggression levels than women but the impact of ASB does not vary by gender (Table A3.6).

3.4 Educational outcomes

Leaving Certificate performance was measured in terms of CAO points, which takes account of both the subject level taken and the grade received. The analysis looks at the raw relationship between ASB trajectory and grades, before controlling for contact with the justice system and family background factors. The final model takes account of reading test scores at age 9 which might be expected to influence both ASB trajectory and Leaving Certificate performance. Both the increasing and decreasing ASB groups receive much lower grades than those with no or only low levels of ASB (Table 3.7, Model 1). This difference is sizeable, around 90 to 95 CAO points. Much of the effect of adolescent ASB is mediated through contact with the criminal justice system: those who have received a formal sanction score over

100 points less while those who had been questioned by the police still have a substantial grade penalty of almost 70 points (Model 2). Even taking account of contact, those in the increasing ASB group still score around 50 points less. The effects of a formal sanction and being in the increasing ASB group remain robust to the inclusion of individual and family background factors (Model 3). However, the penalty attached to police questioning becomes non-significant when family factors and prior reading score are taken into account. Model 4 shows that even taking account of reading test score at age 9, there is a penalty attached to increasing ASB and having received a formal sanction.

Analyses explored whether these relationships varied by gender and social class background. The educational penalty for being in the increasing ASB group and for having received a formal sanction is found to be larger for females than for males (Table A3.3). There is no systematic variation in the impact of ASB or justice system contact by social class background; that is, the interaction between ASB or system contact and social class is not found to be significant.

Table 3.7 OLS regression models of the relationship between ASB trajectory and Leaving Certificate points, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (reading score at 9)
ASB trajectory:				
Increasing	-89.074***	-49.883*	-46.450*	-66.501***
Decreasing	-95.590***	-20.786	-7.314	-19.400
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		-68.308*	-47.321±	-34.798
Formal sanction		-104.437***	-90.067***	-6.877***
R^2	0.018	0.044	0.178	0.34

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,692.

At age 25, respondents were asked about their highest educational qualification. This was coded on the basis of National Framework of Qualifications (NFQ) levels; in this analysis, the levels have been recoded into six categories, ranging from Leaving Certificate or lower to PhD. By age 25, those in the increasing ASB group have attained significantly lower educational qualifications than those with no or low ASB, while there is no significant impact of having been in the

decreasing group (Model 1, Table 3.8). Being questioned by the police is related to lower qualifications but this is partly explained by earlier educational achievement (compare Models 3 and 4). Receiving a formal sanction is significantly related to lower qualifications, with the impact of increasing ASB continuing to have a direct effect on educational outcomes (Model 2). These patterns are robust to the inclusion of individual and family background factors as well as reading test score at age 9 (Models 3 and 4). These relationships do not vary systematically by gender or social class background (Table A3.3).

Table 3.8 Ordered logit models of the relationship between ASB trajectory and highest educational level by 25 years of age, Cohort '98 (odds ratios)

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (reading test score at 9)
ASB trajectory:				
Increasing	0.377***	0.460**	0.488**	0.416**
Decreasing	0.508	1.022	1.134	1.044
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		0.412*	0.515*	0.611
Formal sanction		0.542***	0.578***	0.675*
R^2	0.006	0.011	0.046	0.077

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. Cut-points for Model 1 are -0.7, -0.5, -0.3, 2 and 6.6; for Model 2, -0.7, -0.5, -0.4, 2 and 6.5; for Model 3, -1.8, -1.6, -1.5, 1.1 and 5.6. N = 2,581.

3.5 Health, wellbeing and social relationships

This section looks at the relationship between ASB trajectory and depression, life satisfaction, social relatedness, trust in others and self-reported health. Those with an increasing ASB trajectory have significantly higher depression scores at age 20, a difference that is robust to the inclusion of contact with the criminal justice system, family factors and socio-emotional difficulties at age 9 (Table 3.9). No significant difference is found between those with decreasing ASB levels and those with no/low ASB. Furthermore, there is no significant relationship between being in contact with the criminal justice system and depression scores at age 20. Table 3.10 indicates that any effects of adolescent ASB trajectories are no longer evident by age 25. Although young women have significantly higher depression scores than young men, the strength of the relationship between ASB, justice

system contact and depression at either age 20 or 25 does not vary significantly by gender (Table A3.4).

Table 3.9 OLS regression models of the relationship between ASB trajectory and depression score (CES-D scale) at age 20, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (SDQ total difficulties score at 9)
ASB trajectory:				
Increasing	1.223*	1.245*	1.623**	1.472*
Decreasing	-0.177	-0.456	-0.340	-0.328
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		0.070	0.080	0.047
Formal sanction		0.109	0.222	0.136
R^2	0.003	0.004	0.035	0.044

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,652.

Table 3.10 OLS regression models of the relationship between ASB trajectory and depression score (CES-D scale) at age 25, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (depression score at 20)
ASB trajectory:				
Increasing	0.975	0.859	1.002	-0.146
Decreasing	0.280	1.165	1.145	1.197
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		2.307	2.354	2.271
Formal sanction		0.138	0.256	-0.084
R^2	0.009	0.009	0.039	0.218

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,242.

Respondents were asked to rate their overall satisfaction with life on a scale of 0 to 10. Significantly lower life satisfaction is found at age 20 among those who were in the increasing ASB group (Table 3.11), a pattern that is not due to justice system contact, family factors or earlier socio-emotional difficulties. No difference is found by level of contact with the justice system. As was the case with depression, the effect of being in the increasing ASB group on life satisfaction has

faded by age 25, only being significant at the 10 per cent level for Model 1 (Table 3.12).[38] At age 20, women have lower life satisfaction than men but its relationship with ASB and criminal justice contact does not vary significantly by gender (Table A3.5).

Table 3.11 OLS regression models of the relationship between ASB trajectory and life satisfaction at age 20, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (SDQ total difficulties score at 9)
ASB trajectory:				
Increasing	-0.563**	-0.522**	-0.572**	-0.589**
Decreasing	-0.320	-0.138	-0.159	-0.156
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		-0.416	-0.389	-0.362
Formal sanction		-0.007	-0.014	-0.027
R^2	0.003	0.004	0.010	0.013

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,666.

Table 3.12 OLS regression models of the relationship between ASB trajectory and life satisfaction at age 25, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (life satisfaction at 20)
ASB trajectory:				
Increasing	-0.584±	-0.541	-0.484	-0.397
Decreasing	0.288	-0.224	-0.234	-0.258
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		-0.706	-0.620	-0.498
Formal sanction		-0.086	-0.035	0.027
R^2	0.005	0.009	0.023	0.109

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,265.

[38] This may also reflect greater attrition, especially for those with criminal justice contact, between 20 and 25 years, making it harder to detect significant differences.

Self-reported satisfaction with their social life is used to capture the quality of their social relationships at age 20. Those in the increasing and decreasing ASB groups are significantly less satisfied with their social life than those with low or no ASB (Table 3.13). This difference is not due to family factors or socio-emotional difficulties at age 9 (see Models 3 and 4). The negative effect of being in these ASB groups is found to be stronger for women than for men (Table A3.8). Contact with the criminal justice system has no impact, over and above ASB trajectory.

Table 3.13 Ordered logit models of the relationship between ASB trajectory and satisfaction with social life at age 20, Cohort '98 (odds ratios)

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (SDQ total difficulties score at 9)
ASB trajectory:				
Increasing	0.595***	0.588**	0.586**	0.658*
Decreasing	0.769	0.666*	0.660*	0.672*
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		1.395	1.147	1.434
Formal sanction		1.007	1.001	1.003
R^2	0.001	0.007	0.006	0.006

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,691.

Those in the increasing ASB group and those who had received a formal sanction (arrest, caution or prosecution) are found to have much lower levels of trust in other people than those with low/no ASB (Table 3.14). These differences remain when family characteristics and earlier socio-emotional difficulties are taken into account. By age 25, the effect of ASB trajectory on trust in others is attenuated and mainly explained by contact with the criminal justice system, which has a significant negative relationship with generalised trust (Table 3.15). Poorer trust is evident among those who had been questioned by the police, even when earlier socio-emotional difficulties are taken into account (Model 4). The relationships do not vary markedly by gender or social class background (Table A3.7).

Table 3.14 OLS regression models of the relationship between ASB trajectory and general trust in others at age 20, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (SDQ total difficulties score at 9)
ASB trajectory:				
Increasing	-0.971***	-0.801**	-0.812**	-0.767**
Decreasing	-0.196	-0.189	-0.194	-0.211
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		-0.287	-0.230	-0.114
Formal sanction		-0.432**	-0.402**	-0.354*
R^2	0.010	0.016	0.037	0.046

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,690.

Table 3.15 OLS regression models of the relationship between ASB trajectory and general trust in others at age 25, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (SDQ total difficulties score at 9)
ASB trajectory:				
Increasing	-0.601*	-0.441	-0.507±	-0.382
Decreasing	0.016	-0.086	-0.204	-0.237
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		-1.522***	-1.357***	-1.249***
Formal sanction		-0.364±	-0.358±	-0.288
R^2	0.003	0.021	0.069	0.091

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,594.

Self-reported health at age 20 is not significantly related to ASB trajectory but those who had received a formal sanction have much poorer health than others (Table 3.16). The latter difference is not due to differences in mother reports of the respondent's health at age 9 (Model 4). The relationship between formal sanctions and health is somewhat stronger for women but does not vary significantly by social class background (Table A3.9). The effect of criminal sanction on health diminishes by age 25 (Table 3.17).

Table 3.16 Ordered logit models of the relationship between ASB trajectory and self-reported health at 20 years of age, Cohort '98 (odds ratios)

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (health at age 9)
ASB trajectory:				
Increasing	0.788	0.956	0.930	0.973
Decreasing	0.766	1.009	1.040	1.036
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		0.647±	0.684	0.675
Formal sanction		0.635***	0.643**	0.650**
R^2	0.000	0.002	0.014	0.018

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. Cuts for Model 1 are -2.9, -1.1 and 1; for Model 2, -3, -1.2 and 0.9; for Model 3, -3.5, -1.7 and 0.4. N = 4,692.

Table 3.17 Ordered logit regression models of the relationship between ASB trajectory and self-reported health at age 25, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)	Model 4 (health at 20)
ASB trajectory:				
Increasing	0.682±	0.739	0.768	0.690±
Decreasing	0.886	0.780	0.684	0.693
(Ref. None/low)				
Contact with the system by age 17:				
Questioned by police		0.616±	0.666	0.775
Formal sanction		0.787	0.787	0.899
R^2	0.001	0.003	0.020	0.084

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. Cuts for Model 1 are -2.1, -0.7 and 1.7; for Model 2, -2.2, -0.7 and 1.1; for Model 3, -2.8, -1.3 and 0.6; for Model 4, 0.2, 1.9 and 4. N = 2,581.

3.6 Labour market outcomes

At age 20, most of the young adults were still in full-time education and training. This section therefore looks at the relationship between adolescent ASB and three sets of labour market outcomes at the age of 25: employment status (distinguishing between the employed, the unemployed and those out of the labour force for education, disability

or care reasons); whether the respondent had received a social welfare payment in 2021 and/or 2022; and income decile in 2022.

No significant difference is found in labour force status by ASB trajectory or contact with the criminal justice system (Tables 3.18 and A3.10), a pattern that is likely to reflect low levels of unemployment at the time of the survey.

Table 3.18 Multinomial logit models of the relationship between ASB trajectory and employment status (ILO definition) at 25 years of age, Cohort '98 (relative risk ratios) (base: employment)

	Model 1 (raw) Unemployed	Model 1 (raw) Out of LF	Model 2 (previous contact) Unemployed	Model 2 (previous contact) Out of LF	Model 3 (family factors) Unemployed	Model 3 (family factors) Out of LF
ASB trajectory:						
Increasing	0.865	1.051	0.959	0.185	0.980	1.109
Decreasing	1.306	1.727	1.865	0.846	2.213	1.673
(Ref. None/low)						
Contact with the system by age 17:						
Questioned by police			0.185	0.844	0.168±	0.705
Formal sanction			0.846	0.936	0.769	0.897
R^2	0.001	0.001	0.002	0.002	0.036	0.036

Source: GUI Cohort '98.

Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,448.

Table 3.19 shows that men and women who have had contact with the criminal justice system are much more likely to have received social welfare payments in 2021 and/or 2022, even taking account of their individual and family background factors (see also Table A3.11).[39] Income levels are significantly lower, by about a decile, among those who had been in trouble with the police by age 17, even taking account of family social class (Table 3.20), a difference that does not vary by gender (Table A3.11).

[39] It is likely that levels of receipt of social welfare may have been higher for at least part of this period because of the operation of the Pandemic Unemployment Payment. However, the type of payment received cannot be distinguished in the RMF dataset.

Table 3.19 Logistic regression models of the relationship between ASB trajectory and welfare receipt at 25 years of age, Cohort '98 (odds ratios)

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)
ASB trajectory:			
Increasing	1.698	1.454	1.489
Decreasing	2.036*	1.299	1.425
(Ref. None/low)			
Contact with the system by age 17:			
Questioned by police		2.564**	2.274*
Formal sanction		1.649*	1.675*
R^2	0.045	0.010	0.037

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,581.

Table 3.20 OLS regression models of the relationship between ASB trajectory and income decile at 25 years of age, Cohort '98

	Model 1 (raw)	Model 2 (previous contact)	Model 3 (family factors)
ASB trajectory:			
Increasing	-0.715	-0.580	-0.564
Decreasing	-1.213**	-0.477	-0.471
(Ref. None/low)			
Contact with the system by age 17:			
Questioned by police		-1.109*	-1.074*
Formal sanction		-0.314	-0.299
R^2	0.007	0.008	0.019

Source: GUI Cohort '98.
Note: Model 3 controls for gender, social class, migrant status, disability and urban/rural location; *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,581.

3.7 Conclusions

This chapter has looked at the trajectory of ASB and its consequences into adulthood. Most young people have relatively low levels of ASB, 4 per cent have higher levels at age 13 but discontinue involvement while 5 per cent increase their involvement over time. This is in keeping with international research which shows that, for some young people, ASB is limited to the adolescence years. While the models presented here can help explain overall prevalence of ASB (see Chapter 2), it is more difficult to explain escalation (or diminution) of ASB. However, exposure to adverse experiences between the ages of 13 and 17 years is strongly linked to increasing ASB, especially for young men.

Levels of ASB involvement are predictive of contact with the criminal justice system, but females and those from advantaged backgrounds have less contact than might be predicted on the basis of their behaviour, especially during adolescence. This is consistent with previous research which has suggested differential visibility to police of behaviour in more disadvantaged communities (see Mackie et al., 2025). Sibling contact with the police is predictive of the young adult's contact, suggesting either the impact of role models or direct involvement in activities with siblings; the pattern may also reflect greater visibility to police if the family is known to them or greater policing of areas in which these families are located.

Both ASB groups are more likely to have contact with the criminal justice system by age 20, with such contact predictive of ongoing contact by age 25. The findings point to an educational penalty, with lower Leaving Certificate grades and qualification levels for those with increased ASB and justice system contact. Increased ASB, and resulting contact with the system, have at least a short-term effect on a number of wellbeing outcomes, including depression and life satisfaction. This group also seem to have poorer social networks, being more dissatisfied with their social life and having less trust in others. In contrast, there is no significant relationship between ASB trajectory, criminal justice contact and labour force status, perhaps reflecting the strong labour market. However, those who have received sanctions (being arrested or prosecuted) are more likely to be in receipt of social welfare and have lower income on average.

Chapter 4

Conclusions and implications for policy

4.1 Background to the study

Over several decades, research in a variety of jurisdictions has focussed on antisocial behaviour (ASB) among young people (Bevilacqua et al., 2018; Bor et al., 2007; Czech and Kemp, 2010; Gubbels et al., 2024; Villafuerte-Díaz et al., 2024; Laban et al., 2026). For many young people, involvement in ASB reflects physical, social and emotional changes during adolescence and declines over time (Popli et al., 2025; Walsh 2019; Czech and Kemp, 2010). For others, such behaviour persists into early adulthood and beyond (Bor et al., 2007; Loeber et al., 2013). Existing international research has highlighted the factors driving adolescent ASB and its persistence, including family environment (Laban et al., 2026), neighbourhood characteristics (Hemphill et al., 2015), peer influence (Brewer et al., 2020), school (Dornbusch et al., 2001), and wider societal factors (Villafuerte-Díaz et al., 2024). Furthermore, ASB can have a negative impact on communities (Victims Commissioner, 2019) as well as a notable economic cost for society (Romeo et al., 2006). Involvement in ASB during adolescence has been found to have detrimental consequences for the future life-chances of young people, ranging from poor academic outcomes to ongoing involvement in criminal activities (Bevilacqua et al., 2018; Odgers et al., 2008; Popli et al., 2025).

To date, there has been a lack of large-scale empirical research in Ireland on adolescent involvement in ASB, particularly from a longitudinal perspective. The GUI study provides a unique opportunity to explore patterns of involvement, the characteristics of those involved and the consequences into early adulthood. This study uses the GUI data for Cohort '98 to trace ASB at 13 and 17 years of age and its consequences for educational, labour market and wellbeing outcomes at ages 20 and 25. Analyses look at both non-violent ASB, which ranges from paying the incorrect bus fare to taking something from a shop, and violent ASB, which includes hitting or kicking someone and carrying a knife or other weapon. This study also takes advantage of the two-cohort nature of GUI to compare the level of ASB among 13-year-olds a decade apart, exploring whether the profile of those engaged in ASB has changed in terms of gender and social

background. This chapter summarises the main findings of the study and discusses the implications for policy development.

4.2 Patterns of ASB involvement

Involvement in ASB (as defined in this study) among 13-year-olds in Ireland is relatively low: around a fifth have taken something from home without permission in the past year, while a tenth have behaved badly in public, paid the incorrect bus or train fare, or taken something from school. In terms of violent behaviour, around a fifth have hit, punched or kicked someone in the past year. Trends over a decade differ markedly by gender. Levels of violent and non-violent ASB have been relatively stable for boys, though with a dip in levels during the period of pandemic-related restrictions in 2020/2021, reflecting the peer-related nature of much engagement in ASB (see Wikström, 2012).[40] In contrast, taking account of their socio-economic background characteristics, there has been an increase over time in non-violent and violent ASB among 13-year-old girls. By 2022, the gender gap in non-violent behaviour had disappeared while the gap in violent behaviour had narrowed. The findings yield new insights into the extent to which ASB levels change between 13 and 17 years of age. The vast majority (91 per cent) of young people have no or only low incidence of ASB at both ages; for 4 per cent it is a temporary phase with ASB declining over time, while for 5 per cent ASB increases over the course of adolescence.

4.3 Risk factors for ASB involvement

The analyses explored the extent to which ASB involvement reflects family background factors, school and neighbourhood characteristics, social relationships, wellbeing and mental health. Contrary to some international research presented in Chapter 1 of this report, ASB involvement in Ireland is not the product of socio-economic disadvantage and there is some evidence that access to resources in more highly educated families and in fee-paying schools may be linked to some forms of non-violent misbehaviour, such as taking things without permission. Only being from a lone-parent family emerges as a risk factor in terms of family background. Family processes emerge as a more important factor, with mother-child conflict in childhood

[40] Although it may seem that restrictions reduced ASB among boys, it should also be noted that the period of restrictions was associated with greater intra-family conflict, poorer wellbeing and more unhealthy eating for many young people (Laurence and Smyth, 2026).

significantly associated with later ASB. Having older siblings is also a risk factor, perhaps because of exposure to more risky behaviour, while siblings being in trouble with the police is strongly related to increasing ASB over time and to contact with the criminal justice system.

ASB occurs within and is shaped by a variety of contexts, including school and neighbourhood. School factors are not strongly linked to ASB, though non-violent ASB is more prevalent in fee-paying schools while violent ASB is somewhat more common in DEIS schools, although the latter pattern also reflects living in a more disorderly neighbourhood. There is an urban-rural gap in the prevalence of ASB, with higher rates in cities; it is not possible to determine the reason for this pattern, but greater anonymity may give more opportunity to misbehave, as may easier access to public spaces. Living in a disorderly neighbourhood, characterised by public drinking or drug-taking, is a risk factor for adolescent ASB, as is socialising with older peers. The findings point to ASB as, at least in part, an expression of poorer wellbeing and mental health difficulties. Externalising behaviour in childhood is a risk factor for later ASB while depression and hearing voices at age 13 is strongly associated with involvement in violent and non-violent ASB. Indeed, the increase in ASB levels over time among girls appears to be mostly driven by an increase in these mental health difficulties in the post-pandemic period.

Adverse childhood experiences (ACEs) include bereavement, family separation, addiction and mental health difficulties among parents. The experience of ACEs between 13 and 17 emerges as the strongest factor associated with increasing ASB levels over that timeframe. Males are more responsive to going through ACEs than females, though both groups are affected.

4.4 The consequences of ASB involvement

One of the most obvious consequences of ASB is contact with the criminal justice system, including being questioned by the police and being subject to formal sanction (such as a caution, being sent to the Youth Diversion Programme, an arrest or prosecution). A limitation of the study is the numbers are not large enough to distinguish between measures such as the YDP designed to steer young people away from prosecution and being arrested or prosecuted. A significant minority of young people have had some contact with the justice system, with

over a fifth of them reporting having been questioned by police between the ages of 17 and 20 years. Not surprisingly, those with greater involvement in non-violent ASB are more likely to have had early contact (by age 17) with the system. However, even taking account of ASB involvement, social class and gender differences are evident, with more contact among males and those from working-class backgrounds. Sibling contact with the police also emerges as a risk factor for own contact, perhaps reflecting being involved in activities with siblings or being more visible to the authorities because of their siblings' behaviour. Looked at longitudinally, even those who decreased their ASB levels between 13 and 17 are at greater risk of contact with the justice system between 17 and 20 years of age and by 25 years of age. Early (pre-17) contact is also predictive of later contact by 20, though early contact only affects contact by 25 via its effect on justice contact at 20.

The analyses examined the relationship between ASB trajectories and education, labour market, health and wellbeing outcomes, and whether any such effects were due to contact with the criminal justice system. Both ASB trajectory groups achieve lower Leaving Certificate grades than those with little or no involvement. The grade penalty for the decreasing ASB group only applies to those who had early contact with the justice system. However, the increasing ASB group have an educational penalty, even taking account of the grade gap for those with early justice contact. Those who were in the increasing ASB group and those who had experienced an early formal sanction were much less likely than others to have achieved a degree by age 25.

The increasing ASB group have significantly higher depression scores, lower life satisfaction, lower satisfaction with their social life and less trust in others at age 20, though these effects diminish by age 25. Those in the decreasing ASB group are also less likely to be satisfied with their social life but do not differ in relation to other aspects of their wellbeing. Contact with the justice system has at least a short-term effect on a number of wellbeing outcomes, including depression, life satisfaction, health, quality of social networks and trust in others. There are few systematic relationships between ASB and labour market outcomes, most likely reflecting the strong labour market at the time of the survey. However, welfare receipt is more prevalent, and income lower, among those who had early contact with the justice system.

4.5 Limitations of the study

Like all research, the study has some limitations. The GUI study comprises a large and nationally representative sample of children and young people, with weighting used to account for non-response and attrition. Nonetheless, it appears likely that those young people with the highest levels of ASB may not be represented in the sample. At the same time, a study that covers multiple domains of a young person's life and one that allows them to answer sensitive questions, including those on ASB, on a laptop rather than directly to an interviewer is likely to encourage reporting of ASB. GUI therefore proves very useful given the lack of systematic data available on the outcomes for young people who have contact with the justice system (see, for example, Reddy and Redmond, 2022). Another limitation is the fact that the numbers who engaged in the Youth Diversion Programme are too small to distinguish, so these young people are included in a group with those who had been subject to another sanction. The study findings provide the first Irish evidence of the consequences of adolescent ASB for early adult outcomes. However, the estimates of consequences are likely to be conservative. Very small groups involved in the ASB decreasing and increasing trajectory groups (4 per cent and 5 per cent respectively) make it more difficult to detect significance, especially for the smaller 25-year sample. Furthermore, analyses point to higher attrition rates among those involved in ASB and those with contact with the criminal justice system.

4.6 Implications for policy

For most young people, involvement in ASB is found to be limited or confined to early adolescence, though even age-delimited behaviour can have longer-term consequences. For others, ASB persists or even escalates into later adolescence, with negative consequences for a range of outcomes in early adult life. The study findings point to several risk factors for ASB involvement and escalation**,** and thus have implications for policy in a number of domains, including family support, mental health and wellbeing, justice, education and community development.

Mother-child conflict and adverse childhood experiences are significantly related to (increasing) ASB involvement, highlighting the importance of family support services, especially around periods of change or crisis in family life. International research shows that parenting programmes have a notable short-term effect on ASB in

children and adolescents through a reduction in parental stress, the promotion of parent-child interaction, a reduction in negative parental behaviour and a strengthening of parental competencies (e.g. praise, reward, supervision, effective limit setting) (Beelmann et al., 2023). Approaches involving teaching parents how to establish a clear framework of expectations, providing family skills training and family therapy have also been found to be effective (Ross et al., 2011). An overview of parenting initiatives in Ireland suggests that interventions which address children's behaviour across multiple settings (such as home and school) and involve interagency cooperation tend to be more effective (CES, 2016). DCDE has overall responsibility for the coordination of parent support services based on the *Supporting Parents* model (DCEDIY, 2022), with a number of other bodies involved, including Tusla, the HSE and Family Resource Centres. Funding was announced by DCDE in March 2026 for parenting peer support projects which may help engage more difficult to reach parents. There is scope for further research and evaluation on the extent to which existing family support provision is responsive to the needs of young people engaged in ASB and their families across all social groups.[41]

Schools can help counter ASB by promoting student engagement with school. In DEIS schools, this can build on existing programmes, such as the School Completion Programme (SCP). Approaches that involve collaboration between staff, students and community members in revising school policies as well as providing academic and counselling services for low-achieving or disruptive students have been found effective in the reduction of youth crime and ASB (Ross et al., 2011). The findings of the study showing that low level ASB is also evident in fee-paying schools indicate that all schools might benefit from raising awareness of ASB behaviours and its impact.

Living in a more disorderly neighbourhood is found to contribute to within-family strain and foster externalising difficulties among children and young people. Community development initiatives to enhance local infrastructure and stronger neighbourhood bonds could therefore yield dividends in terms of young people's involvement in ASB. The work of Local Community Safety Partnerships also has the potential to

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41 Qualitative research points to the potential of the time-limited strengths-based Youth Advocate Programme in working with young people at risk (including those involved in ASB) and their families (Devaney et al., 2023).

contribute to a joined-up approach at local level. Although not the focus of the current study, facilities for young people may play an important role, with research in London showing lower levels of youth crime in neighbourhoods with youth clubs (Villa, 2024). Organised and supervised afterschool activities can also provide young people with positive role models (Ross et al., 2011).

Externalising difficulties in childhood along with mental health difficulties in adolescence are strongly related to involvement in violent and non-violent ASB. Indeed, increasing depression and mental health symptoms (such as hearing voices) post-pandemic[42] appear to account for much of the increase in ASB among girls. The Department of Health's (2020) *Sharing the Vision* policy envisages a continuum of support from mental health promotion to specialist provision for those with acute difficulties and places particular emphasis on supports for children and young people. However, school staff often have no ready access to referral pathways for children and young people with more complex needs (Smyth et al., 2025). Furthermore, reviews of the Child and Adolescent Mental Health Services (CAMHS) have pointed to underfunding, significant understaffing, variability in acceptance of referrals and lengthy waiting lists (Mental Health Commission, 2023; see also Leahy and McNicholas, 2024; Nic Dhonnacha et al., 2024).

Socio-economic disadvantage does not emerge as a significant driver of adolescent ASB in our study, though there is a social gradient in contact with the criminal justice system, with the result that working-class young people are more likely to experience such contact and suffer its consequences. This may occur because of greater police presence in more disadvantaged neighbourhoods and/or may reflect the fact that more advantaged families can better protect their children from facing the legal consequences of ASB engagement.[43] Furthermore, males are more likely to be questioned by the police or receive a formal sanction than females with the same levels of ASB (see Horner and Fisher, 2020, for similar patterns in the US). Other GUI-based research has indicated that many 17-years-olds, especially males, feel that people act as if they are afraid of them (42 per cent for males and 26 per cent for females) (Capistrano et al., 2026). The

[42] While it cannot be definitely established that these patterns are attributable to the effects of the pandemic, pre-pandemic externalising and internalising difficulties at age 9 were stable, if not improving, between cohorts.

[43] It is worth noting that much of the ASB at age 13 reflects taking something from home or school. Families or schools are very unlikely to report such behaviour to the police.

differing trends in, and visibility of, ASB may require more attention to gender-specific strategies to counter such behaviour (Tzoumakis et al., 2020). It is important that stereotypes about the social background and gender of those engaged in ASB be challenged in society more generally but also among Gardaí (see Independent Working Group on Antisocial Behaviour, 2025). International research has pointed to interventions that focus on surveillance and control being less effective in addressing ASB than more holistic and/or therapeutic supports (Ross et al., 2011; Kilkelly et al., 2021), so some types of system contact may be more beneficial. In Ireland, a network of Youth Diversion Projects (YDPs) is a community-based multi-agency initiative, designed to divert young people aged 12 to 17 years involved in ASB. These projects are established in high priority locations around Ireland and allow for the employment of additional youth justice workers for existing YDPs in areas with high levels of youth crime. These programmes also offer mentoring supports for YDP participants. An evaluation of the programme revealed positive views among participants, staff and key stakeholders, though the findings pointed to the potential for greater standardisation of provision and for improved links with local mental health services (Department of Justice, 2023).

The study findings point to the significant impact of ASB and resulting contact with the criminal justice system on education, wellbeing, health and bonds with others, incurring a cost not only for the individual but for broader society. The results point to the need to further enhance a joined-up approach across government departments, State agencies and community organisations to address ASB and its consequences (see Axford and Humayun, 2026; Kim et al., 2015).

Appendix tables

Table A1.1 Descriptive statistics for explanatory variables by cohort (%)

	Cohort '98	Cohort '08
Female	51.2	53.1
Class group:* **		
Professional	15.7	25.2
Managerial	40.5	38.9
Other non-manual	18.5	17.4
Skilled manual	11.6	8.2
Semi/unskilled manual	8.1	7.2
Non-employed	5.6	3.1
Parental education:* **		
Junior Certificate or lower	7.6	1.8
Leaving Certificate	25.8	4.7
Post-secondary	25.3	33.2
Degree or higher	41.3	60.3
Financial strain* **	18.8	5.1
Lone-parent family* **	13.2	9.5
Migrant background* **	6.4	9.7
School social mix:±		
DEIS	13.4	14.5
Fee-paying	77.1	77.6
Non-DEIS	9.6	7.9
School gender mix:* **		
Boys'	19.8	11.3
Girls'	24.0	15.6
Coeducational	56.2	73.1
School size:* **		
<400	17.3	13.4
400-599	29.3	22.0
600-799	32.1	28.6
800+	21.3	36.1
Population density: **		
Large cities	45.2	49.6
Towns/cities 10,000+	9.3	9.0
Medium towns (3,000-9,999)	18.2	16.8
Open country/village/ small town	27.2	24.7
Neighbourhood disorder (mean)* **	6.7	6.2
Mother-child conflict at 9 (mean)* **	15.1	14.4
No. older siblings (mean)* **	0.9	1.8
No. of close friends:* **		
0 or 1	6.1	6.8
2 or 3	34.4	45.2
4 or 5	33.3	33.7
6 or more	26.2	14.2
Some, most or all of friends a year or two older* **	53.6	34.2

Contd.

Table A1.1 Continued

	Cohort '98	Cohort '08
Puberty:* **		
Early	18.6	26.1
Medium	36.7	40.2
Late	44.7	33.7
Disability* **	4.7	15.0
N	7,171	2,571

Source: GUI Cohorts '98 and '08 at age 13.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A1.2 Descriptive statistics for measures of wellbeing and mental health by cohort and gender

	Males Cohort '98	Males Cohort '08	Females Cohort '98	Females Cohort '08
SDQ externalising difficulties at 9:				
Low	65.8±	69.9	74.6***	80.4
Medium	21.1	19.1	16.8	14.2
High	13.1	11.1	8.6	5.4
SDQ internalising difficulties at 9:				
Low	76.6	77.8	72.5***	80.0
Medium	15.3	14.8	18.6	13.8
High	8.1	7.6	9.0	6.2
SDQ externalising difficulties at 13:				
Low	72.6***	78.3	80.5***	85.0
Medium	17.0	13.8	12.8	11.2
High	10.5	7.9	6.7	3.7
SDQ internalising difficulties at 13:				
Low	79.6*	77.5	76.3***	70.1
Medium	13.8	13.6	15.8	18.0
High	6.5	8.9	7.9	12.0
Depression score	3.6***	4.2	4.0***	7.6
Hears voices:				
No	78.4***	75.4	74.8***	62.9
Maybe	17.3	17.6	19.9	24.8
Definitely	4.2	7.1	5.3	12.3

Source: GUI Cohorts '98 and '08 at age 13.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A2.1 Negative binomial regression models of the factors associated with non-violent antisocial behaviour – interaction effects, Cohorts '98 and '08 (incidence risk ratios)

	Coefficient
Model 1:	
Cohort '08 – 2021	0.686**
Cohort '08 – 2022	1.040
Female	0.633***
2021*female	1.527*
2022*female	1.355±
Model 2:	
Cohort '08 – 2021	0.071
Cohort '08 – 2022	1.303
Class group:	
Professional	1.055
Managerial	1.054
Other non-manual	1.029
Skilled manual	1.161
Non-employed (Ref. semi/unskilled)	0.868
Professional*2021	0.988
Managerial*2021	1.433
Other non-manual*2021	1.432
Skilled manual*2021	1.090
Non-employed*2021	0.432
Professional*2022	0.705
Managerial*2022	0.882
Other non-manual*2022	0.948
Skilled manual*2022	0.901
Non-employed*2022	1.346
Model 3:	
Cohort '08 – 2021	0.414
Cohort '08 – 2022	0.693
Parental education:	
Leaving Certificate	1.023
Post-secondary	0.836
Degree or higher	1.166
(Ref. Junior Cert. or lower)	
Leaving Certificate*2021	0.882
Post-secondary*2021	2.625
Degree or higher*2021	2.163
Leaving Certificate*2022	1.556
Post-secondary*2022	2.024
Degree or higher*2022	1.707
Model 4:	
Cohort '08 – 2021	0.834±
Cohort '08 – 2022	1.179
Financial strain	0.954
Financial strain*2021	1.121
Financial strain*2022	1.073

Contd.

Table A2.1 Continued

	Coefficient
Model 5:	
Cohort '08 – 2021	0.898
Cohort '08 – 2022	1.113
Lone parent family	1.362**
Lone parent*2021	0.688
Lone parent*2022	1.466
Model 6:	
Cohort '08 – 2021	0.871
Cohort '08 – 2022	1.224*
Migrant background	1.203
Migrant*2011	0.684
Migrant*2022	0.719
Model 7:	
Cohort '08 – 2021	1.059
Cohort '08 – 2022	1.112
School social mix:	
DEIS	1.166
Fee-paying (Ref. Non-DEIS)	1.482**
DEIS*2021	0.253*
Fee-paying*2021	0.616±
DEIS*2022	1.002
Fee-paying*2022	0.926
Model 8:	
Cohort '08 – 2021	0.801±
Cohort '08 – 2022	1.224±
School gender mix:	
Boys'	1.083
Girls' (Ref. Coeducational)	0.885
Boys'*2021	0.845
Girls'*2021	1.586±
Boys'*2022	0.870
Girls'*2022	0.896
Model 9:	
Cohort '08 – 2021	0.870
Cohort '08 – 2022	1.822**
School size:	
400-599	1.386**
600-799	1.284**
800+ (Ref. <400)	1.325**
400-599*2021	0.943
600-799*2021	0.882
800+ *2021	1.269
400-599*2022	0.959
600-799*2022	0.666
800+ *2022	0.537*

Contd.

Table A2.1 Continued

	Coefficient
Model 10:	
Cohort '08 – 2021	0.678**
Cohort '08 – 2022	1.260
Population density:	
Towns/cities 10,000+	0.587***
Medium towns (3,000-9,999)	0.612***
Open country/village/ small towns	0.491***
(Ref. Large cities)	
Towns/cities*2021	1.465
Medium towns*2021	1.035
Rural*2021	1.534*
Towns/cities*2022	0.756
Medium towns*2022	0.477**
Rural*2022	1.082
Model 11:	
Cohort '08 – 2021	1.027
Cohort '08 – 2022	0.876
Neighbourhood disorder	1.009
Disorder*2021	0.969
Disorder*2022	1.048
Model 12:	
Cohort '08 – 2021	1.180
Cohort '08 – 2022	1.060
Mother-child conflict	1.023***
Conflict*2021	0.977±
Conflict*2022	1.008
Model 13:	
Cohort '08 – 2021	0.975
Cohort '08 – 2022	0.611
No. of close friends:	
2 or 3	1.336*
4 or 5	1.461**
6 or more	1.651***
(Ref. 0 or 1)	
2/3*2021	0.964
4/5*2021	0.834
6+*2021	0.668
2/3*2022	2.214*
4/5*2022	1.751±
6+*2022	2.183*
Model 14:	
Cohort '08 – 2021	0.921
Cohort '08 – 2022	1.267*
Older friends	1.596***
Older friends*2021	0.341***
Older friends*2022	0.493**

Contd.

Table A2.1 Continued

	Coefficient
Model 15:	
Cohort '08 – 2021	0.703*
Cohort '08 – 2022	1.355*
Older siblings	1.073*
Older siblings *2021	1.115
Older siblings *2022	0.923
Model 16:	
Cohort '08 – 2021	0.941
Cohort '08 – 2022	1.222±
SDQ externalising at 9:	
Medium	1.172
High	0.943
Medium*2021	0.669±
High*2021	0.786
Medium*2021	0.813
High*2022	1.086
Model 17:	
Cohort '08 – 2021	0.896
Cohort '08 – 2022	1.127
SDQ internalising at 9:	
Medium	1.040
High	0.793±
Medium*2021	0.867
High*2021	0.591
Medium*2021	1.013
High*2022	1.505
Model 18:	
Cohort '08 – 2021	0.845
Cohort '08 – 2022	1.191±
Disability	1.064
Disability*2021	0.972
Disability*2022	0.977
Model 19:	
Cohort '08 – 2021	0.835
Cohort '08 – 2022	1.144
SDQ externalising at 13:	
Medium	1.114
High	1.426**
Medium*2021	1.100
High*2021	0.905
Medium*2021	0.822
High*2022	1.622±

Contd.

Table A2.1 Continued

	Coefficient
Model 20:	
Cohort '08 – 2021	0.860
Cohort '08 – 2022	1.111
SDQ internalising at 13:	
Medium	0.744**
High	0.670**
Medium*2021	0.881
High*2021	0.893
Medium*2021	1.158
High*2022	1.475
Model 21:	
Cohort '08 – 2021	0.789
Cohort '08 – 2022	1.328
Puberty:	
Medium	0.980
Late	0.791**
Medium*2021	1.057
Late*2021	1.175
Medium*2021	0.827
Late*2022	0.870
Model 22:	
Cohort '08 – 2021	0.742*
Cohort '08 – 2022	1.149
Depression	1.087***
Depression*2021	1.020
Depression*2022	1.006
Model 23:	
Cohort '08 – 2021	0.767*
Cohort '08 – 2022	1.246±
Voices:	
Maybe	1.295***
Definitely	1.674***
Maybe*2021	1.399±
Definitely*2021	0.935
Maybe*2021	0.945
Definitely*2022	0.699

Source: GUI Cohorts '98 and '08 at age 13.

Note: These models control for all of the factors specified in Model 1, Table 2.1; *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A2.2 **Negative binomial regression models of the factors associated with non-violent antisocial behaviour, separately for males and females – interaction effects, Cohorts '98 and '08 (incidence risk ratios)**

	Females	Males
Model 2:		
Cohort '08 – 2021	1.739	0.456
Cohort '08 – 2022	1.056	0.873
Class group:		
Professional	1.356	0.833
Managerial	1.046	0.985
Other non-manual	1.086	0.946
Skilled manual	1.226	1.052
Non-employed (Ref. semi/unskilled)	0.930	0.784
Professional*2021	0.553	1.675
Managerial*2021	1.199	1.601
Other non-manual*2021	1.140	1.543
Skilled manual*2021	0.930	0.739
Non-employed*2021	0.180*	0.534
Professional*2022	0.939	1.005
Managerial*2022	1.744	1.017
Other non-manual*2022	2.162	0.779
Skilled manual*2022	1.665	1.159
Non-employed*2022	1.866	1.415
Model 3:		
Cohort '08 – 2021	1.539	0.725*
Cohort '08 – 2022	1.653**	1.085
Parental education:		
Leaving Certificate	0.923	0.807
Post-secondary	0.803	0.918
Degree or higher	0.670**	0.770**
(Ref. Junior Cert. or lower)		
Leaving Certificate*2021	0.368±	0.197
Post-secondary*2021	0.492	0.352
Degree or higher*2021	1.371	1.056
Leaving Certificate*2022	0.000	0.222
Post-secondary*2022	0.912	0.366
Degree or higher*2022	1.273	0.943
Model 4:		
Cohort '08 – 2021	1.522**	0.603**
Cohort '08 – 2022	1.567**	0.904
Financial strain	1.042	0.920
Financial strain*2021	0.979	1.206
Financial strain*2022	1.717	0.681
Model 5:		
Cohort '08 – 2021	1.738***	0.664**
Cohort '08 – 2022	1.478*	0.900
Lone parent family	1.507**	1.332*
Lone parent*2021	0.456±	0.622
Lone parent*2022	1.831	0.925

Contd.

Table A2.2 Continued

	Females	Males
Model 6:		
Cohort '08 – 2021	1.621**	0.606**
Cohort '08 – 2022	1.785***	0.891
Migrant background	1.371	1.083
Migrant*2011	0.466	1.168
Migrant*2022	0.409*	0.975
Model 7:		
Cohort '08 – 2021	1.739**	0.700*
Cohort '08 – 2022	1.526**	0.943
School social mix:		
DEIS	1.237	1.123
Fee-paying (Ref. Non-DEIS)	1.458*	1.363*
DEIS*2021	0.563	0.580
Fee-paying*2021	0.500	0.879
DEIS*2022	1.382	0.741
Fee-paying*2022	1.122	0.970
Model 8:		
Cohort '08 – 2021	1.463*	0.611**
Cohort '08 – 2022	1.770**	0.830
School gender mix:		
Single-sex (Ref. Coeducational)	0.988	0.976
Single-sex*2021	1.138	1.018
Single-sex*2022	0.830	1.218
Model 9:		
Cohort '08 – 2021	1.506	0.589
Cohort '08 – 2022	2.316*	1.595±
School size:		
400-599	1.234	1.520**
600-799	0.988	1.513**
800+ (Ref. <400)	1.282±	1.334*
400-599*2021	1.019	0.700
600-799*2021	0.910	0.916
800+ *2021	1.058	1.461
400-599*2022	0.860	0.538±
600-799*2022	0.731	0.439*
800+ *2022	0.527	0.521*

Contd.

Table A2.2 Continued

	Females	Males
Model 10:		
Cohort '08 – 2021	1.236	0.385***
Cohort '08 – 2022	1.761±	1.007
Population density:		
Towns/cities 10,000+	0.531***	0.649**
Medium towns (3,000-9,999)	0.479***	0.730*
Open country/village/ small towns	0.500***	0.488***
(Ref. Large cities)		
Towns/cities*2021	1.362	1.806
Medium towns*2021	0.804	1.431
Rural*2021	1.461	1.978*
Towns/cities*2022	1.183	0.550±
Medium towns*2022	0.618	0.292*
Rural*2022	0.905	1.138
Model 11:		
Cohort '08 – 2021	1.191	1.362
Cohort '08 – 2022	0.600	0.967
Neighbourhood disorder	0.990	1.024
Disorder*2021	1.040	0.881±
Disorder*2022	1.174*	0.987
Model 12:		
Cohort '08 – 2021	2.112*	0.840
Cohort '08 – 2022	0.605	1.124
Mother-child conflict	1.027***	1.020**
Conflict*2021	0.977	0.980
Conflict*2022	1.068*	0.984
Model 13:		
Cohort '08 – 2021	1.227	0.566
Cohort '08 – 2022	0.549	0.595
No. of close friends:		
2 or 3	1.311	1.404±
4 or 5	1.581*	1.448*
6 or more	1.646*	1.700**
(Ref. 0 or 1)		
2/3*2021	1.419	1.126
4/5*2021	1.230	1.163
6+*2021	1.018	0.929
2/3*2022	4.086*	1.497
4/5*2022	2.541	1.406
6+*2022	1.980	1.832
Model 14:		
Cohort '08 – 2021	1.633**	0.698*
Cohort '08 – 2022	1.730**	0.967
Older friends	1.906***	1.480***
Older friends*2021	0.366*	0.232**
Older friends*2022	0.606*	0.310*

Contd.

Table A2.2 Continued

	Females	Males
Model 15:		
Cohort '08 – 2021	1.188	0.547**
Cohort '08 – 2022	2.180**	0.949
Older siblings	1.040	1.109**
Older siblings *2021	1.169	1.073
Older siblings *2022	0.836	0.960
Model 16:		
Cohort '08 – 2021	1.611**	0.685*
Cohort '08 – 2022	1.529**	0.929
SDQ externalising at 9:		
Medium	1.242	1.127
High	0.936	0.949
Medium*2021	0.875	0.631
High*2021	0.741	0.917
Medium*2021	0.691	1.104
High*2022	3.340*	0.646
Model 17:		
Cohort '08 – 2021	1.612**	0.635**
Cohort '08 – 2022	1.447*	0.920
SDQ internalising at 9:		
Medium	1.257±	0.903
High	0.793	0.785
Medium*2021	0.783	1.085
High*2021	0.715	0.593
Medium*2021	0.856	0.937
High*2022	3.569*	0.744
Model 18:		
Cohort '08 – 2021	1.485*	0.613**
Cohort '08 – 2022	1.490*	0.953
Disability	0.579*	1.426*
Disability*2021	1.495	0.984
Disability*2022	2.044	0.643
Model 19:		
Cohort '08 – 2021	1.543**	0.539***
Cohort '08 – 2022	1.426*	0.877
SDQ externalising at 13:		
Medium	0.998	1.168
High	1.334	1.490**
Medium*2021	1.098	2.061*
High*2021	0.617	1.041
Medium*2021	0.983	0.910
High*2022	4.827**	1.206

Contd.

Table A2.2 Continued

	Females	Males
Model 20:		
Cohort '08 – 2021	1.562*	0.635**
Cohort '08 – 2022	1.386±	0.887
SDQ internalising at 13:		
Medium	0.712**	0.747*
High	0.552***	0.767
Medium*2021	1.040	0.420±
High*2021	0.766	1.515
Medium*2021	1.344	0.982
High*2022	2.156±	1.237
Model 21:		
Cohort '08 – 2021	1.181	0.564*
Cohort '08 – 2022	2.104*	0.998
Puberty:		
Medium	0.979	0.958
Late	0.930	0.700**
Medium*2021	1.341	1.117
Late*2021	1.528	1.178
Medium*2021	0.830	0.698
Late*2022	0.605	1.128
Model 22:		
Cohort '08 – 2021	1.497±	0.503**
Cohort '08 – 2022	2.023**	0.786
Depression	1.088***	1.083***
Depression*2021	1.001	1.045
Depression*2022	0.974	1.027
Model 23:		
Cohort '08 – 2021	1.356	0.586**
Cohort '08 – 2022	1.963***	0.799
Voices:		
Maybe	1.267	1.344**
Definitely	1.971***	1.382
Maybe*2021	1.365	1.184
Definitely*2021	1.303	1.165
Maybe*2021	0.584±	1.588±
Definitely*2022	0.625	0.881

Source: GUI Cohorts '98 and '08 at age 13.
Note: These models control for all of the factors specified in Model 1, Table 2.1; *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A2.3 **Negative binomial regression models of the factors associated with violent antisocial behaviour, separately for males and females – interaction effects, Cohorts '98 and '08 (incidence risk ratios)**

	Females	Males
Model 2:		
Cohort '08 – 2021	3.626*	0.476
Cohort '08 – 2022	1.765	0.818
Class group:		
Professional	1.782±	0.674±
Managerial	1.228	0.702*
Other non-manual	1.316	0.725±
Skilled manual	1.160	0.862
Non-employed (Ref. semi/unskilled)	0.931	0.821
Professional*2021	0.310±	2.286
Managerial*2021	0.452	1.481
Other non-manual*2021	0.402	1.552
Skilled manual*2021	0.112*	1.081
Non-employed*2021	0.151*	1.256
Professional*2022	0.745	1.344
Managerial*2022	0.932	1.165
Other non-manual*2022	0.474	1.136
Skilled manual*2022	1.808	1.209
Non-employed*2022	0.000	0.000
Model 3:		
Cohort '08 – 2021	1.616±	1.063
Cohort '08 – 2022	1.299	1.322±
Parental education:		
Leaving Certificate	1.258	0.969
Post-secondary	0.974	0.782±
Degree or higher (Ref. Junior Cert. or lower)	0.722±	0.792±
Leaving Certificate*2021	0.434	0.000
Post-secondary*2021	0.346	0.354*
Degree or higher*2021	1.030	0.642
Leaving Certificate*2022	2.612	0.000
Post-secondary*2022	1.178	0.317
Degree or higher*2022	1.137	0.622*
Model 4:		
Cohort '08 – 2021	1.420	0.694*
Cohort '08 – 2022	1.449	0.916
Financial strain	1.120	0.968
Financial strain*2021	0.688	1.087
Financial strain*2022	1.363	0.458
Model 5:		
Cohort '08 – 2021	1.437	0.776
Cohort '08 – 2022	1.642*	0.996
Lone parent family	1.267	1.496**
Lone parent*2021	0.846	0.536
Lone parent*2022	0.495	0.344*

Contd.

Table A2.3 Continued

	Females	Males
Model 6:		
Cohort '08 – 2021	1.398	0.732±
Cohort '08 – 2022	1.683*	0.927
Migrant background	1.311	0.873
Migrant*2011	1.012	0.489
Migrant*2022	0.319*	0.531
Model 7:		
Cohort '08 – 2021	1.643*	1.011
Cohort '08 – 2022	1.182	0.926
School social mix:		
DEIS	1.159	1.131
Fee-paying (Ref. Non-DEIS)	0.928	0.820
DEIS*2021	0.489	0.154***
Fee-paying*2021	0.501	0.611
DEIS*2022	2.408*	0.791
Fee-paying*2022	0.785	1.301
Model 8:		
Cohort '08 – 2021	1.262	0.658*
Cohort '08 – 2022	1.418	0.864
School gender mix:		
Single-sex (Ref. Coeducational)	0.870	0.930
Single-sex*2021	1.332	1.268
Single-sex*2022	1.134	1.059
Model 9:		
Cohort '08 – 2021	2.133±	0.427±
Cohort '08 – 2022	2.519*	0.746
School size:		
400-599	1.272	1.087
600-799	1.025	1.107
800+ (Ref. <400)	1.730*	1.171
400-599*2021	0.796	0.623
600-799*2021	0.698	1.700
800+ *2021	0.459	2.493±
400-599*2022	0.511	1.102
600-799*2022	0.891	1.446
800+ *2022	0.382*	1.110

Contd.

Table A2.3 Continued

	Females	Males
Model 10:		
Cohort '08 – 2021	1.473	0.460*
Cohort '08 – 2022	1.010	0.770
Population density:		
Towns/cities 10,000+	0.944	0.692**
Medium towns (3,000-9,999)	0.749	0.803
Open country/village/ small towns	0.873	0.694**
(Ref. Large cities)		
Towns/cities*2021	0.715	1.901
Medium towns*2021	0.395	2.643±
Rural*2021	1.150	1.527
Towns/cities*2022	1.199	1.232
Medium towns*2022	2.354	1.429
Rural*2022	1.670	1.136
Model 11:		
Cohort '08 – 2021	1.298	1.990
Cohort '08 – 2022	0.621	0.717
Neighbourhood disorder	1.035	1.019
Disorder*2021	1.012	0.842*
Disorder*2022	1.147±	1.032
Model 12:		
Cohort '08 – 2021	1.352	0.396*
Cohort '08 – 2022	0.801	0.607
Mother-child conflict	1.033**	1.020**
Conflict*2021	1.002	1.036
Conflict*2022	1.040	1.024
Model 13:		
Cohort '08 – 2021	2.677*	0.259±
Cohort '08 – 2022	0.416	0.523
No. of close friends:		
2 or 3	0.926	1.146
4 or 5	0.840	1.279
6 or more	1.176	1.333
(Ref. 0 or 1)		
2/3*2021	0.498	2.745
4/5*2021	0.540	2.331
6+*2021	0.266*	3.753
2/3*2022	2.405	1.912
4/5*2022	7.370**	1.538
6+*2022	3.361	1.611

Contd.

Table A2.3 Continued

	Females	Males
Model 14:		
Cohort '08 – 2021	1.597*	0.776
Cohort '08 – 2022	1.624*	0.900
Older friends	1.977***	1.630***
Older friends*2021	0.103***	0.419*
Older friends*2022	0.489	1.037
Model 15:		
Cohort '08 – 2021	1.468	0.882
Cohort '08 – 2022	1.405	0.936
Older siblings	1.089	1.083±
Older siblings *2021	0.968	0.893
Older siblings *2022	1.037	0.956
Model 16:		
Cohort '08 – 2021	1.725*	0.732
Cohort '08 – 2022	1.352	0.757±
SDQ externalising at 9:		
Medium	1.035	1.093
High	1.230	1.129
Medium*2021	0.688	0.647
High*2021	0.085**	1.206
Medium*2021	1.760	1.369
High*2022	1.070	1.425
Model 17:		
Cohort '08 – 2021	1.589*	0.552**
Cohort '08 – 2022	1.500±	0.877
SDQ internalising at 9:		
Medium	1.385±	1.076
High	1.058	0.569**
Medium*2021	0.264*	1.402
High*2021	1.632	4.250**
Medium*2021	1.257	0.864
High*2022	0.484	1.427
Model 18:		
Cohort '08 – 2021	1.429	0.723±
Cohort '08 – 2022	1.655*	0.871
Disability	1.192	1.222
Disability*2021	0.729	0.807
Disability*2022	0.510	1.034

Contd.

Table A2.3 Continued

	Females	Males
Model 19:		
Cohort '08 – 2021	1.545*	0.560*
Cohort '08 – 2022	1.273	0.805
SDQ externalising at 13:		
Medium	1.048	0.918
High	1.187	1.279
Medium*2021	0.605	3.058**
High*2021	0.391	1.008
Medium*2021	1.319	1.045
High*2022	2.784±	1.588
Model 20:		
Cohort '08 – 2021	1.373	0.638*
Cohort '08 – 2022	1.331	0.840
SDQ internalising at 13:		
Medium	0.631*	0.749*
High	0.520*	0.758
Medium*2021	1.006	0.931
High*2021	1.220	1.859
Medium*2021	1.622	1.652
High*2022	1.196	0.919
Model 21:		
Cohort '08 – 2021	1.111	0.803
Cohort '08 – 2022	1.188	0.948
Puberty:		
Medium	0.993	0.942
Late	0.671*	0.687**
Medium*2021	0.934	0.726
Late*2021	2.039	0.952
Medium*2021	1.444	0.822
Late*2022	1.287	1.071
Model 22:		
Cohort '08 – 2021	1.457	0.747
Cohort '08 – 2022	1.506	0.773
Depression	1.091***	1.090
Depression*2021	0.995	0.986
Depression*2022	0.998	1.026
Model 23:		
Cohort '08 – 2021	1.106	0.728
Cohort '08 – 2022	1.782*	0.840
Voices:		
Maybe	1.406*	1.357**
Definitely	2.849***	1.711**
Maybe*2021	1.855±	0.980
Definitely*2021	0.884	0.618
Maybe*2021	0.467±	1.136
Definitely*2022	0.867	1.129

Source: GUI Cohorts '98 and '08 at age 13.
Note: These models control for all of the factors specified in Model 1, Table 2.1; *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.1 **Multinomial logistic regression models of the factors associated with trajectories of antisocial behaviour between 13 and 17 years of age for Cohort '98 (base category: no/low ASB) (relative risk ratios)**

	Full model (M1) Increasing ASB	Full model (M1) Decreasing ASB	SDQ at 13 (M2) Increasing ASB	SDQ at 13 (M2) Decreasing ASB	ACEs (M3) Increasing ASB	ACEs (M3) Decreasing ASB
Female	0.306**	0.377**	0.336**	0.421*	0.285***	0.398*
Class group:						
Professional	0.588	0.753	0.613	0.830	0.810	0.849
Managerial	1.017	0.679	1.053	0.748	1.262	0.757
Other non-manual	0.641	0.587	0.647	0.632	0.768	0.636
Skilled manual	1.483	1.663	1.518	1.811	1.686	1.860
Non-employed	1.793	0.554	1.799	0.608	2.129	0.612
(Ref. semi/unskilled)						
Parental education:						
Leaving Certificate	0.613	0.932	0.621	0.919	0.585	0.880
Post-secondary	0.541	0.774	0.521	0.734	0.556	0.691
Degree or higher	1.358	0.964	1.386	0.964	1.350	0.916
(Ref. Junior Cert. or lower)						
Financial strain	1.169	0.888	1.155	0.877	1.017	0.875
Lone-parent family	1.284	2.158±	1.238	1.981±	1.058	1.809
Migrant background	1.046	0.624	1.067	0.682	1.102	0.755
School social mix:						
DEIS	0.858	1.319	0.837	1.296	0.755	1.214
Fee-paying (Ref. Non-DEIS)	1.376	1.635	1.464	1.772	1.416	1.711
School gender mix:						
Boys'	1.145	0.779	1.201	0.831	1.115	0.807
Girls' (Ref. Coeducational)	0.681	0.934	0.646	0.901	0.640	0.883
School size:						
400-599	1.809	1.490	1.784	1.502	1.785	1.428
600-799	1.803	1.834	1.763	1.850	1.804	1.801
800+ (Ref. <400)	0.635	1.210	0.650	1.280	0.712	1.234

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Table A3.1 Continued

	Full model (M1) Increasing ASB	Full model (M1) Decreasing ASB	SDQ at 13 (M2) Increasing ASB	SDQ at 13 (M2) Decreasing ASB	ACEs (M3) Increasing ASB	ACEs (M3) Decreasing ASB
Population density: (Ref. Large cities):						
Towns/cities 10,000+	1.353	0.413*	1.423	0.432*	1.428	0.424*
Medium towns (3,000-9,999)	1.621	0.473±	1.632	0.502	1.675	0.510
Open country/village/ small town	0.881	0.372**	0.897	0.383**	0.939	0.379**
Neighbourhood disorder	1.000	1.069	0.999	1.064	0.996	1.056
Mother-child conflict	1.030±	1.071**	1.008	1.041*	1.015	1.044*
No. of close friends:						
2 or 3	0.767	2.110	0.758	1.962	0.745	2.011
4 or 5	0.925	2.195	0.881	1.998	0.853	2.012
6 or more (Ref. 0 or 1)	0.909	2.259	0.867	2.074	0.872	2.180
Some/most/all friends a year or two older	1.282	1.665±	1.277	1.558	1.123	1.501
SDQ externalising difficulties at 9	1.093**	1.038	1.034	0.966	1.032	0.960
SDQ internalising difficulties at 9	0.964	0.866	0.974	0.886*	0.972	0.885*
Disability	0.514	2.524*	0.496	2.358±	0.688	2.540*
SDQ externalising difficulties at 13			1.123*	1.158*	1.091±	1.151*
SDQ internalising difficulties at 13			0.980	0.971	0.974	0.972
ACEs by age 13:						
1					0.575*	0.819*
2+ (Ref. None)					0.697	0.872
ACEs by age 17:						
1					2.105**	1.187
2					3.077*	1.019
3 + (Ref. None)					10.380***	1.677
Pseudo R^2	0.132		0.141		0.185	

Source: GUI Cohort '98. Note: *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 4,596.

Table A3.2 **Ordered logit models of the relationship between ASB trajectory, gender and contact with the criminal justice system by 20 and 25 years of age, Cohort '98 (odds ratios)**

	Contact by age 20 - - gender interaction with trajectory	Contact by age 20 - gender interaction with system contact	Contact by age 25 - - gender interaction with trajectory	Contact by age 25 - gender interaction with system contact by 17	Contact by age 25 - gender interaction with system contact by 20
ASB trajectory:					
Increasing	3.837***	3.745***	2.741**	2.401**	1.493
Decreasing	2.230*	1.846*	3.000**	2.206*	1.896
(Ref. None/low)					
Female	0.299***	0.276***	0.334***	0.362**	0.284***
Increasing*female	0.796		0.456		
Decreasing*female	0.439		0.211*		
Contact with the system by age 17:					
Questioned by police		5.867***		4.293***	1.377
Formal sanction		6.131***		2.667***	1.296
Questioned*female		0.383*		0.032**	
Sanction*female		1.724		0.583	
Contact with the system by age 20:					
Questioned by police					2.359***
Formal sanction					5.007***
Questioned*female					2.068*
Sanction*female					1.585
R^2	0.155	0.156	0.089	0.093	0.131
N	4,665	4,665	2,581	2,581	2,570

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.3 OLS regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and educational outcomes, Cohort '98 (odds ratios)

	Leaving Certificate points Model 1	Leaving Certificate points Model 2	Degree by age 25 Model 1	Degree by age 25 Model 3
ASB trajectory:				
Increasing	-22.858	-51.276**	0.597±	0.479**
Decreasing	6.801	-12.685	1.241	1.088
(Ref. None/low)				
Female	6.351	12.626	1.148	1.207
Increasing*female	-77.832*		0.490	
Decreasing*female	-38.780		0.775	
Contact with the system by age 17:				
Questioned by police		-25.938		0.923
Formal sanction		-61.611		0.692±
Questioned*female		-42.729		0.297±
Sanction*female		-73.226**		0.641
R^2	0.179		0.047	0.048
N	4,692	4,665	2,581	2,581

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.4 **OLS regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and depression scores, Cohort '98 (odds ratios)**

	Depression at 20: Model 1	Depression at 20: Model 2	Depression at 25: Model 1	Depression at 25: Model 2
ASB trajectory:				
Increasing	1.124*	1.651**	0.727	1.078
Decreasing	-0.749±	-0.312	1.857	1.164
(Ref. None/low)				
Female	1.404***	1.453***	1.406***	1.263***
Increasing*female	2.308		0.975	
Decreasing*female	1.125		-2.206	
Contact with the system by age 17:				
Questioned by police		-0.117		2.111
Formal sanction		0.064		-0.259
Questioned*female		0.406		0.580
Sanction*female		0.402		1.264
R^2	0.037	0.035	0.041	0.041
N	4,652	4,652	2,242	2,242

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.5 **OLS regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and life satisfaction, Cohort '98**

	Life satisfaction at 20: Model 1	Life satisfaction at 20: Model 2	Life satisfaction at 25: Model 1	Life satisfaction at 25: Model 2
ASB trajectory:				
Increasing	-0.546**	-0.571**	-0.253	-0.513
Decreasing	-0.060	-0.156	-0.304	-0.286
(Ref. None/low)				
Female	-0.231**	-0.228*	0.003	0.072
Increasing*female	-0.101		-0.834	
Decreasing*female	-0.279		0.239	
Contact with the system by age 17:				
Questioned by police		-0.143		0.020
Formal sanction		-0.018		0.191
Questioned*female		-0.522		-1.633
Sanction*female		0.020		-0.535
R^2	0.010	0.011	0.025	0.029
N	4,666	4,666	2,265	2,265

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.6 **OLS regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and aggression, Cohort '98**

	Model 1	Model 2
ASB trajectory:		
Increasing	4.080***	3.924***
Decreasing	1.961	1.676±
(Ref. None/low)		
Female	-1.002***	-0.962***
Increasing*female	-0.571	
Decreasing*female	-0.735	
Contact with the system by age 17:		
Questioned by police		1.604±
Formal sanction		1.655**
Questioned*female		-1.208
Sanction*female		-0.339
R^2	0.087	0.087
N	4,650	4,650

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.7 **OLS regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and trust in others, Cohort '98**

	Trust in others at 20 Model 1	Trust in others at 20 Model 2	Trust in others at 25 Model 1	Trust in others at 25 Model 2
ASB trajectory:				
Increasing	-0.583±	-0.807**	-0.602*	-0.492±
Decreasing	-0.156	-0.190	-0.520	-0.245
(Ref. None/low)				
Female	-0.125	-0.185±	-0.546***	-0.486***
Increasing*female	-0.222		0.311	
Decreasing*female	-0.409*		1.047*	
Contact with the system by age 17:				
Questioned by police		-0.401		-0.829
Formal sanction		-0.433*		-0.395±
Questioned*female		0.389		-1.072
Sanction*female		0.075		0.110
R^2	0.039	0.037	0.070	0.071
N	4,690	4,690	2,581	2,581

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.8 **OLS regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and satisfaction with social life, Cohort '98**

	Model 1	Model 2
ASB trajectory:		
Increasing	0.761	0.572**
Decreasing	0.930	0.649*
(Ref. None/low)		
Female	0.877±	0.851*
Increasing*female	0.296*	
Decreasing*female	0.378**	
Contact with the system by age 17:		
Questioned by police		1.623±
Formal sanction		1.113
Questioned*female		0.737
Sanction*female		0.754
R^2	0.008	0.006
N	4,691	4,691

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.9 **Ordered logistic regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and health, Cohort '98**

	Health at 20 Model 1	Health at 20 Model 2	Health at 25 Model 1	Health at 25 Model 2
ASB trajectory:				
Increasing	1.199	0.904	0.737	0.681±
Decreasing	1.511	0.989	0.659	0.686
(Ref. None/low)				
Female	0.829*	0.800*	0.767*	0.788*
Increasing*female	0.356*		0.815	
Decreasing*female	0.357*		1.192	
Contact with the system by age 17:				
Questioned by police		0.526±		0.893
Formal sanction		0.755±		0.996
Questioned*female		1.728		0.753
Sanction*female		0.655±		0.784
R^2	0.016	0.015	0.084	0.084
N	4,692	4,692	2,581	2,581

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

Table A3.10 Multinomial logistic regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and ILO status, Cohort '98

	ASB trajectory - gender interaction Unemployed	ASB trajectory - gender interaction Out of LF	Contact with justice system - gender interaction Unemployed	Contact with justice system - gender interaction Out of LF
ASB trajectory:				
Increasing	1.372	0.720	1.007	1.100
Decreasing	4.690*	2.575±	2.226	1.702
(Ref. None/low)				
Female	1.946*	1.382*	1.608±	1.389±
Increasing*female	0.278	2.972		
Decreasing*female	0.000	0.162*		
Contact with the system by age 17:				
Questioned by police			0.000	0.517
Formal sanction			0.575	0.941
Questioned*female			0.000	1.775
Sanction*female			1.671	0.895
R^2	0.041		0.037	

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10. N = 2,448.

Table A3.11 Logistic regression models of the relationship between ASB trajectory, gender, contact with the criminal justice system and welfare receipt, Cohort '98

	Welfare receipt Model 1	Welfare receipt Model 2	Income decile Model 1	Income decile Model 2
ASB trajectory:				
Increasing	1.706	1.473	-0.253	-0.583
Decreasing	2.006	1.429	-0.629	-0.481
(Ref. None/low)				
Female	1.466**	1.452**	-0.164	-0.106
Increasing*female	0.625		-1.036	
Decreasing*female	0.321		0.561	
Contact with the system by age 17:				
Questioned by police		2.385±		-0.668
Formal sanction		1.884*		-0.045
Questioned*female		0.905		-0.821
Sanction*female		0.727		-0.636
R^2	0.038	0.037	0.020	0.020
N	2,581	2,581	2,581	2,581

Source: GUI Cohort '98.
Note: *** p<.001, ** p<.01, * p<.05, ± p<.10.

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