

The relationship between a trusted adult and adolescent health and education outcomes







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About this briefing

This rapid evidence review examines the importance of trusted adults during adolescence, with a focus on defining this role, examining the impact on health and education outcomes, and providing implementation guidance.

Key points

- A wide range of settings were identified in which young people can develop supportive relationships with trusted adults, including at home, school, in statutory services and the wider community.
- A number of characteristics of the trusted adult role were observed. These broadly mirror the way in which national and local bodies have recently described this role. There is, however, no common universal definition.
- It is often difficult to quantify the impact of the trusted adult role on specific concrete outcomes due to the nature and diversity of the evidence base. A related common methodological issue is the use of weak or ambiguous definitions of the role. This means the nature, scope and degree of adult support actually received is often unclear.
- However, when asked directly, young people consistently view the trusted adult role as positive and indicate that it can help achieve outcomes such as higher educational attainment, optimism, self-efficacy and reduced internalising symptoms.
- There is very little evidence that youth-adult relationships are associated with deterioration in outcomes. When this is observed, it typically occurs in the context of weaker relationships where the adult does not truly fulfil the trusted adult role.
- It is clear that the greatest potential benefit from this role arises when there is a high-quality youth–adult relationship. A number of barriers and facilitators to developing such relationships were identified, which collectively emphasise the importance of Scotland's youth work sector.

Facilitators of trusted adult relationships:

- Youth able to choose their preferred adult.
- Genuine, empathetic and proactive support offered.
- Confidentiality.
- Reliability of adult (keeping promises, appointments etc.).
- Ability to raise any issue without judgement (importantly including taboo topics such as sexual relationships and substance use).
- Patience on behalf of youth and adult.
- Mutual respect between youth and adult.
- Structures or activities that promote regular, long-term engagement.
- Shared interests between youth and adult.
- Youth and adult matched on sociodemographic criteria (e.g. sex, ethnicity, socioeconomic status).
- A willingness of the adult to 'go the extra mile'.

Barriers to forming a trusted adult relationship:

- Overly formal relationship (narrowly defined role with strict, often professional, boundaries and overly restrictive rules and regulation).
- Labelling young person 'at risk'.
- Lack of trust.
- Perception that relationship is time-limited.
- Poor youth-adult communication.
- Youth fearful of 'opening up'.
- Youth feeling indebted to adult figure.

Background

Scotland has an ambition to be the best place in the world to grow up.¹ Policy and practice in recent years has predominantly aimed to achieve this by focusing on prenatal, infant and child health,² however, there is a danger of forfeiting this early investment if it is not followed up in subsequent life stages. Adolescence (here defined as 10–19 years³) represents a further, particularly sensitive, window of opportunity in which developmental processes interact with individuals' social, environmental, economic and built environments to shape adult behaviour, mental health and wellbeing.⁴

Recent evidence indicates that there is significant scope for improvement in the health of Scotland's adolescents. Particularly striking is a sharp decline in the mental wellbeing of 13- to 15-year-olds (especially females) in recent decades⁵ which is steeper than that seen across other European countries.⁶ ⁷ Concurrently, Child and Adolescent Mental Health Services (CAMHS) in Scotland are experiencing unprecedented demand, leading to an increasing number with substantial delays in receiving treatment.⁸

Stark inequalities are observed for Scotland's adolescents, with particular population groups being significantly less likely to show positive outcomes owing to the circumstances in which they are born and raised. For instance, the gap in health between rich and poor tends to be larger than seen in other economically developed countries.⁶ Young people growing up in poverty are also less likely to fully engage with, and succeed at, school, which perpetuates socioeconomic inequalities in health.⁹ Further, around 65% of young people in Scotland have experienced at least one of a range of childhood stressors such as parental divorce, physical abuse, emotional neglect or parental incarceration, which are associated with poorer outcomes across the lifespan.¹⁰ ¹¹ For Scotland to fulfil its ambition of being the best place in the world to grow up, it is necessary to be proactive in mitigating the harmful impact of social, economic and environmental factors, with strong economic¹² and practical⁸ rationales for doing so.

A preventative asset that has received recent attention is social support, with the role of 'trusted adults' in adolescence emerging as a specific area of focus in Scotland and the UK.^{13 14 15} This focus follows concerns that societal and demographic change is diminishing the prevalence and quality of youth–adult relationships, particularly among those who are most vulnerable.¹⁶ Indeed there is some indication that the absence of trusted adult support is a key factor associated with youth offending rates¹⁶ and poorer outcomes among youth in care¹⁷.

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Intuitively, promoting trusted adult support may have potential as a costeffective primary prevention method, given the broad range of settings in which young people and adults stand to forge relationships (including home, school, youth work venues, statutory services and the wider community). However, despite the recent focus and potential of this approach, a number of outstanding issues restrict the ability of the public health community to fully endorse or implement a role for trusted adults in supporting adolescents' health and education outcomes. Key among these issues is the lack of a clear definition on what constitutes a trusted adult for adolescents. It is also not clear what impact the presence of a trusted adult can have on adolescent outcomes due to a lack of review-level evidence and a reliance on single research studies and anecdotal evidence.¹⁸ In addition there is not a common understanding of how best to establish and maintain such relationships between adolescents and adults. This evidence briefing summarises UK and international literature in order to address these unknowns.

Evidence summary

Systematic review methods were used to identify and synthesise literature published between 2007 and 2017 which evaluates the impact of trusted adults during adolescence (10–19 years) on health or education-related outcomes (the latter including, for example, literacy, numeracy and attitudes towards school and further education). In order to screen for relevant literature, initially a broad definition of a trusted adult was adopted as someone who 'children and young people may turn to for help, and will take them seriously', in line with the Scottish Government's child safety guidance.¹⁹ For full review methods see the published review protocol.^{20 21}

Literature searches retrieved 2,908 unique studies, of which 192 were included in this review after full-text screening. The vast majority of these articles (179) described original primary research, with the remaining 13 articles being literature reviews. Primary research articles were predominantly conducted in the United States (125/179), with nine conducted in the United Kingdom and 21 in other European countries. The remaining articles were conducted in a diverse range of countries spanning Africa, the Americas, Asia, and Australasia. The majority of primary research articles identified were quantitative (136/179), with a smaller number of qualitative (25/179) and mixed-methods (18/179) studies retrieved.

What constitutes a trusted adult?

The retrieved literature demonstrates the broad range of settings in which supportive relationships with adults can exist. The most commonly identified 'trusted adults' were parents/primary caregivers (examined in 38% of articles) and teachers or other school staff (27% of articles). Mentors assigned as part of a mentoring programme were the focus of 18% of articles. The remaining articles focused on other non-parental adults including grandparents, sports coaches, street outreach workers, workplace mentors, youth workers or other community adults.

Great diversity was observed in how youth–adult relationships are described. There does not yet exist a single universal definition of the trusted adult role; rather, retrieved articles tend to utilise ad-hoc descriptions which vary substantially. Within these diverse definitions, a range of positive characteristics were identified, many of which are largely consistent with the recent local and national focus on the role. For instance a commonly observed attribute was assistance with personal emotional problems (e.g. someone 'who you can go to for support and guidance'²²), with other positive qualities including a 'special' or close emotional bond, the adult 'being there', 'looking out for' and 'caring for' the young person, making an 'important positive difference' in their lives, helping them develop as a person and supporting a positive attitude towards future success. A number of articles focused explicitly on 'natural mentoring' relationships, which are characterised by an informal youth–adult bond that develops organically, often through the young person's choice. Despite evidence of definitions that include the above criteria, it is also common for articles to employ significantly vaguer, more generic definitions of social support received from adults, for example 'My family shows me support' or 'My teachers listen to me'. While such definitions are less clearly indicative of the trusted adult role, it is difficult to disregard them in this review, as these broader traits are also consistent with the recent national and local focus on trusted adults.

Association with health and educational outcomes Existing review-level literature

Thirteen literature reviews were identified, including four meta-analyses, six systematic reviews and three narrative reviews, which focus predominantly on quantitative research. A number of these reviews conclude that having a trusted adult during adolescence is positively associated with improved health and education outcomes. However, collectively, this literature does not provide a particularly clear picture of this association, with the majority of reviews finding no overall effect or small effect sizes. These somewhat equivocal findings span a wide range of settings and foci, including universal positive youth development interventions, universal mentoring programmes, youth in foster care, 'natural mentoring', school-based mentoring, afterschool programmes and specialised adult support interventions designed to prevent substance use or mitigate against the impact of parental HIV/AIDS.

Despite this inconclusive evidence, there is very little indication from existing review-level literature that a trusted adult relationship is associated with worse youth outcomes. Where such evidence does exist, it tends to be linked to the introduction of yet another transient relationship for young people whose lives are characterised by inconsistency and a high-turnover rate of adult relationships (particularly for those in foster care). This is in line with a broader observation across review-level articles, that higher quality and longer-term contact with adults typically improve the impact on adolescent outcomes.

Primary literature

Quantitative (data-driven) studies

The 136 quantitative articles retrieved broadly reflect the inconclusive findings of existing review-level literature. For example, mental health and wellbeing was assessed in 93 quantitative articles. While 44% of these articles found exclusively that adult support is associated with improved mental health/wellbeing, 15% observed no significant association and 39% found only partially supportive evidence (i.e. identified no effect across some but not all measured outcomes, statistical methods or groups of individuals).

A similar picture emerges for each of the outcome types assessed in quantitative studies, which includes risky behaviours (e.g. substance and alcohol use, smoking, risky sexual activity); perceptions of school performance and/or attitudes towards school; exam-assessed attainment; health-promoting behaviours (e.g. diet, physical activity); self-rated general health and body mass index. Again mirroring existing review-level evidence there is very little evidence that trusted adult relationships are harmfully associated with adolescent outcomes, with only two of the papers assessing mental health/wellbeing finding a negative impact.

One of the studies finding a negative impact on youth outcomes²³ found that internalising symptoms (e.g. depression and anxiety) increased among homeless adolescents who received more adult mentoring sessions at the expense of formal clinical treatment. The retrieved literature²⁴ ²⁵ ²⁶ provides some evidence that informal adult support can bolster the efficacy of other protective factors or existing treatment approaches. However, this evidence²³ indicates that caution is needed to avoid the perception among policy makers, practitioners, 'trusted adults' and adolescents themselves that it is a panacea that can fully replace traditional clinical approaches, particularly among those 'at risk'.

There are a number of methodological issues common to the retrieved quantitative studies which, in part, may explain their modest and inconclusive findings. A key limitation is that the apparent nature, scope and degree of contact in youth–adult relationships is frequently unclear. This often means there is a risk of analyses treating as equivalent those with a true trusted adult relationship and those with a weaker or tokenistic relationship. Furthermore, cross-sectional study designs (which form the bulk of the retrieved quantitative evidence) cannot determine whether the trusted adult role precedes, and causes, any change in adolescent outcomes. These and other methodological limitations of quantitative studies are summarised in Appendix 1.

Qualitative (descriptive) studies

As summarised above and in Appendix 1, it is often difficult to reliably determine the presence and nature of a trusted adult relationship in studies that use quantitative methods. The definitions used in data-driven studies tend to be substantially briefer, reflecting practicalities including questionnaire design. Conversely, studies with qualitative methodologies are less often restricted to single brief definitions and have the capacity to expand upon themes and clarify meaning with participants. While it is rarer for qualitative studies to focus on specific concrete outcomes, a number of these articles provide relevant insight that clarifies some of the above issues arising from quantitative methodologies.

In stark contrast to the retrieved quantitative studies, qualitative studies more consistently conclude that trusted adults during adolescence can help achieve improved health and education outcomes. Some qualitative studies also offer more direct evidence of this association as adolescents have the opportunity to state explicitly that their improvement was because of a trusted adult (see examples in box below). '[Mentor] taught me that school's important. They're like don't slack off in your classes and whatever ... I used to not do my homework at all ... I brought up most of my grades.'²⁷

'I probably wouldn't have gone back to school ... he encouraged me to stay in school.'²⁸

'She helped me find confidence in myself, and helped me understand that I could do anything I set my mind to.'²⁹

'I thank the [mentoring] program for being here. It's a lot of help. It relieves stress ... I wasn't gonna die if I didn't have the [mentoring] program, but I was just really stressed out. But then, when [my counselor] came, I could just release, you know, all my problems.'³⁰

Box 1. Example quotations from qualitative studies providing direct evidence of an association between adolescent outcomes and trusted adult presence.

Qualitative studies find that trusted adults can improve outcomes across a wide range of contexts including universal mentoring programmes; targeted mentoring programmes (e.g. following violence-related injury or among socioeconomically deprived youth); adolescents in or leaving foster care; universal school-based adult support; and the role of family adults and 'very important' non-parental adults in the wider adolescent population. Within these settings positive impacts are seen on a range of outcomes predominantly relating to mental health and wellbeing, educational achievement and risk-taking behaviours. These studies also help clarify the specific impact of trusted adults within multi-component interventions, as it is often unclear from quantitative studies which aspect of the treatment has the most significant effect. For example, one qualitative study²⁷ found that adolescent females more frequently attribute improvement in academic

performance to one-on-one mentoring than they did a group-based intervention.

Qualitative studies provide deeper insight into the rare occasions where relationships with adults are associated with deterioration in outcomes, with these again concluding that this typically occurs in the context of poor-quality relationships. This observation again emphasises the importance of high-quality youth–adult relationships. For example, one study of youth leaving foster care in five European countries³¹ found that poorer academic prospects were linked to a perceived lack of adult interest or low expectations of the adolescents' ability. Echoing the findings from existing review-level literature, this literature also finds that youth experiencing frequent changes in care placements are less likely to succeed academically, particularly when this also involves moving to a different school, as this can further disrupt adult support networks.

While qualitative studies provide richer insight into the nature and impact of trusted adult relationships, methodological issues are also common to this literature which mean that caution is warranted when interpreting their findings. Chiefly, qualitative studies are open to biases in researchers' interpretation of observations and selective disclosure by participants, which could serve to exaggerate the frequency and extent of any positive impact. Qualitative studies also typically utilise relatively small sample sizes, which limits the confidence with which they can be extrapolated to the wider population.

Mixed-methods studies

Because of the methodological issues facing exclusively quantitative or qualitative studies discussed above, studies that employ a combination of both approaches stand to offer particularly valuable insight into the impact that trusted adults can have on adolescent outcomes. These studies also tend to more frequently yield evidence of a positive impact of the trusted adult role. For example, one such study³² examined the impact of naturally occurring mentorships over a 15-year period among a cohort of 2,495 young adults. Critically, this study used a robust qualitative procedure to identify those that had a trusted adult during adolescence, which involved a team of researchers reaching consensus on open-ended question responses. This study found that those with a trusted adult figure during adolescence went on to exhibit a broad range of improved outcomes including higher educational attainment, optimism and self-efficacy and fewer internalising symptoms.

Establishing trusted adult relationships

A common theme across the literature summarised above is that a stable, high-quality relationship is vital in order to achieve the potential benefits of the trusted adult role and avoid causing harm. The retrieved literature also makes it clear, however, that youth–adult relationships cannot always be taken at face value. Due to ambiguous definitions and labelling of the role, there is significant scope for variation in the actual quality, nature and frequency of youth–adult contact. As such, there is a danger of assuming that a young person's support needs are met if they report the mere presence of an adult figure. In order to allow policy makers and practitioners to make the most of the trusted adult role, the points below summarise barriers and facilitators to supportive youth–adult relationships observed across the retrieved literature.

Facilitators of trusted adult relationships:

- Youth able to choose their preferred adult.
- Genuine, empathetic and proactive support offered.
- Confidentiality.
- Reliability of adult (keeping promises, appointments etc.).
- Ability to raise any issue without judgement (importantly including taboo topics such as sexual relationships and substance use).
- Patience on behalf of youth and adult.
- Mutual respect between youth and adult.

- Structures or activities that promote regular, long-term engagement.
- Shared interests between youth and adult.
- Youth and adult matched on sociodemographic criteria (e.g. sex, ethnicity, socioeconomic status).
- A willingness of the adult to 'go the extra mile'.

Barriers to forming a trusted adult relationship:

- Overly formal relationship (narrowly defined role with strict, often professional, boundaries and overly restrictive rules and regulation).
- Labelling young person 'at risk'.
- Lack of trust.
- Perception that relationship is time-limited.
- Poor youth-adult communication.
- Youth fearful of 'opening up'.
- Youth feeling indebted to adult figure.

Conclusion

Given potential benefits observed in a broad range of settings, there is merit to pursuing wider adoption of the trusted adult role among adolescents in Scotland. One of the pitfalls surrounding this approach, however, relates to the definition and understanding of the role. It is trivial to simply state that adolescents should have a trusted adult, yet without full comprehension of what this role entails, and how to implement it, there is a danger that young people could find themselves within a tokenistic relationship. Based on the retrieved evidence, tokenistic relationships may have minimal positive impact and risks worsening outcomes in certain circumstances, especially for those who have been let down by adults in the past.

This briefing has aimed to clarify current ambiguity by summarising a large body of UK and international literature covering the past decade of research in this area. Although a common universal definition does not exist, a number of key traits possessed by trusted adults have been identified. It is important to emphasise the breadth of this role, with each of the identified traits being necessary, but not alone sufficient to constitute adequate support. For example, 'trust' alone is not necessarily an indicator of a deeper supportive bond, as this could merely reflect that young people believe the information or advice imparted upon them. (For illustration, consider what insight can be gained by asking in isolation the question 'are there teachers you can trust?')

While much of the retrieved literature indicates a positive impact of the trusted adult role, findings vary significantly according to study type, which raises concerns about the appropriateness of existing methodologies. Some of the least ambiguous and most direct evidence comes from studies that utilise qualitative methodologies, however these too aren't without limitations. This review, therefore, highlights that new longitudinal research in this area is required, which combines quantitative and qualitative methods, and uses robust youth-informed definitions to assess the true presence, extent and quality of the youth–adult relationship. Theory-based evaluation methods such as realist evaluation³³ are also particularly well suited to this type of complex social intervention.

It is clear that the greatest potential benefits of this role emerge where there exists a high-quality youth–adult relationship. The observed barriers and facilitators to achieving this emphasise the importance of Scotland's youth work sector. Founded on the principle of voluntary participation,³⁴ youth work is uniquely placed to provide young people with an opportunity to informally interact with a number of adults in a safe environment, within a structure that provides a basis for regular long-term contact. Indeed a 2018 study of youth work in Scotland³⁵ found evidence that this approach is consistently associated with improvement in adolescent health, academic performance and wider positive development, with trusted adult relationships being explicitly identified by youth as a contributory factor.

About NHS Health Scotland evidence briefings

NHS Health Scotland evidence briefings are produced by the organisation's Evidence for Action (EfA) team, often in collaboration with external academic, public- and third-sector partners as part of the Public Health Evidence Network (PHEN) in Scotland. This briefing was produced in collaboration with the Scottish Collaboration for Public Health Research and Policy (SCPHRP) which is based at the University of Edinburgh.

EfA briefings use systematic methods* to review the most appropriate evidence to provide a robust, quality assured and balanced assessment of interventions and approaches likely to be effective in improving health and reducing health inequalities. As such, users can have a high degree of confidence that the conclusions and/or recommendations are valid. Supporting literature reviews and other relevant background papers are often available. Please contact the person named on the inside cover of this briefing for further details.

* The highest degree of confidence can be drawn from the review of existing evidence already critically appraised and quality-assured and/or systematic overview and synthesis of existing research evidence from primary and/or review level studies. Protocols for each of these methods have been produced and are available on request.

Scottish policy link(s):

The Scottish Government. Delivering for today, investing for tomorrow: the Government's programme for Scotland 2018–2019. www.gov.scot/publications/delivering-today-investing-tomorrow-governments-programme-scotland-2018-19/pages/8/

The Scottish Government: Getting it Right for Every Child. www2.gov.scot/Topics/People/Young-People/gettingitright

The Scottish Government: Strategic Objectives. www2.gov.scot/About/Performance/scotPerforms/objectives

Appendix 1: Methodological limitations of quantitative studies

Issue 1

 Nature, scope and degree of adult support received unclear due to weak or ambiguous definitions of the trusted adult role. Some articles may inappropriately infer that a trusted adult relationship exists (e.g. do not confirm this from a young person's point of view).

Implications

- Youth with a true trusted adult relationship and those with a weaker or more tokenistic relationship are treated as equivalent for analytical purposes, which may dilute any apparent positive impact.
- Sensitivity of analyses limited where adult support is merely categorised as present or absent.

Examples

- Bird et al 2012³⁶
- Drevon et al 2016³⁷
- Yadav et al 2010³⁸
- Higginbotham et al 2010³⁹

Issue 2

• Cross-sectional study design.

Implications

- Often impossible to determine whether trusted adult relationship precedes (and causes) any change in observed outcomes.
- Trusted adult relationships may be proactively established or maintained where youth already experience some negative outcome, behaviour or emotion. This may serve to water down the apparent

association between the role and these outcomes as changes over time are not observable.

Examples

- Crosby et al 2017⁴⁰
- Vazsonyi & Snider 2008⁴¹
- Konishi & Saewyc 2014⁴²

Issue 3

• Randomised controlled trial design.

Implications

- Often impossible to exclude that control group youth have a trusted adult figure outside of the study context. As such there may, in reality, be little difference in the conditions experienced by control and intervention groups.
- Impossible to blind participants to group allocation (i.e. intervention vs control), meaning biases can emerge when outcomes are recorded.

Examples

- Herrera et al 2011⁴³
- Millenky et al 2014⁴⁴
- Ho et al 2017⁴⁵

Issue 4

• Small sample sizes (30% of quantitative studies use a sample size of less than 300).

Implications

 Limits ability to detect real effects, particularly when effects are small or analyses are conducted separately across social or demographic characteristics.

Examples

- Park et al 2016⁴⁶
- Larose et al 2010⁴⁷

References

¹ The Scottish Government. Delivering for today, investing for tomorrow: the Government's programme for Scotland 2018–2019. www.gov.scot/publications/delivering-today-investing-tomorrow-governments-programme-scotland-2018-19/pages/8/ (accessed 28 November 2018).

² The Scottish Government. Maternal and Child Health.
www.gov.scot/policies/maternal-and-child-health (accessed 28 November 2018).

³ Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation. Geneva: World Health Organization; 2017. www.who.int/maternal_child_adolescent/topics/adolescence/frameworkaccelerated-action/en/ (accessed 28 November 2018).

⁴ UNICEF. The adolescent brain: A second window of opportunity. www.unicef-

irc.org/publications/pdf/adolescent_brain_a_second_window_of_opportunity_ a_compendium.pdf (accessed 28 November 2018).

⁵ Currie C, Whitehead R, van der Sluijs W et al. Health Behaviour in Schoolaged Children: World Health Organization Collaborative Cross-National Study (HBSC): findings from the 2014 HBSC survey in Scotland. Child and Adolescent Health Research Unit (CAHRU), University of St Andrews. www.cahru.org/content/03-publications/04reports/hbsc nr14 interactive final.pdf (accessed 28 November 2018).

⁶ Inchley J, Currie D, Young T et al. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1 (accessed 28 November 2018). ⁷ Whitehead R, Berg C, Cosma A et al. Trends in adolescent overweight perception and its association with psychosomatic health 2002–2014:
Evidence from 33 countries. *Journal of Adolescent Health* 2017; 60(2): 204–211.

⁸ Audit Scotland. Children and young people's mental health. www.auditscotland.gov.uk/uploads/docs/report/2018/nr_180913_mental_health.pdf (accessed 28 November 2018).

⁹ Eisenstadt N. The life chances of young people in Scotland: A report to the First Minister. www.gov.scot/publications/independent-advisor-povertyinequality-life-chances-young-people-scotland-report (accessed 28 November 2018).

¹⁰ Couper S, Mackie P. Polishing the diamonds: Addressing Adverse Childhood Experiences in Scotland. www.scotphn.net/wpcontent/uploads/2016/05/2016_05_26-ACE-Report-Final2.pdf (accessed 28 November 2018).

¹¹ Marryat L, Frank J. The prevalence of Adverse Childhood Experiences in the general population of Scottish children in the first 8 years of life. www.scphrp.ac.uk/the-prevalence-of-adverse-childhood-experiences-in-thegeneral-population-of-scottish-children-in-the-first-8-years-of-life/ (accessed 28 November 2018).

¹² Sheehan P, Sweeny K, Rasmussen B et al. Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents. *Lancet* 2017; 309 1792–806.

¹³ The Scottish Government. Getting it Right for Every Child. www2.gov.scot/Topics/People/Young-People/gettingitright/wellbeing/nurtured (accessed 28 November 2018). ¹⁴ Glasgow City Health and Social Care Partnership. One good adult. https://glasgowcity.hscp.scot/news/film-clip-shows-benefit-one-good-adult (accessed 28 November 2018).

¹⁵ UK Government. Trusted Relationships Fund.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/684312/Trusted_Relationships_Fund_Prospectus.pdf (accessed 28 November 2018).

¹⁶ Mackenzie S. How to reduce youth crime and anti-social behaviour by going round in circles: A submission to IPPR's Britain's got brains competition. www.ippr.org/files/images/media/files/publication/2011/05/reducing_youth_crime_1660.pdf (accessed 28 November 2018).

¹⁷ Barnardos. Someone to care: Experiences of leaving care.
 www.barnardos.org.uk/someone_to_care_final_feb2014.pdf (accessed 28 November 2018).

¹⁸ Public Health Wales. Sources of resilience and their moderating relationships with harms from adverse childhood experiences. www.wales.nhs.uk/sitesplus/documents/888/ACE%20&%20Resilience%20Re port%20(Eng_final2).pdf (accessed 28 November 2018).

¹⁹ The Scottish Government. Protecting children and young people: What you can do to help if you are worried about a child or young person. www2.gov.scot/Publications/2005/01/20382/48304 (accessed 28 November 2018).

²⁰ PROSPERO International Prospective Register of Systematic Reviews. The relationship between a trusted adult and adolescent outcomes: A review protocol. www.crd.york.ac.uk/prospero/display_record.php?RecordID=76739 (accessed 28 November 2018).

²¹ Pringle J, Whitehead R, Milne D et al. The relationship between a trusted adult and adolescent outcomes: a protocol of a scoping review. *BMC Systematic Reviews* 2018; 7:207.

²² Hurd N, Sellers R. Black adolescents' relationships with natural mentors: associations with academic engagement via social and emotional development. *Cultural Diversity & Ethnic Minority Psychology* 2013; 19(1):76– 85.

²³ Bartle-Haring S, Slesnick N, Collins J et al. The utility of mentoring homeless adolescents: a pilot study. *The American Journal of Drug and Alcohol Abuse* 2012; 38(4):350–358.

²⁴ Kogan S, Brody G. Linking parenting and informal mentor processes to depressive symptoms among rural African American young adult men. *Cultural Diversity & Ethnic Minority Psychology* 2010; 16(3):299–306.

²⁵ Buchanan R, Bowen G. In the context of adult support: The influence of peer support on the psychological well-being of middle-school students. *Child* & Adolescent Social Work Journal 2008; 25(5):397–407.

²⁶ Davidson S, Adams J. Adversity and internalizing problems among rural Chinese adolescents: The roles of parents and teachers. *International Journal of Behavioral Development* 2013; 37(6):530–541.

²⁷ Deutsch N, Reitz-Krueger C, Henneberger A et al. 'It gave me ways to solve problems and ways to talk to people': Outcomes from a combined group and one-on-one mentoring program for early adolescent girls. *Journal of Adolescent Research* 2017; 32(3):291–322.

²⁸ Duke T, Farruggia S, Germo G. 'I don't know where I would be right now if it wasn't for them': Emancipated foster care youth and their important non-parental adults. *Children and Youth Services Review* 2017; 76:65–73.

²⁹ Johnson D, Gastic B. Natural mentoring in the lives of sexual minority youth. *Journal of Community Psychology* 2015; 43(4):395–407.

³⁰ Slater H, Mitschke D, Douthit P. Understanding qualities of positive relationship dynamics between adolescent parents and their school-based counselors. *Journal of Family Social Work* 2011; 14(4):354–368.

³¹ Jackson C, Cameron C. Leaving care: Looking ahead and aiming higher. *Children and Youth Services Review* 2012; 34(6):1107–1114.

³² Miranda-Chan T, Fruiht V, Dubon V, Wray-Lake L. The functions and longitudinal outcomes of adolescents' naturally occurring mentorships. *American Journal of Community Psychology* 2016; 57(1–2):47–59.

³³ Pawson R, Tilley N. *Realistic evaluation*. London: Sage; 1997.

³⁴ McGregor C. Universal youth work: A critical review of the literature. Edinburgh Youth Work Consortium and the University of Edinburgh. www.youthlinkscotland.org/media/1112/youth-work-literature-review-finalmay-2015.pdf (accessed 28 November 2018).

³⁵ Fyfe I, Biggs H, Hunter S et al. The impact of community-based universal youth work in Scotland. www.youthlinkscotland.org/media/3183/impact-of-community-based-universal-youth-work-in-scotland-november-2018.pdf (accessed 28 November 2018).

³⁶ Bird J, Kuhns L, Garofalo R. The impact of role models on health outcomes for lesbian, gay, bisexual, and transgender youth. *Journal of Adolescent Health* 2012; 50(4):353–357.

³⁷ Drevon D, Almazan E, Jacob S et al. Impact of mentors during adolescence on outcomes among gay young adults. *Journal of Homosexuality* 2016;
63(6):821–837.

³⁸ Yadav V, O'Reilly M and Karim K. Secondary school transition: does mentoring help 'at-risk' children? *Community Practitioner* 2010; 83(4):24–8.

³⁹ Higginbotham B, MacArthur S and Dart P. 4-H Mentoring: Youth and families with promise – adult engagement and the development of strengths in youth. *Journal of Prevention & Intervention in the Community* 2010; 38(3):229–243.

⁴⁰ Crosby S, Somers C, Day A et al. Examining school attachment, social support, and trauma symptomatology among court-involved, female students. *Journal of Child and Family Studies* 2017; 26(9):2539–2546.

⁴¹ Vazsonyi A and Snider J. Mentoring, competencies, and adjustment in adolescents: American part-time employment and European apprenticeships. *International Journal of Behavioral Development* 2008; 32(1):46–55.

⁴² Konishi C and Saewyc E. Still a target: Sexual diversity and power of caring. *School Psychology International* 2014; 35(5):504–515.

⁴³ Herrera C, Grossman J, Jauh T et al. Mentoring in schools: an impact study of big brothers big sisters school-based mentoring. *Child development* 2011; 82(1):346–361.

⁴⁴ Millenky M, Schwartz S and Rhodes J. Supporting the transition to adulthood among high school dropouts: An impact study of the National Guard Youth Challenge Program. *Prevention Science* 2014; 15(4):448–459.

⁴⁵ Ho F, Louie L, Wong W et al. A Sports-Based Youth Development Program,
Teen Mental Health, and Physical Fitness: An RCT. *Pediatrics* 2017;
140(4):e20171543.

⁴⁶ Park H, Yoon J and Crosby S. A pilot study of big brothers big sisters programs and youth development: An application of critical race theory. *Children and Youth Services Review* 2016; 61:83–89.

⁴⁷ Larose S, Chaloux N, Monaghan D et al. Working alliance as a moderator of the impact of mentoring relationships among academically at-risk students. *Journal of Applied Social Psychology* 2010; 40(10):2656–2686.