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Research Article

Addressing rates of low mood and anxiety among adolescent girls: Co-production of programme theories with adolescent girls and professionals

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Abstract

Background: From early adolescence, girls face greater risk of experiencing low mood and anxiety, with recent evidence that this may be worsening. This is increasingly recognised as a critical public health issue, with an imperative for research that meaningfully progresses our understanding of how to reduce the risk of these experiences, including research that asks adolescent girls themselves.

Aims: We set out to explore what adolescent girls think can be done to reduce rates of low mood and anxiety among their population, and to understand how such options can be enacted.

Design and methods: We adopted a coproduced qualitative design, conducting focus groups in 2022 with 32 adolescent girls aged 16–18 years in England. We analysed data with content analysis to construct candidate 'programme theories', or models for intervention, and refined these through discussion with four professionals.

Results: We produced five candidate programme theories: (A) social media education and campaigning, (B) school staff training and culture change on gender stereotypes, (C) comprehensive approach to sexual harassment in schools, (D) social hobby spaces in schools and/or communities and (E) relationally grounded whole-school approach to mental health and well-being. Guided by the Medical Research Council guidance for complex interventions, for each we describe required resources, activities, mechanisms, outcomes and key considerations for context and successful implementation.

Limitations: While the study offers valuable, coproduced insights into adolescent girls' mental health, limitations include a relatively small and self-selecting adolescent sample and under-representation of certain demographic groups, which may have meant some perspectives were not included; a small sample size of professional participants which may have limited discussion and affected transferability of insights across varied contexts and approaches to mental health provision; limited engagement with wider stakeholder groups which could have augmented and contextualised findings more deeply, and context-specific constraints such as recruitment in England only

and timing of data collection (shortly before high-stakes exams following COVID-19 restrictions) that may affect wider applicability.
Conclusions: These coproduced candidate programme theories provide valuable insights on opportunities to develop, extend and challenge the ways in which we currently work to improve the mental health of adolescent girls.
Future work: Future research should employ multimethod, participatory approaches across diverse populations and contexts to refine and test these youth-informed programme theories and explore their implementation in varied educational, social and cultural settings.
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Introduction

From early adolescence onwards, girls report greater rates of low mood and anxiety relative to boys, and from mid-adolescence are twice as likely to report depression.[1,2] This gender gap is understood to be attributable not to any one factor, but to the complex interplay of sex- and gender-based influences across affective, biological, cognitive, social, environmental and societal domains, which may fluctuate as girls and women pass through specific developmental and life stages (e.g., emotional reactivity, pubertal hormones, rumination, interpersonal stressors, gender-based violence and structural inequalities).[1,3–5] Evidence indicates that these rates have increased further among girls in recent years (e.g. [6–9]) and this may have been exacerbated by the COVID-19 pandemic.[10,11] Causes of such increases remain unclear, although potential explanations include aspects of social media engagement, increased sexualisation of adolescent girls, growing academic pressure, limited school emphasis on low mood and anxiety provision despite girls' vulnerability, and societal changes in how we discuss mental health (e.g. [6,12–14]). This is a substantial population health concern requiring further investigation and active public health efforts.[15–17] We note concurrent concerns about the mental health of transgender and non-binary adolescents, though these fall beyond the scope of this work. We also highlight that we use the gender-based language of *girls and women* inclusively throughout this piece but acknowledge that much of the literature we draw on uses sex-based (i.e. *female*) language and sampling approaches.

Understanding and guidance on how public health efforts can be harnessed towards improving this area of adolescent mental health is still developing. England's Department of Health and Social Care established the Women's Mental Health Taskforce in response to evidence of deteriorating mental health among women, and their final report[15] set out commitments across systems and strategic priorities, but focused only on adult women. The Women's Health Strategy for England[18] subsequently adopted a life course approach and includes ambitions towards better tailoring research, information and services focused on mental health among girls and women. For adolescent girls, this strategy emphasises wider available provision in schools (e.g. health education; whole-school approaches) and community systems (e.g. mental health services). It further acknowledges a need for action around body image and online engagement. At the time of writing, clarity on more specific actions resulting from this strategy is pending, and indeed, under a recent change of government, this specific strategy is to be renewed. The current strategy as of the time of writing does, however, recognise that more evidence around interventions that can support adolescent girls' mental health is necessary to guide decision-making, alongside a wider emphasis on girls' and women's voices within the development of health policies and provision.[18]

In order to generate evidence-based interventions, it is first imperative that we develop population-sensitive programme theories. The ways in which a given intervention is anticipated to work can be articulated through 'programme theory', which describes the mechanisms, components, targeted outcomes, implementation strategy and context, all of which together explain intervention functioning.[19] An intervention's mechanism is sensitive to contextual and social influences, meaning that the outcome of an intervention can be thought of as the result of both the mechanism *and* the context.[20] This principle can be captured in a context-mechanism-outcome configuration and reflects a realist approach to intervention design, implementation and evaluation, whereby the question is not whether that intervention works, but questions of 'what works, for whom, in what circumstances, how, why, and to what extent?'.[20] Moreover, complex systems theory emphasises the need for a holistic, rather than reductionist, approach to understanding and planning for how a given intervention will function in context, where both the intervention and the context can be recognised as inherently complex and dynamic in the real world.[19] There is also a need to explore the mechanisms by which unintended harmful consequences may occur within interventions, including for the target outcome and extraneous outcomes.[21]

Some school-based psychological programmes have been suggested as relevant to gender differences in adolescent mental health. For instance, the UK resilience programme evaluation noted short-term impact on depression scores among girls who were more deprived, low-attaining, or who began the intervention period with worse overall psychological health,[22] while a recent UK school-based evaluation noted greater improvement in emotional difficulties among girls after engagement in relaxation techniques.[23] However, more broadly, current evidence does not reliably investigate or demonstrate gender-specific effects of programmes that solely deliver mental health education in schools, and recent large systematic reviews and meta-analyses of school-based mental health interventions have not generally disaggregated outcome by gender.[24,25] This lack of robust evidence highlights a critical gap that ongoing research, including this study, seeks to address.

As we see ongoing public health concern and efforts around low mood and anxiety among adolescent girls, there is a need to engage key stakeholders – particularly adolescent girls themselves – in exploring opportunities. Public health efforts with a given population should begin with contextual exploration of how that population understands their needs.[19,26] Constructing contextually sensitive programme theories that respond to adolescent girls' conceptualisations of the problem *and* appropriate responses is therefore valuable for identification of opportunities for either new intervention development, or the adaption or rolling out of existing interventions. This principle, that youth voice is critical in adolescent mental health research and particularly in thinking about system and service change, increasingly features in adolescent mental health guidance and practice, including methods guidance, for example, from the National Institute for Health and Care Research (NIHR),[27,28] and priority setting with adolescents themselves (e.g. [29]). Yet, there are ongoing gaps in how such practices are adopted within adolescent mental health,[30] and such exploration and user input is habitually neglected in relation to women's health.[5,31] If we are to effectively respond to concerns about low mood and anxiety among adolescent girls, direct engagement to understand their views on this area of mental health, including appropriate public health responses, is critical.

Aims and research questions

This study is part of a wider project exploring adolescent girls' perspectives of low mood and anxiety in their population, including contributing factors and appropriate responses. We report elsewhere on girls' perceptions of contributors;[32] here, we address two research questions through analysis of discussions with adolescent girls, supplemented by engagement with professionals in adolescent mental health and public health policy, practice and research: (1) *What do adolescent girls think could be helpful actions that could lessen low mood and anxiety in their population?* and (2) *What are priority actions to lessen low mood and anxiety, and what approaches could be implemented to achieve these?* Our focus was on beginning with, and centring, the voices of adolescent girls themselves on potential 'actions', and to then augment and contextualise these through discussion with professionals to build a rounded understanding of opportunities and challenges in policy and practice. We adopted a holistic approach to enacting these questions; the factors and processes understood to underpin gender inequality in mental health are systemic, and interventions for this population risk failing to address those underlying factors.[33] Thus, we adopt a broad understanding of 'intervention' to accommodate possibilities of system change, and focus not on generating any single programme theory but on generating multiple potential approaches aligned with different parts of structural systems around adolescent girls.

Methods

Design and research team

We adopted a coproduced qualitative design, undertaking online focus groups with 16- to 18-year-old adolescent girls in England in May–August 2022, followed by an online workshop with professionals in November 2022. The study was coproduced with young women (author Pratyasha Nanda and another young person, Joanna Lam), who were central to the team throughout project design, implementation and interpretation, embedding youth voice to facilitate the project in better engaging with our participants and more meaningfully interpret their experiences. We met regularly as a team throughout the process to explore and reach decisions collectively, and young researchers were involved throughout data generation, analysis and interpretations as we will detail below. The project received approval from the University of Manchester's Research Ethics Committee (Ref: 2022–13633–23090). We pre-registered the project (Research Registry ID researchregistry7803) and shared a protocol and data generation documents via the Open Science Framework.[32] Our team comprises research academics, clinical academics, young people and youth engagement specialists. Most of us are women; some are from UK ethnic minority and Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual (LGBTQIA+) communities. Several team members bring lived experience of mental health difficulties. We have shared interests in adolescent mental health, and

expertise around gendered experiences, public health, intervention design and social justice. Some authors bring clinical backgrounds (Steven Pryjmachuk, Laura Anne Winter and Bernadka Dubicka), and the young researchers involved in the project (Pratyasha Nanda and Joanna Lam) bring existing experience working on other research projects and in child and youth mental health service training and provision.

Stage 1: focus groups with adolescent girls

Participants

We engaged with 32 diverse adolescent girls aged 16–18 years across England. We targeted this age group, as adolescent low mood and anxiety rates are highest here,[8] and we anticipated a fuller range of experience and more developed understandings of complex social issues.[34] We held eight focus groups (ranging 3–5 participants; mean = 4). We aimed for 40–45 participants, a moderate sample and group size for focus groups,[35] but the timing (a period where this age group had high-stakes exams) resulted in lower responsiveness from gatekeeper organisations and, in turn, adolescents. Guided by principles of 'information power' in qualitative research,[36] we evaluated the contributions and varied perspectives of our participants, concluding that a sample size of 32 was appropriate and sufficient. We used professional networks (e.g. Anna Freud Schools Division, National College Association, Further Education Tutorial Network) to recruit through post-16 education and youth settings in England (e.g. sixth forms, colleges, vocational centres, charities, youth clubs), asking organisations to disseminate an advert to 5–10 adolescent girls. We sought to adopt a gender-informed approach to recruitment, focusing on recruiting individuals who self-identified as girls and young women, though we note that no participants described themselves as transgender (see *Strengths and limitations* for reflections on this). Our recruitment materials used gendered language ('young women' and 'teenage girls') rather than sex-based 'female' language, and included an illustration of young women showing varied gender expressions. We also provided guidance to gatekeepers in schools and youth settings, emphasising that we wanted to hear from young women from diverse backgrounds, including girls who may express their gender in varied ways. We initially intended to use demographic information shared during sign-up to identify a diverse sample, as gender identity experiences intersect with wider identities, including ethnicity, class and sexual orientation,[37,38] but given slow recruitment, we invited all interested people to participate. We established informed written consent, providing written information alongside a video with focus group moderators (Rebecca Jefferson, Pratyasha Nanda and Joanna Lam).

Participants were aged 16 (n = 6), 17 (n = 24) or 18 (n = 2) years old. Of 32 participants, 15 described themselves as White, 9 as Asian, 4 as Black, 2 as Mixed and 2 as another ethnicity. In terms of sexual orientation, 20 participants described themselves as heterosexual, 5 as bisexual, 2 as gay or lesbian, 1 as queer, 1 as asexual, 1 as not sure and 2 preferred not to say. Thirteen identified as having no religion, seven as Christian, six as Muslim, two as Hindu, and the remaining three preferred not to say. Half (n = 16) shared having, at some time, sought help from mental health services, which we defined for participants as a wide range of available services including, for example, general practitioners, school counsellors and psychiatric services. Only two participants shared having been eligible for free school meals, and two shared having special educational needs. None shared that they were disabled; none shared that they were transgender. Participants were from most regions of England, with 11 from the North West, 10 from the South East, 3 from the East Midlands, 2 from the West Midlands, 4 spread across the East of England, London, the South West and Yorkshire, and 1 who opted not to share.

Data generation

Focus groups took place online via Zoom (Zoom Video Communications, San Jose, CA, USA), co-led by Rebecca Jefferson and a young co-researcher (Pratyasha Nanda or Joanna Lam), and lasted 63–78 minutes. Having young people co-lead these sessions was designed to minimise power dynamics, to facilitate inclusive discussions, and elicit insights grounded in young people's insights. We avoided including participants who had signed up from the same settings within the same focus groups, and established ground rules including around confidentiality and group dynamics. We provided a brief overview of current rates of low mood and anxiety among adolescent girls, and explored participants' perceptions on contributing factors, asking them to reflect back over their teenage years. Once these issues had been explored, we then asked what actions could reduce these rates. After some initial discussion, we facilitated groups in agreeing upon one or two actions to unpack further. We went through each in turn, unpacking with participants what they thought would help, how, what might indicate success in the short term or long term, and considerations around how this would need to function in practice to be successful, including challenges and barriers.

Analysis of focus groups

Authors Rebecca Jefferson and Ola Demkowicz used content analysis, adopting a latent lens in which we coded data within a pre-determined theoretical structure; we regularly debriefed with the wider team, including focused exploration with Pratyasha Nanda as a young researcher, to help us remain grounded in a youth perspective.[39] Specifically, we mapped each 'helpful action' discussed in focus groups onto a programme theory structure (*Table 1*), which was informed by a range of theory and guidelines, including Medical Research Council (MRC) guidance[19] and realist intervention theory.[20]

Initially this led to 16 discrete programme theories. We combined those with overlapping mechanisms, resulting in seven programme theories, and we set aside three of these, as they were raised in only one focus group and/or were underdeveloped in discussions, specifically: youth spaces specifically for girls, improving mental health helplines, and classroom opportunities for peer-based discussion of sensitive issues. This resulted in a preliminary set of four candidate programme theories for discussion with professionals, detailed later in this paper, and subsequently our discussion with professionals led to one programme theory being separated into two, resulting in a final set of five candidate theories, as presented in this piece.

Stage 2: workshop with professionals

Participants

We engaged professionals in adolescent mental health and public health policy, practice and research through targeted e-mail outreach, drawing upon existing direct and extended connections. As previously noted, we aimed to centre the voices of adolescent girls themselves, gathering their suggestions on potential 'actions'. Input from professionals then allowed us to contextualise and explore how these adolescent-driven ideas could be practically implemented, and build a comprehensive understanding of the opportunities and challenges in translating adolescents' suggestions into policy and practice. Despite aiming to engage 15–20 professionals, most of those approached had wider workload demands affecting availability. As a result, our professional workshop comprised four participants: a Senior Policy Advisor, a Public Health Manager, a Programme Manager in a child and youth mental health role, and an academic psychologist. While a larger sample would have been preferable, the smaller group size yielded sufficiently detailed and rich data. We established informed consent via an information sheet and consent form.

Data generation

The workshop took place online via Zoom, co-chaired by Ola Demkowicz, with support from Rebecca Jefferson and Pratyasha Nanda, and lasted 3 hours. We presented the research context, an overview of focus groups and formative findings, and the shortlisted set of candidate programme theories constructed with adolescent girls. Participants then independently completed a survey via Qualtrics (Qualtrics, LLC, Provo, Utah, USA), commenting on each candidate programme theory regarding whether the model makes logical sense, what considerations might be needed in practice, potential positive and negative consequences, and any similar/relevant approaches. We then engaged in group discussion of these points to better understand nuances, and finally held a group consensus task where professionals endorsed or rejected candidate programme theories to better understand priorities.

Analysis of professional workshop

Authors Rebecca Jefferson and Ola Demkowicz again used content analysis to analyse the workshop transcript, continuing use of a latent lens to incorporate professionals' survey and discussion data into the existing candidate programme theory structures to augment the initial perspectives and ideas established with adolescent girls. At this stage, in response to professional discussion, one of the original four theories presented to professionals was separated into two distinct theories, resulting in five programme theories, which we present next.

TABLE 1 Programme theory template used to code data

Programme theory structure				
Resources	**Input/components**	**Mechanisms**		**Outcomes**
The resources that are likely needed to implement action	The intervention component; that is, what is added to create change	How the input leads to the effect; how does it change what is happening in a useful way? If target population engages, what will happen?	Subprocesses that are triggered when target population engages with input	Primary outcomes; secondary outcomes
Context and implementation (including barriers/challenges to success).				

Trustworthiness and rigour

Our research design and analysis and interpretation was guided by Yardley's framework: sensitivity to context, commitment and rigour, transparency and coherence, and impact and importance.[40,41] We contextualised our interpretations in participants' own narratives as well as the sociocultural context of data and the wider theory, evidence, policy and practice. Commitment was demonstrated through in-depth focus group facilitation and a systematic latent analysis that went beyond surface-level insights. We maintained coherence by grounding our design within the research question, theoretical framing and epistemological stance. Transparency and coherence have been upheld through cyclical analysis and team discussions, thorough documentation, and detailed reporting. With respect to impact and importance, we have deeply considered findings within existing theory and literature, working to thoroughly understand where findings offer new, useful insights for both practice and research. We emphasise that our findings have been constructed to offer a credible and plausible account of participants' insights, rather than a definitive account.

Results and discussion: candidate programme theories

Five discrete candidate programme theories were developed:

A. Social media education and campaigning.
B. School staff training and culture change on gender stereotypes.
C. Comprehensive approach to sexual harassment in schools.
D. Social hobby spaces in schools and/or communities.
E. Relationally grounded whole-school approach to mental health and well-being.

Here, we examine each one discretely (though they operate across different and inter-related parts of systems and could be considered complementary and potentially integrated). For each, we describe the 'problem', and explore mechanism(s) of change, anticipated outcomes, and context and implementation considerations, including potential barriers, facilitators and unintended consequences. We contextualise findings within wider theory and evidence throughout, rather than in a discrete discussion section, to facilitate coherence in exploring each one. Due to pragmatic constraints, we are necessarily selective in using quotes and coverage of wider policy and literature context.

Candidate programme theory A: social media education and campaigning

Description of the problem

Adolescent participants shared that social media can encourage insecurity and comparison, which can affect mood and create worry: 'it just makes you feel like you're not doing what you should be, and then you'd feel anxious for trying to be someone like you see' (Gemma). They discussed this as inherent to social media, particularly visually driven platforms, and doubted that industry and government could mandate change: 'they're getting more profit so taking [features like filters] away, even though looking at the bigger picture it's going to help mental health, that's not their goal' (Louise). They therefore favoured supporting adolescent girls in navigating social media. Some evidence links social media usage and low mood and anxiety and wider poor mental health among adolescents, particularly girls (e.g. [42]) but findings are mixed (e.g. [43]). Research highlights that girls are more likely than boys to use highly visual social media formats,[44] and there are numerous wider mechanisms for gendered impacts, including that social media's focus on own physical appearance interacts with adolescent sociocognitive developmental changes (e.g. heightened self-consciousness) and complex gendered socialisation processes (e.g. an overemphasis on physical appearance of girls and women).[45] Quantitative (e.g. [46]) and qualitative evidence (e.g. [47]) support suggestions from our participants and this wider theoretical standpoint that heightened focus on appearance on social media impacts girls' body image, low mood and anxiety.

Programme theory

Table 2 presents a two-pronged approach of social media education in school/community spaces promoting awareness and skills, coupled with public health campaigning.

Mechanisms and outcomes

Adolescent participants suggested that awareness and skill promotion would reduce pressure and insecurity, and support positive change and openness, in turn reducing low mood and anxiety and improving body image and well-being: 'it would stop little girls trying to look a certain way and [...] obsessing over their body which could really affect their mental health' (Emmy).

Context and implementation

First, we consider education-based delivery. England's statutory guidance for relationships and sex education (RSE) and health education[48] outlines expectations for knowledge and awareness around online activities, including distinguishing online and physical worlds. This

TABLE 2 Candidate programme theory A: social media education and campaigning

Resource	Input/components	Mechanisms		Outcomes
Training materials; Campaign materials.	(1) Social media education in schools supporting adolescents in navigating social media, including managing expectations and self-care; (2) Campaigns that promote awareness that social media is curated.	Greater awareness that social media is not 'real' (e.g. Photoshop awareness); Increased digitally healthy behaviour skills.	Reduced conformity pressure; Reduced insecurity; Positive change in using social media (engagement and self-expression); Greater discussion and openness around navigating social media.	Primary: decreased low mood and anxiety; Secondary: improved body image and well-being.

Context and implementation: quality of materials; consideration of delivery agent and platform; beginning in childhood; uptake issues; target collective change; wider campaigning needed.

includes the impact of unhealthy comparison, online curation and being discerning. Suggested resources under this curriculum have included lesson plans primarily targeting Key Stage 3/4 pupils on social media. Previously, educators were primarily directed to such plans developed by Public Health England[49] (since replaced by the UK Health Security Agency and Office for Health Improvement and Disparities), and more recent resources include plans developed by the NHS and recommended by the Department for Health and Social Care.[50] Such lesson plans generally focus on awareness of potential impacts (including for well-being), understanding support, strategies to minimise/manage effects, and considerations around achieving balance in online and offline worlds, and cover (sometimes very briefly) issues including online stress, fear of missing out, screen time, cyberbullying and body image in a digital world. Thus, our candidate programme theory aligns somewhat with existing practice, although current resources are introduced once most adolescents are already established social media users, and function as one-off sessions covering many aspects, which may not effectively facilitate behaviour change. Evidence on the effectiveness of interventions around social media use delivered in school contexts is limited, though a recent Australian randomised controlled trial of an adolescent social media literacy programme found promising effects in depressive symptoms among girls, and not boys.[51]

Professional participants noted the importance of materials being designed (and updated) with young people and to keep pace with varied, rapidly changing social media formats (indeed, adolescent participants reflected their education felt dated). They noted that the individual delivering sessions would need understanding of mental health *and* social media, and perhaps ought to be pastoral or mental health staff. Participants noted that their own school-based discussions often started years after usage begins, given widespread usage prior to the recommended minimum age of 13,[52] highlighting a need for early input and ongoing reinforcement. The recommended resources noted above are generally designed for Key Stage 3 and Key Stage 4 (i.e. in secondary school), and so begin slightly before this recommended age. However, our participants emphasise a need for earlier provision, including in primary school key stages.

On campaigning, there are some campaigns from English public bodies on digital self-care, for example, 'digital 5 a day',[53] though none to our knowledge target adolescents, and various resources from charities and third-sector organisations (e.g. [54]). There is, perhaps, a need to assess possibilities for joined-up public health campaigning strategies, and for public bodies to lead or fund a more ambitious approach. Social media itself can be a powerful public health campaign tool with considerable reach, and could be used as a vehicle for such messaging, optimised through best practice guidance (e.g. [55]). We acknowledge irony in delivering interventions via social media, but leveraging such platforms to promote critical awareness allows messaging to be encountered organically and function as contextually embedded reinforcement.

Adolescent participants noted a challenge regarding the potential effectiveness of behaviour change messaging, suggesting that many adolescents know but do not use 'healthy' social media strategies: 'I've never pressed [I don't want to see this] because, you just don't think like that, you just scroll past it' (Phoebe). They also highlighted the need for *collective* rather than *individual* social norm changing, as it would be challenging to alter behaviours if peers and public figures continue. This may be particularly valuable in considering how social media intersects with developmental emphasis on physical appearance and gender socialisation overemphasising girls' appearance: that is, framing social media coping strategies in the context of collective identity, peer solidarity, and resisting gendered pressures could well be leveraged to better, and

indeed more honest, effect than individual messages of personal resilience.

This supports a two-pronged approach targeting school-based learning *and* wider messaging, targeting social media norms among peer groups (also suggested by Gordon *et al*.[51]). Some resources (e.g. from the NHS[50]) include suggested activities for students to work together to create resources with practical advice on social media and well-being, and it would be useful to understand the degree to which such activities effectively facilitate shifts on group norms. Finally, although participants expressed scepticism in industry change, they nevertheless emphasised campaigning for platforms to actively support healthy adolescent engagement. This reflects inherent ethical issues with placing individualised responsibility with affected populations, without addressing systemic issues:

> *Where does accountability lie with various different platforms and kind of putting the onus on young women to respond, react correctly to everything that's on social media doesn't feel like the fairest thing when social media is a bear trap that is set up a) for them to feel that way and b) for them to keep clicking.*
>
> *Amy, professional*

Candidate programme theory B: school staff training and culture change on gender stereotypes

Description of the problem

Adolescent participants described gendered norms being reiterated in classroom spaces, including encouragement for boys to be confident and assertive and girls to be quiet and reserved, the gendering of subjects, and negative responses, where girls are seen to diverge: '[boys] get praised […] they just have the confidence to say whatever they feel' (Kira); 'all the boys would ask me, "Oh, are you gonna play football today?" like making fun of me' (Louise). They reflected that such experiences may mean girls feel less supported, and impact confidence and self-esteem. Findings echo other qualitative studies: adolescent girls in Sweden described boys as more favoured and dominant in school;[56] young people in England described teachers inadvertently, and peers intentionally, promoting gender stereotypes;[57] and interviews with UK teachers highlight ongoing perpetuation of gender stereotypes.[58,59] Some evidence indicates associations between low mood and endorsement of stereotypical gender norms – for instance, that boys should be tough and girls modest[60] – while qualitative evidence suggests that such norms can elicit upset and worry for girls.[56,61]

Programme theory

Table 3 presents a candidate programme theory for training and culture change for school staff challenging gender stereotypes. We focus on secondary school, but professional participants emphasised that equivalent training would also be important for early years and primary stages, appropriately tailored to correspond to developmental stages and relevant practices.

Mechanisms and outcomes

Adolescent participants proposed that staff training could encourage shifts in beliefs and norms, in turn supporting more conscientious practices (e.g. staff messaging, approaches towards girls, responses to students' gender stereotyped comments and behaviours). Participants suggested that this could make girls feel generally more supported and empowered in education, and in turn reduce low mood and anxiety and improve school belonging and engagement.

Context and implementation

Such training is not, to our knowledge, routinely delivered to school staff, including within teacher training, though there have long been calls to embed this (e.g. [62]). Interviews with teachers highlight that few have experienced training

TABLE 3 Candidate programme theory B: school staff training and culture change on gender stereotypes

Resource	Input/components	Mechanisms		Outcomes
Training materials; Ongoing space for discussion; Policy development.	Training and ongoing culture exploration for school staff around gendered stereotypes in school contexts.	Staff beliefs and norms shift; Improved staff understanding of how stereotypes affect girls.	Changes in staff messaging; Staff encourage girls more consistently; Staff challenge gender stereotype comments and behaviours from adolescents; Girls feel more supported and empowered in education spaces.	Primary: decreased low mood and anxiety; Secondary: improved school belonging and engagement.

Context and implementation: importance of cultural change; ensuring engagement and buy-in with all staff (and volunteers); ongoing reinforcement within wider setting culture shift; recognition of wider sociocultural context.

around gender stereotypes and their implications, but emphasise apparent willingness to engage in such discourses.[58,59] Evidence supporting effectiveness is underdeveloped given sparseness in such practices. However, experimental evidence from a teacher training programme in Northern Uganda[63] highlighted that training can influence gender equality beliefs but may not translate into changes in practice, perhaps because tackling gender *norms* is a more complex, nuanced task. While the cultural context differs, such insights are valuable in understanding the nuances of such efforts in embedded social contexts.

The most central consideration for optimising context and implementation was the need for not only training but also an embedded cultural shift. Professional participants emphasised the need to go beyond only training teachers, instead including all staff, fostering buy-in over time, and ensuring ongoing reinforcement and discussion instead of one-off training: 'training is often "forgotten" once "completed" and for change to happen this would need frequent reinforcement' (Dan, professional). Indeed, Chinen and Coombes,[63] in reflecting on how gender stereotype education for teachers may not translate into changes in practice, highlight the critical importance of a wider school culture shift that is receptive to complex, nuanced gender discourses (as we discuss below).

Adolescent and professional participants emphasised that schools should acknowledge the wider sociocultural context of gender stereotypes, including in adolescents' home lives and media engagement: 'conversations with parents and carers […] can undermine everything you do in a school day' (Dan, professional). Professionals suggested exploring stereotypes with parents and carers would be helpful, a promising direction for future research. Though it was discussed less by our participants, it seems pertinent to note the increasing popularity of 'manosphere' social media content centring sexism and misogyny. Schools face ongoing challenges in navigating discussions about, and about the implications of, such content,[64,65] demonstrating how school discourses and norms are intricately embedded in wider ecosystems. This context highlights the importance of schools being mindful that change may be complex and take time, but that this does not negate the importance of their role as girls navigate this landscape: 'just alleviating and making women feel safer and more comfortable is the aim I think, rather than just completely eradicating inequality because it's so difficult to do that within society' (Kira).

We note potential unintended consequences here; exploring gender discourses with school staff might inadvertently *reinforce* binary essentialist views of gender, which assumes two categories – 'male' and 'female' – and assigns fixed, inherent characteristics to each. Teacher interviews indicate such beliefs,[58,59] including the notion that girls are naturally more emotionally open and thus better able to engage with support.[66] Thus, efforts to build nuanced discussion around gender and implications for school contexts could counterproductively endorse or compound a view of girls and boys as inherently 'different', encouraging oversight of the unique needs and experiences of each student, leading to inadequate or misdirected support for girls (and other gender groups).

Candidate programme theory C: comprehensive approach to sexual harassment in schools

This was initially subsumed within the previous programme theory within a wider construct of gendered issues in education, but following the workshop with professionals, we separated these into two separate theories, to reflect distinct needs and approaches and ensure that sexual harassment was not 'lost' given its seriousness.

Description of the problem

Some adolescent participants described a secondary school culture where it was common for some boys to confidently sexually harass girls, via direct comments and actions as well as indirect behaviours, such as collectively 'ranking' peers:

> *From year seven, you know, there's so much, like, the boys are confident enough to you know, like sexually, like, it, I guess it … [splutters, sighs] sexual harass […] boys will rank girls' like bodies and like ass specifically, like it's, it's, it's a, it's a like common thing.*
>
> *Sunita*

These participants felt that teachers did not seem to interpret these behaviours as harmful, saying they saw little consequence for boys even when teachers witnessed incidents, with girls themselves sometimes shamed for behaviours towards them: 'when a boy is like pinching a girl or something like that, and like physically doing things [teachers will …] be like "oh, stop flirting!", and blame the girl' (Sunita). Sexual harassment, defined as unwanted behaviour of a sexual nature with the purpose or effect of undermining someone's dignity or creating an intimidating, hostile or offensive environment,[67] is framed within a broader spectrum of 'harmful sexual behaviours', including abuse, assault and violence. Evidence indicates that experiencing sexual harassment is associated with low mood and anxiety (e.g. [68]). UK government and schools have faced increasing pressure to address such issues, following widespread attention from the UK anti-rape culture movement 'Everyone's Invited' and a subsequent

Office for Standards in Education, Children's Services and Skills (Ofsted) investigation concluding that sexual harassment is normalised and widespread in schools.[69] This commonly includes behaviours targeted towards girls but also towards boys and other gender groups.[69,70]

Programme theory

Table 4 presents a candidate programme theory for a comprehensive approach to addressing sexual harassment in schools. This is a three-strand approach: safeguarding training and policy, a whole-school culture, and embedded RSE discussions.

Mechanisms and outcomes

Participants described how clear training and policies could result in more appropriate identification of, and responses to, behaviours. We stress that 'awareness' relates not only to specific behaviours and how to intervene but also to underlying social norms. Through a joined-up approach challenging harmful norms *and* behaviours, participants suggested that behaviours would lessen, in turn reducing low mood and anxiety and improving equity in schools.

Context and implementation

From 2016, the UK government began incorporating harmful sexual behaviours from peers, not only adults, into school safeguarding guidance.[71] Current guidance denotes it as good practice for designated safeguarding leads (and deputies) to have a good understanding of such behaviours (potentially as part of training), that they should be incorporated into the whole-school approach, and use of a preventative approach, for example, through addressing of inappropriate behaviour.[72] However, many have argued that such policies focus on legal and procedural responsibility, and fail to effectively address the underlying social norms – shaped by students, staff and government – within school culture (e.g. [73,74]). Similarly, professional participants advocated for a holistic whole-school approach cohesively responding to incidents, while also challenging the normalisation of the beliefs and actions underpinning sexual harassment (and indeed wider harmful sexual behaviours): 'there is a risk, if it all falls under safeguarding, that it's only dealing with [...] when things go wrong' (Dan, professional). Despite recognition of the need for an integrated, culture-based approach (e.g. [69,74,75]), recent evidence indicates that schools are indeed more focused on procedural components of tackling sexual harassment, with far less focus on underlying cultural shifts.[74]

Adolescent participants mostly discussed the need for teacher training in how to intervene upon witnessing or becoming aware of sexual harassment; their emphasis on this underscores their frustration with a lack of tangible action and accountability. Ofsted[69] guidance noted that teachers should consistently intervene to reinforce a culture in which such behaviours are not tolerated, explaining their unacceptability and consistently enforcing consequences, including sanctions, to clearly demonstrate this. Yet, discussions with teachers highlight greater comfort with reporting than intervening.[75] Professional participants observed that the seriousness with which schools generally approach safeguarding means that it could be valuable to include explicit and comprehensive coverage of such peer-to-peer behaviours within safeguarding training. Current Department for Education[72] guidance advises that this should potentially be part of safeguarding training for designated safeguarding officers and their deputies; we stress the importance of *all* staff having clear understanding and confidence in enacting guidance.

However, as professional participants highlighted, sexual harassment often occurs out of sight of adults. Many adolescents are not inclined to report these experiences to adults, with concerns including anonymity, reputational damage, guilt, fear of not being believed, retaliation, perceived ambiguity in the behaviour, and mistrust of school systems.[70,74,75] This presents a challenge for enforcing a no-tolerance culture, and in turn for reporting and analysis, and for ensuring an appropriate estimation of scale.[75] This,

TABLE 4 Candidate programme theory C: comprehensive approach to sexual harassment in schools

Resource	Input/components	Mechanisms		Outcomes
Training materials; Policy development support; Enhanced RSE training and materials.	(1) Safeguarding training and policy; (2) Whole-school culture with shared understanding/approach; (3) Comprehensive and nuanced RSE (including teacher training).	Greater staff awareness, intervention and enforcement; Challenging norms; Greater awareness among young people.	Reduced sexual harassment	Primary: reduced low mood and anxiety; Secondary: greater equity in school spaces.

Context and implementation: safeguarding framing as critical; ensuring a whole-school approach; holistic approach to challenging normalisation of underlying beliefs and behaviours; ongoing reinforcement, including consistent intervention and consequences; development of existing RSE curriculum.

too, emphasises the need for a comprehensive approach, including preventative efforts.

The Department for Education[72] and Ofsted[69] do emphasise a preventative approach (though this too includes monitoring of patterns, hampered by under-disclosure), including through RSE. England's statutory RSE guidance advises coverage of related concepts and laws, including around harassment and other sexually harmful behaviours,[48] and RSE lessons could create space for meaningful, nuanced student education around consent, harmful behaviours and wider contexts. Discussions with adolescents have highlighted that boys are more likely to downplay and dismiss harassment as low-level, individualised incidents rather than part of wider contexts; RSE lessons create an opportunity to educate students on how such norms are part of a wider, serious spectrum, and facilitate solidarity with feminist movements among all students.[70,76] However, there are various complexities and limitations noted in England's current RSE approaches, including gaps in staff training and delivery, and legalistic, binary consent concepts misaligned with the complexity of adolescent social, sexual and romantic experiences.[77,78] Here, professional participants noted that RSE can be approached by staff in a perfunctory way, and that a pro-active approach may be needed to effectively challenge sexual harassment: 'schools can look at what's in their curriculum [...] it's in there in terms of what you should be doing, but it's whether it's given the focus that it needs' (Chrissy, professional).

Adolescent participants were sceptical about the effectiveness of RSE lessons for reducing behaviours; they emphasised the importance of also enhancing girls' agency and support, including peer support: 'it's gonna sound really cynical but I don't think [boys would] listen, and I think we should focus on girls' (Sunita). Practically, this means promoting multiple accessible help-seeking routes, recognising that adolescents will vary in use of formal and informal support. Creating an open climate is essential for students to feel comfortable using such routes, which requires awareness across support networks on appropriate approaches. This includes adolescents themselves understanding how to provide support and challenge harmful cultures. Horeck and Ringrose[76] stress the need for awareness and dialogue around sexual harassment to foster solidarity, noting that girls often encounter this mostly in digital spaces, while Lloyd and Walker[74] note low school engagement in empowering adolescents in such ways. Ongoing prioritisation and research is needed to understand how school systems can optimally involve the whole-school community in upholding a culture where sexual harassment is not tolerated; we direct readers to Blake and Lewis[75] and Lloyd and Walker[74] for focused examination of school practices and opportunities.

Candidate programme theory D: social hobby spaces in schools and/or communities

Description of the problem

Adolescent participants saw hobbies as beneficial for mental health, yet indicated that many adolescents do not have hobbies and are unaware of potential benefits: 'so many of my friends that just don't have a hobby that they can escape to and make them feel better, so I think making that more known to people will really help their mental health' (Jessica). They indicated that extracurricular options that they saw in their contexts were poor or limited, and often sport-dominated, which suggested to them that schools do not value a wide range of activities, and was seen as particularly affecting girls, given various factors that hamper girls' physical activity engagement. Research demonstrates that hobbies or social leisure activities are associated with lower low mood and anxiety in the short and long terms (e.g. [79,80]) with evidence that this operates at least partly by increasing peer belonging.[81] UK-based qualitative evidence also indicates a need for greater access to regular clubs and social activities.[82] Evidence that girls are more likely to feel excluded from sports-based activities in adolescence is well established, understood to be the result of persistent gender norm messaging positioning much physical activity as non-feminine and heightening body image concerns, at a time when girls are experiencing considerable physical changes in their bodies.[83,84] This emphasises a need for varied, gender-inclusive social hobby groups beyond those focused on physical activity, *and* effort to overcome such norms.

Programme theory

Table 5 outlines a candidate programme theory for social spaces focused on 'hobbies' or leisure time activities in schools and/or community spaces, with attention to gendered issues in how adolescents select and engage in hobbies.

Mechanisms and outcomes

Adolescent participants suggested that social hobby spaces could enable girls to discover and engage in activities without pressure, countering academic stress (although they did note that some activities encourage competitiveness, and that these should be actively minimised where possible), could facilitate emotion regulation and expression, provide space for distraction, and enhance peer connections. In turn, they suggested such shifts could reduce low mood and anxiety and improve well-being and social support.

TABLE 5 Candidate programme theory D: social hobby spaces in schools and/or communities

Resource	Input/components	Mechanisms		Outcomes
Materials for activity; Facilities and space; Funding to support organisation as needed; Training for girls to lead sessions; Compensation/payment for leaders.	Creation of varied social spaces focused on 'hobbies'.	Discover and engage in activities of interest without pressure; Engage in relaxed social spaces; Space for either reflection or distraction; Accessibility of varied activities for girls, including ensuring those typically male-dominated are designed in gender-inclusive ways.	Relieves academic stress; Creates space for emotion regulation and expression; Feeling cared for by school; Supports peer connection; Greater normalisation and engagement in male-dominated activities.	Primary: decreased low mood and anxiety; Secondary: improved social support among peers; improved well-being.

Context and implementation: both school and community options; inclusivity considerations; adolescent voice; difficult to challenge gendered engagement in hobbies.

Context and implementation

The UK Department for Digital, Culture, Media and Sports[82], under the previous government, recognised the importance of improving extracurricular engagement, committed to access for every young person by 2025 (though with no acknowledgement of potential gender disparities). As of 2025 this goal is now being furthered under the recent change of government through a focus on ensuring every child has access to enrichment (though again with no acknowledgement of gender disparities or needs).[85] To date, in recent years such goals have being actioned through funding community organisations and through charity organisations (e.g. #IWill, Youth Endowment Foundation), though it remains to be seen how the new focus on enrichment will be actioned practically. It is essential that such efforts are evaluated both for effectiveness but also for their accessibility and reach for adolescents, particularly girls.

Schools routinely provide extracurricular activities, though the extent and options vary vastly, for example, depending on local socioeconomic contexts;[86] and there have been calls for greater governmental support and benchmarks for schools.[87] Schools most widely offer physical activity and sport extracurriculars,[87,88] though, as noted, there are gendered disparities here. We echo calls for changes to the physical education curriculum and extracurricular activities to address gender disparities (e.g. [89]); various programmes designed to break down gendered stereotypes within sports, for example, Girls Active;[90] are steps in the right direction, though our findings suggest that there is still a long way to go in achieving change at scale in this area of girls' experiences.

Schools were noted as accessible, and useful for those from less financially secure families (though schools, too, have strained budgets): 'for many [...] school could be the correct place to offer social space due to the size of estates and resources available as well as the accessibility' (Amy, professional). Yet, community spaces are also needed for adolescents who would not benefit from extra time at school (e.g. due to difficulty with academic pressures, experiences of bullying or discrimination) and those excluded from school systems. Social prescribing models could facilitate community-based activities, and bring benefits of a broad spectrum of activities, and, thus, personalised choices. This is typically used as a response to mental health issues rather than preventatively, though recent evidence found social prescribing for children and young people to be effective in a preventative and early intervention role (e.g. [91]). The social prescribing evidence base continues to develop, and may provide valuable insights into how we can facilitate extracurricular opportunities with an early intervention focus.

Some adolescent participants suggested 'women only' clubs to create safe spaces free from judgement from boys: 'a lot of the reasons that girls get judged for things that they like is 'cause there's boys there' (Sunita). This need for a safe space has been highlighted in other literature. For example, Lewis *et al.*[92] found that women-only spaces, when facilitated as feminist spaces emphasising active listening and empathy, are seen as providing an environment where women feel free from the need to self-censor and from fear of potential threats. Conversely, several other adolescent participants reflected on separating gender groups as counterintuitive, advocating for breaking down stereotypes and shifting norms instead, and indeed, girls themselves can reiterate gendered norms.[93] The desire for gendered spaces was not consistently indicated, and could be a preference for *some* but not *all* girls, but is also a contextually specific consideration to be made depending on the specifics of the activity, setting, and cohort. Adolescent participants also noted that engagement in 'gendered'

activities might be limited for some by perceived risk of stigma and teasing, so efforts to widen available activities should be mindful of this.

Nevertheless, how the creation and running of such group hobby spaces can be made relationally safe is important. Our participants particularly emphasised the need for these spaces to offer an alternative to more pressurised and sometimes stressful spaces in their lives; it is important, therefore, to consider how such groups could inadvertently introduce further stress – both performance-based and socially-framed – if not managed carefully. It is, therefore, important to consider how hobby spaces not only serve as the provision of activities but also actively curate these spaces to limit issues of peer hierarchy, competition or exclusion that could undermine girls' sense of relational safety.

Adolescent and professional participants indicated that decisions around these spaces should be guided locally by girls' voices and preferences, including girls in choosing activities and determining how they will function. This could also help to challenge gender norms, where relevant, to specific activities; intervention evaluation in girls' sports found that involving girls as peer leaders in schools effectively challenged gendered engagement.[84]

Candidate programme theory E: relationally-grounded whole-school approach to mental health and well-being

Description of the problem

Adolescent participants emphasised schools as, in principle, ideal for mental health promotion and support, given the time adolescents spend there. However, they described secondary school as challenging, with intense academic pressure and limited autonomy: '[it would be better] if schools are more relaxed in general and teachers are not like shouting […it's] a hostile environment' (Hanna). This echoes concerns of competing academic and well-being agendas in secondary schools,[94,95] and misalignment with adolescent developmental needs.[96] Adolescent participants highlighted limitations in school-based mental health provision, echoing wider qualitative insights,[97] including repetitive curriculum-based taught sessions, conflation of mental health and mental ill health resulting in oversimplified provision and/or difficulty accessing meaningful support, and perceived shortfalls in teachers' capacities: '[in mental health lessons] they kind of said it in a way that was like "it's all in your power to change your mindset." […] You wouldn't feel comfortable saying it kind of like "you are weak"' (Stephanie).

Programme theory

In initial analysis, adolescent participants' varied reflections on school-based provision aligned, collectively, with a whole-school mental health approach integrated mental health and well-being provision across school culture, including universal, targeted and culture-based approaches.[98] We used this framing in our initial programme theory and in our professional workshop. However, further analysis highlighted two elements strongly emphasised by adolescent participants but largely absent in current national guidance documents:[98,99] (a) mutually respectful staff-student relational dynamics, which is only briefly acknowledged in guidance; and (b) reframing educational priorities (locally and nationally) to reduce pressure and improve student autonomy, generally absent in guidance. Such elements echo 'relational' approaches, centred around strong, respectful relationships, understanding and addressing power dynamics and systemic issues, and valuing students' voices and autonomy to create a supportive, equitable environment (e.g. [100,101]). This differs somewhat from a traditional whole-school mental health approach, which focuses on systematic integration of mental health practices. Relational approaches are not commonly focused specifically on mental health but on various outcomes, *including* mental health. Thus, *Table 6* presents a candidate programme theory for a 'relationally grounded' whole-school mental health approach, infusing the more traditional integrated whole-school approach with relational components.

Mechanisms and outcomes

Adolescent participants suggested that multifaceted approaches could improve awareness of mental health experiences (including low mood and anxiety) among the school community, and increase sharing and help-seeking via informal (peers, parents/carers) and formal (e.g. teachers, counsellors) routes. They emphasised that more equalised student–teacher relationships would encourage emotional openness, echoing Winter's[102] reflections of the value of egalitarian student–teacher relationships for adolescents' emotional well-being. Adolescent and professional participants observed that upskilling teachers around empathy, supportive behaviours and mental health awareness could be complemented by wider professional support routes (e.g. school counsellors, pastoral teams, child and adolescent mental health services) to facilitate appropriate responsiveness to varied experiences of low mood and anxiety. Participants suggested that rebalancing school dynamics and priorities could lower pressure, and improve academic engagement and outcomes alongside low mood and anxiety.

TABLE 6 Candidate programme theory E: relationally grounded whole-school approach to mental health

Resource	Input/components	Mechanisms		Outcomes
Training; Funding to support organisational elements; Upper-level support (e.g. government, local authorities).	Whole-school approach to mental health provision, including: Curriculum-based sessions; Social support networks within school (including counselling); Mutually respectful teacher–student relationships; Embedded changes to school priorities; Partnerships with family and community organisations around mental health.	Improved awareness around difficulties among students, parents/carers, teachers; Greater opportunity to talk about difficulties; Greater skills among teachers, complemented by professionals in school.	Greater opportunity for help-seeking and identification of difficulties; Reduced feelings of isolation among those experiencing difficulties; More effective conversations and signposting/referrals; Greater service engagement; Reduced school stress.	Primary: decrease in low mood and anxiety; Secondary: improved academic engagement and outcomes; improved well-being.

Context and implementation: complexity in practice; school buy-in; strengthening teacher–student relationships, role boundaries; wider community and service engagement.

Context and implementation

There is widespread uptake of the traditional whole-school mental health model (i.e. integrated mental health provision) given its policy emphasis. There is growing guidance for schools around relational practices and whole-school approaches (i.e. those emphasising interpersonal relationships, power dynamics and student autonomy), broadly originating from local authorities, charities and third-sector organisations rather than national government (e.g. [103,104]) and covering broadly varied practices, perhaps needing conceptual clarity and development. These models are not generally presented jointly as we do here.

Whole-school mental health approaches often become diluted in practice due to their complexity.[105,106] There are quality and depth considerations for each component *and* integration, and relational approaches introduce additional layers. For instance, adolescent participants reflected that mental health and related curriculum sessions often feel perfunctory ['they usually just put a PowerPoint up and they just say "okay that's it"' (Hanna)], and that insufficient trust or training disincentivises meaningful engagement with signposted help-seeking routes. Early evaluation of the Children and Young People's Mental Health Trailblazer programme,[107] including the creation of school mental health support teams (MHSTs), further highlighted issues around complexity and effectiveness, including that children in less well-integrated schools were less able to explain how their school cared for them.

Adolescent and professional participants emphasised whole-school buy-in, particularly around shifts in teacher–student relationships, including opportunities for deeper connections with strategically placed staff: 'maybe more the head of years to build a better relationship with the students […] like professional but more of like a friendly professional' (Katrina). However, participants recognised competing demands facing schools (including resourcing) and the importance of boundaries around teachers as support:

> *Obviously can go talk to your teacher, you know when you're feeling down or something happened, but they can't actually offer you any support because they're not qualified […] we can't expect teachers to sort of be able to do all that.*
>
> *Rana*

Professional participants explored how schools can connect to wider communities and relevant services, noting developing policy approaches around MHSTs and Integrated Care Boards. However, early evaluation of MHST provision highlighted access to wider services as a major concern, with particular implications for students with more complex or severe mental health needs.[107] Evaluation of School-Based Health Centers in the USA could offer interesting potential here; these function as whole-health (e.g. physical, mental, dental, reproductive) services embedded in schools, and studies indicate positive effects, including reduced disparities in use of mental health care.[108] Adolescent participants emphasised in-school services, such as through counselling provision, and expressed a preference for drop-in models rather than referrals or pre-booking, seemingly for immediate emotional support, rather than ongoing low mood and anxiety, and this too may not serve those with more serious needs: 'what if that day I'm feeling good I'm not having those problems, but if on Tuesday I'm feeling bad but then I have to book it for Friday, like [I'm] going to be fine then' (Rana). Participants explored how schools connect with parents/carers, often a key tenet in whole-school approaches, though adolescents identified complexities, including how involving parents/carers in emergent issues can feel like a trust violation, create worry and risk unintended consequences: 'students knew [that after attending a parent/carer assembly seemingly on emotional support] the

parents weren't going to help them, they were just going to shout at them' (Isa).

Implications and recommendations for decision-makers

Through discussions with adolescent girls and professionals, we produced five candidate programme theories that could be promising in addressing low mood and anxiety among adolescent girls:

A. Social media education and campaigning;
B. School staff training and culture change on gender stereotypes;
C. Comprehensive approach to sexual harassment in schools;
D. Social hobby spaces in schools and/or communities; and
E. Relationally grounded whole-school approach to mental health and well-being.

Some elements correspond to the current (and soon to be renewed) Women's Health Strategy for England,[18] such as the need for action around body image and online engagement, and the role of school-based mental health promotion, and thus could provide important insights for actioning this strategy. More generally, alignment with existing policy and practices varies. Some aspects align closely in principle; for instance, the education aspect of our social media campaigning programme theory corresponds to RSE expectations and resources, and so could clarify potential change mechanisms and enhance practices towards this (e.g. ensuring sufficient attention to online comparison, opportunities for youth cocreation of materials, keeping pace with industry change, delivery agent and timing considerations, potential for joined-up approaches). That our adolescent participants raised varied shortcomings in various current practices highlights an ongoing need for more work understanding how to improve the nature and implementation of such approaches. Conversely, some aspects either do not correspond clearly to routine practice (e.g. training and culture change around gender stereotypes) and/or echo critiques raised by other scholars (e.g. on limitations in current approaches to exploring sexual harassment in RSE). In such instances, our findings further underscore the importance of addressing these concerns and gaps in practice, and offer insight into potential approaches.

Current MRC guidelines[19] outline development and evaluation of complex interventions to consist of plan development, feasibility and pilot work, evaluation and implementation, recognising that these may not occur in a linear fashion. The candidate programme theories we outline constitute an exploration of plan development, and although we cannot authoritatively state that the approaches outlined here would function as suggested by participants, they offer promising opportunity to direct wider exploration. For instance, evaluative work of existing areas of practice linked to these candidate programme theories (e.g. current RSE approaches to discussing social media) combined with further development and feasibility and pilot work testing alternative, enhanced or entirely new approaches (e.g. more nuanced approaches to exploring consent with adolescents, school training around gender stereotypes) could offer valuable directions for enhancing practice. Exploring such opportunities will require joined-up approaches bringing together researchers, young people, policy-makers, practitioners (including education staff) and wider stakeholders, and would benefit from mobilisation via strategic initiatives and funding. For instance, we welcomed NIHR's recent funding streams focused on young women's mental health (which, as noted in our disclosures, funded this project), and encourage ongoing strategic investment to best implement the Women's Health Strategy for England[18] or any later iterations of such strategy. Such intervention-focused work needs to be complemented by ongoing groundwork research establishing opportunities for intervention, including, for instance, less-understood areas by which mechanisms by which social media links to youth mental health, or conceptualising relational educational approaches, as well as wider epidemiological research examining risk factors and mechanisms for adolescent girls' mental health.

Though we have presented these candidate theories discretely, they operate across both different and inter-related parts of systems and can be considered complementary and potentially integrated. Indeed, all are proposed at least in part for implementation in schools. For instance, culture change around gender stereotypes could support a considered approach to sexual harassment by drawing attention to their place within wider gender inequalities, while social hobby spaces could complement a relationally grounded whole-school approach by facilitating additional support and community beyond the classroom. Such interconnectedness also emphasises a need to push beyond singular relationships between mental health and any one factor or experience, and recognise the inter-relations between mental health and complex factors and systems, engaging in 'bigger picture' system change thinking in how we respond to rates of low mood and anxiety among adolescent girls. This also, however, raises considerations around underlying systemic

challenges that may impede successful implementation. This includes the resource demand that mental health provision places on schools, particularly given difficulties in accessing wider routes for supporting those with the most serious needs,[107,109] and a need to ensure that efforts do not oversimplify patterns of gendered experiences observed in UK schools.[66] Though schools are an ideal space for health promotion, it would also be beneficial to consolidate and expand knowledge and understanding of how these and other potential approaches to addressing low mood and anxiety among girls can extend beyond school spaces. For instance, families and wider communities can play important roles in girls around their social media engagement and navigate discussions around consent, and understanding of how this can be facilitated and work in tandem with school systems and wider services would be valuable. Indeed, the i-THRIVE framework[110,111] is centred around an integrated cross-sector approach to child and adolescent mental health provision that transcends any one mode of intervention and support, conceptualising groups by support needs instead of system needs – namely, support to maintain well-being; advice and signposting; focused goals-based input; more extensive and specialised goals-based help; and risk management (for those currently unable to benefit from treatment). As we explore, test and evaluate approaches to promoting girls' mental health, there is a need for these kinds of ambitious approaches that optimise implementation and recognise interconnected systems within girls' everyday lives, embracing the nuance and complexity inherent within and across these systems.

Strengths and limitations

The current study offers an important contribution to current efforts to understand and respond to rates of low mood and anxiety among girls. A major strength is our coproduction of candidate programme theories with adolescent girls, professionals and young researchers, aiding construction of contextually sensitive theories that can extend, optimise and challenge current practices. However, there are contextual aspects to our sampling to be aware of. Guided by 'information power' principles for qualitative research,[36] our sample size of 32 allowed rich and varied contributions to discussions, yet a greater sample size would have inevitably yielded more comprehensive demographic representation as well as more detailed insight. Though our recruitment approach was designed to engage adolescent girls from a range of backgrounds, participants were self-selecting to some extent – expressing interest and opting in through opportunities offered by schools and youth settings. It is possible that those less inclined to participate in this kind of research may have offered different perspectives or priorities. Our participants are in England, and applicability may vary or necessitate alternative considerations within other national contexts. Participants were aged 16–18 years, and predominantly clustered around the age of 17, and their focus on opportunities for change that extended into primary and secondary school contexts warrants further exploration of these programme theories with those younger age groups. Participants were recruited based on self-identified gender as adolescent girls, although no participants described themselves as transgender when asked, and, therefore, the findings reflect cisgender girls' perspectives. Future research should include transgender girls, and indeed seek to understand where cisgender and transgender girls' needs may converge and diverge. One reason for this may have been that our use of gender-based language rather than sex-based language, though *implying* our focus on self-identification, did not *explicitly* state this, and a clearer explicit statement on self-identification and transgender inclusivity could have better communicated this. We saw good engagement with girls from various ethnic and religious backgrounds and from LGBTQIA+ communities overall, but those who have been eligible for free school meals or who are disabled. Given that gender identity experiences are shaped through intersection with other areas of lived experience, it is critical that the programme theories are translated with sensitivity to the specific contexts in which they are being used. Further exploration of these ideas within a broad range of communities is needed to understand how they can best meet needs within and across varied contexts. This should include both groups less represented in our sample – such as young people eligible for free school meals, who may face distinct structural and social challenges – and groups that are represented but whose experiences merit more targeted investigation. For instance, girls from UK ethnic minority backgrounds may encounter unique forms of challenges on social media, including the frequent promotion of Eurocentric beauty ideals, which may shape their experiences of self-image and comparison, and it is necessary for social media education efforts to be mindful of such experiences. This also includes advancing these programme theories through exploration with other gender groups also; for instance, to better understand how social media education can effectively cover gendered experiences online, and to understand how strategies towards reducing harmful sexual behaviours can effectively challenge social norms across the student cohort. We also did not collect in-depth information on school types, and we recognise that different kinds of school contexts – say, comprehensive versus grammar schools, or mixed-sex versus single-sex schools – may influence aspects of the

school experiences explored with participants in ways that we were not able to interrogate.

Timing, too, may have shaped the nature of discussions; focus groups were conducted shortly before the period of high-stakes exams that many in this age group are navigating, and took place in 2022, following a period of intense COVID-19 pandemic restrictions. Although we asked participants to reflect back over their teenage years, it is possible that such timing has shaped aspects of their priorities in discussions; for instance, a focus on the need for school to be a more holistic environment may have been brought into sharper focus by these contexts.

Our professional group was smaller in size than anticipated, with just four participants, which potentially limited discussion scope, although it did create space for particularly in-depth discussions. Though our professional participants did bring a range of relevant expertise and perspective, a larger range of voices would have been valuable here, particularly given the scope of the different programme theories covered here. We also did not engage with wider stakeholders such as parents/carers; further research should explore varied stakeholder perspectives on these and other potential opportunities. For data collection, focus groups were appropriate but may have meant that some perspectives were dominant or unelicited, and more extended engagement (e.g. through extended participatory action approaches) could yield more advanced programme theories. Further engagement through methods such as observations, interviews and questionnaires could also have allowed further interrogation of proposed theories and their practical application. Continued, multimethod exploration of these areas with varied stakeholders would help to further advance knowledge and understanding around how these theories might be effectively executed in practice.

The focus on coproducing programme theory with girls is a key focus of this research and has offered valuable insights, but does carry some inherent limitations. Programme theory was a useful lens for exploring intervention approaches but may be less intuitive and/or raise tensions for more humanistic areas of practice, though we emphasise that key features of programme theories still hold relevance to those groups (e.g. opportunities to optimise relational approaches towards mental health outcomes may be a valuable perspective to understand from young people and professionals). We also sought to work with girls themselves to steer areas they felt would be beneficial, and so did not undertake a comprehensive literature or system review of wider school- and community-based intervention approaches to promoting adolescent mental health and how such provision may affect girls specifically. Future research documenting such interventions and programmes in a broader, overarching review would be valuable. Further, although our programme theories were built with a specific focus on low mood and anxiety, girls consistently situated these within a wider set of mechanisms and contextual factors, such as self-esteem and body image, academic engagement and school belonging, educational pathways and transitions, gender inequalities in school contexts, exclusion from male-dominated spaces, sexual harassment and peer social support. In our study, these were examined as contributing mechanisms or sites of intervention, rather than as standalone outcomes. Future research could more directly evaluate these domains themselves, alongside their intersections, to build a fuller understanding of the gender mental health gap and to extend intervention models to address developmental and structural challenges.

The involvement of young researchers within the project was a key strength. Their input in developing materials for recruitment and data generation strengthened an inclusive and youth-friendly approach. Their active roles in focus group sessions facilitated young people's engagement in discussions and allowed them to follow up on areas of discussion that we may not have examined as in-depth without their insights. Pratyasha Nanda's role in analysis as a debriefing partner was valuable in ensuring that as we brought in theoretical frameworks to build programme theories, we remained grounded in the values and perspectives explored within the focus groups, and to ensure that our interpretations and suggested applications remained aligned with a youth perspective. The project was ultimately small-scale and so had only two young researchers attached, and later, for the analysis, only Pratyasha Nanda was able to be actively engaged, and it may be that in a larger team – such as a youth advisory group – other insights may have been explored through discussions in terms of application to wider practice.

Concluding remarks

The five programme theories we developed together with adolescent girls and professionals offer potentially promising approaches to improving the mental health of adolescent girls. The insights shared by adolescent girls in this study make an important contribution to our understanding of how girls' mental health might be improved, particularly given the limited meaningful engagement with girls themselves in shaping these conversations in previous explorations. By offering conceptual tools grounded in their lived experiences, the study provides a foundation

for informing and adapting future interventions, particularly those that prioritise embedded, upstream strategies for prevention and promotion, including system-level reform. While some align with existing policies and can extend and challenge current approaches, others highlight important gaps that need addressing, and these warrant further exploration and development to further extend our knowledge and understanding of how they can be further refined to best function in practice. We offer the programme theories here as provisional, youth-driven and theoretically informed frameworks for opportunities to improve adolescent girls' mental health; further research is needed to explore opportunities for new intervention development or the adaption or rolling out of existing interventions. This may include, for instance: the formal mapping of existing systems and practices; participatory action research approaches that can (re)imagine these and other approaches to promoting girls' mental health through more sustained youth engagement; comparative designs that allow examination of how the implementation and experience of such practices may vary across contexts and demographic groups; and feasibility and pilot trials.

Further developing and implementing the approaches described here as well as other approaches that focus on reducing low mood and adolescent girls will require collaboration across schools, families, communities and policy-makers to construct comprehensive and interconnected strategies to effectively support girls' mental health.

Additional information

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Data-sharing statement

Due to the nature of consent with our participants relating to ethics and privacy, there are no data that can be shared.

Ethics statement

The project received approval from the University of Manchester's Research Ethics Committee 1 on 29 April 2022 (Ref: 2022-13633-23090). This project has been conducted in accordance with the World Medical Association Declaration of Helsinki.

Information governance statement

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Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at https://doi.org/10.3310/GJOD1728.

Primary conflicts of interest: Lucy Foulkes has written two books for general audiences, sometimes gives paid talks on youth mental health, and sits on some scientific advisory boards for research studies. Steven Pryjmachuk is an unpaid Non-Executive Director for Six Degrees Social Enterprise, a Community Interest Company providing services for common mental health problems

in the general population. Bernadka Dubicka notes wider grants and contracts from NIHR, UKRI, and the Association for Child and Adolescent Mental Health, support for attending meetings and/or travel with the Royal College of Psychiatrists and Wiley, is the Chair of the trial steering committee for a self-harm trial, and treasurer for the Child and Adolescent Psychiatry (CAP) Section and Board of the European Union of Medical Specialists (UEMS). Laura Anne Winter notes having edited a number of books for Sage in psychology and therapy, and is the Deputy Chair of the British Psychological Society Training Committee in Counselling Psychology. Liz Neill has employed and managed the Young Researchers involved in the project, with payments made to Common Room North Ltd to bring expertise on lived experience, and has covered some in person meetings. Rhiannon Evans is a member of the Scientific Advisory Board for NIHR-funded research studies, and a scientific member of the NIHR Public Health Research programme funding committee.

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This article was published based on current knowledge at the time and date of publication. NIHR is committed to being inclusive and will continually monitor best practice and guidance in relation to terminology and language to ensure that we remain relevant to our stakeholders.

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List of abbreviations

LGBTQIA+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual
MHST	mental health support team
MRC	Medical Research Council
NIHR	National Institute for Health and Care Research
Ofsted	Office for Standards in Education, Children's Services and Skills
RSE	relationships and sex education

References

1. Kuehner C. Why is depression more common among women than among men? *Lancet Psychiatry* 2017;**4**:146–58.
2. McLean CP, Asnaani A, Litz BT, Hofmann SG. Gender differences in anxiety disorders: prevalence, course of illness, comorbidity and burden of illness. *J Psychiatr Res* 2011;**45**:1027–35.

3. Hyde JS, Mezulis AH, Abramson LY. The ABCs of depression: integrating affective, biological, and cognitive models to explain the emergence of the gender difference in depression. *Psychol Rev* 2008;**115**:291–313.
4. Hyde JS, Mezulis AH. Gender differences in depression: biological, affective, cognitive, and sociocultural factors. *Harv Rev Psychiatry* 2020;**28**:4–13.
5. Patalay P, Demkowicz O. Don't mind the gap: why do we not care about the gender-gap in mental health? *Child Adolesc Ment Health* 2023;**28**:341–3.
6. Fink E, Patalay P, Sharpe H, Holley S, Deighton J, Wolpert M. Mental health difficulties in early adolescence: a comparison of two cross-sectional studies in England from 2009 to 2014. *J Adolesc Health* 2015;**56**:502–7.
7. Lessof C, Ross A, Brind R, Bell E, Newton S. *Longitudinal Study of Young People in England Cohort 2: Health and Wellbeing at Wave 2*. London: Department for Education; 2016.
8. Sadler K, Vizard T, Ford T, Goodman A, Goodman R, McManus S, *et al*. *Mental Health of Children and Young People in England, 2017*. NHS; 2018.
9. National Health Service Digital. *Mental Health of Children and Young People in England, 2023 – Wave 4 Follow up to the 2017 Survey*. NHS; 2023.
10. Magson NR, Freeman JYA, Rapee RM, Richardson CE, Oar EL, Fardouly J. Risk and protective factors for prospective changes in adolescent mental health during the COVID-19 pandemic. *J Youth Adolesc* 2021;**50**:44–57.
11. Stroud I, Gutman LM. Longitudinal changes in the mental health of UK young male and female adults during the COVID-19 pandemic. *Psychiatry Res* 2021;**303**:114074.
12. Bor W, Dean AJ, Najman J, Hayatbakhsh R. Are child and adolescent mental health problems increasing in the 21st century? A systematic review. *Aust N Z J Psychiatry* 2014;**48**:606–16.
13. Demkowicz O, Jefferson R, Foulkes L, Lam J, Pryjmachuk S, Evans R, *et al*. Adolescent girls' explanations of high rates of low mood and anxiety in their population: a co-produced qualitative study. *BMC Womens Health* 2025. https://doi.org/10.1186/s12905-024-03517-x
14. Keyes KM, Platt JM. Annual research review: sex, gender, and internalizing conditions among adolescents in the 21st century – trends, causes, consequences. *J Child Psychol Psychiatry* 2023;**65**:384–407.
15. Department of Health and Social Care. The Women's Mental Health Taskforce: Final report. Department of Health and Social Care. URL: https://assets.publishing.service.gov.uk/media/5c18e0f0ed915d0b8a31a424/The_Womens_Mental_Health_Taskforce_-_final_report1.pdf (accessed 8 December 2026).
16. Department for Education. *State of the Nation 2019: Children and Young People's Wellbeing - Research Report*. London: Department for Education; 2019.
17. Ford T. Editorial perspective: why I am now convinced that emotional disorders are increasingly common among young people in many countries. *J Child Psychol Psychiatry* 2020;**61**:1275–7.
18. Department of Health and Social Care. *Women's Health Strategy for England*. Department of Health and Social Care; 2022.
19. Skivington K, Matthews L, Simpson SA, Craig P, Baird J, Blazeby JM, *et al*. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *BMJ* 2021;**374**:n2061.
20. Pawson R, Tilley N. *An Introduction to Scientific Realist Evaluation*. London: SAGE Publications Ltd; 1997.
21. Bonell C, Jamal F, Melendez-Torres GJ, Cummins S. 'Dark logic': theorising the harmful consequences of public health interventions. *J Epidemiol Community Health* 2015;**69**:95–8.
22. Challen A, Noden P, West A, Machin S. *UK Resilience Programme Evaluation: Final Report*. London School of Economics; 2011.
23. Deighton J, Thompson A, Humphrey N, Thornton E, Knowles C, Patalay P, *et al*. *Effectiveness of School Mental Health and Wellbeing Promotion: Universal Approaches in English Primary and Secondary Schools*. Department for Education and Government Social Research; 2025.
24. Hayes D, Deniz E, Nisbet K, Thompson A, March A, Mason C, *et al*. Universal, school-based, interventions to improve emotional outcomes in children and young people: a systematic review and meta-analysis. *Front Child Adolesc Psychiatry* 2025;**4**:1526840.
25. Agteren J, Iasiello M, Lo L, Bartholomaeus J, Kopsaftis Z, Carey M, Kyrios M, *et al*. A systematic review and meta-analysis of psychological interventions to improve mental wellbeing. *Nat Hum Behav* 2021;**5**:631–52.
26. Moore GF, Evans RE, Hawkins J, Littlecott H, Melendez-Torres GJ, Bonell C, Murphy S. From complex social interventions to interventions in complex social systems: future directions and unresolved questions for intervention development and evaluation. *Evaluation (Lond)* 2019;**25**:23–45.
27. Medical Research Council. *Public Involvement and Engagement*. 2024. URL: www.ukri.org/what-we-do/

public-engagement/public-engagement-mrc/ (accessed 23 August 2024).

28. Staniszewska S, Denegri S, Matthews R, Minogue V. Reviewing progress in public involvement in NIHR research: developing and implementing a new vision for the future. *BMJ Open* 2018;**8**:e017124.
29. Taylor A, McMellon C, French T, MacLachlan A, Evans R, Lewis R, *et al*. Defining research priorities for youth public mental health: reflections on a coproduction approach to transdisciplinary working. *Health Res Policy Syst* 2022;**20**:1–14.
30. Fazel M, Hoagwood K. School mental health: integrating young people's voices to shift the paradigm. *Lancet Child Adolesc Health* 2021;**5**:156–7.
31. Mental Health Foundation. *While Your Back was Turned: How Mental Health Policymakers Stopped Paying Attention to the Specific Needs of Women and Girls*. Mental Health Foundation; 2017.
32. Demkowicz O, Foulkes L. *INSIGHT: A Co-produced Qualitative Exploration of Young Women's Perspectives on Psychological Distress in Their Population and Priority Actions for Responding*. 2023. URL: https://fundingawards.nihr.ac.uk/award/NIHR135295 (accessed 24 November 2025).
33. Abel KM, Newbigging K. *Addressing Unmet Needs in Women's Mental Health*. London: British Medical Association; 2018.
34. Smetana JG, Turiel E. *Moral Development During Adolescence*. Oxford: Blackwell Publishing; 2006.
35. Nyumba TO, Wilson K, Derrick CJ, Mukherjee N. The use of focus group discussion methodology: insights from two decades of application in conservation. *Methods Ecol Evol* 2018;**9**:20–32.
36. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. *Qual Health Res* 2016;**26**:1753–60.
37. Cho S, Crenshaw KW, Mccall L. Toward a field of intersectionality studies: theory, applications, and praxis. *Signs* 2013;**38**:785–810.
38. Shields SA. Gender: an intersectionality perspective. *Sex Roles* 2008;**59**:301–11.
39. Kleinheksel AJ, Rockich-Winston N, Tawfik H, Wyatt TR. Qualitative research in pharmaceutical education: demystifying content analysis. *Am J Pharm Educ* 2020;**84**:7113–37.
40. Yardley L. Demonstrating Validity in Qualitative Psychology. In Smith JA, editor. *Qualitative Psychology: A Practical Guide to Research Methods*. 3rd edn. London: SAGE Publications Ltd; 2015. pp. 257–72.
41. Yardley L. Dilemmas in qualitative health research. *Psychol Health* 2000;**15**:215–28.
42. Booker CL, Kelly YJ, Sacker A. Gender differences in the associations between age trends of social media interaction and well-being among 10–15 year olds in the UK. *BMC Public Health* 2018;**18**:321.
43. Panayiotou M, Black L, Carmichael-Murphy P, Qualter P, Humphrey N. Time spent on social media among the least influential factors in adolescent mental health: preliminary results from a panel network analysis. *Nat Ment Health* 2023;**1**:316–26.
44. Anderson M, Jiang J. *Teens' Social Media Habits and Experiences*. Washington: Pew Research Center; 2018.
45. Choukas-Bradley S, Roberts SR, Maheux AJ, Nesi J. The perfect storm: a developmental–sociocultural framework for the role of social media in adolescent girls' body image concerns and mental health. *Clin Child Fam Psychol Rev* 2022;**25**:681–701.
46. Rodgers RF, Slater A, Gordon CS, McLean SA, Jarman HK, Paxton SJ. A biopsychosocial model of social media use and body image concerns, disordered eating, and muscle-building behaviors among adolescent girls and boys. *J Youth Adolesc* 2020;**49**:399–409.
47. Papageorgiou A, Fisher C, Cross D. 'It just sends the message that you're nothing but your body' a qualitative exploration of adolescent girls' perceptions of sexualized images on social media. *Sex Cult* 2022;**27**:482–3.
48. Department for Education. *Relationships Education, Relationships and Sex Education (RSE) and Health Education: Statutory Guidance for Governing Bodies, Proprietors, Head Teachers, Principals, Senior Leadership Teams, Teachers*. Department for Education; 2019.
49. Public Health England. *Better Health: Every Mind Matters*. Public Health England; 2024.
50. National Health Service. *Social Media – KS3 and KS4 Lesson Plan*. NHS; 2024.
51. Gordon CS, Jarman HK, Rodgers RF, McLean SA, Slater A, Fuller-Tyszkiewicz M, Paxton SJ. Outcomes of a cluster randomized controlled trial of the some social media literacy program for improving body image-related outcomes in adolescent boys and girls. *Nutrients* 2021;**13**:3825.
52. Children's Commissioner. *Digital Childhoods: A Survey of Children and Parents*. London: Children's Commissioner; 2022.
53. Children's Commissioner. *Digital 5 a Day*. URL: www.childrenscommissioner.gov.uk/digital/5-a-day/ (accessed 23 August 2024).
54. Young Minds. *Social Media and Mental Health*. URL: www.youngminds.org.uk/young-person/coping-with-life/social-media-and-mental-health/ (accessed 23 August 2024).

55. Hunt I, Linos' E. Social media for public health: framework for social media–based public health campaigns. *J Med Internet Res* 2022;**24**:e42179.

56. Einberg EL, Lidell E, Clausson EK. Awareness of demands and unfairness and the importance of connectedness and security: teenage girls' lived experiences of their everyday lives. *Int J Qual Stud Health Well-being* 2015;**10**:27653.

57. Skipper Y, Fox C. Boys will be boys: young people's perceptions and experiences of gender within education. *Pastor Care Educ* 2022;**40**:391–409.

58. Gilchrist E, Zhang KC. Gender stereotypes in the UK primary schools: student and teacher perceptions. *Int J Educ Reform* 2022;**33**:270–94.

59. Sheehy A, Solvason C. Teaching lads' lads and girly-girls: why recognising and tackling gender stereotypes still matters in education. *Educ Rev* 2023;**53**:794–805.

60. Koenig LR, Blum RW, Shervington D, Green J, Li M, Tabana H, Moreau C. Unequal gender norms are related to symptoms of depression among young adolescents: a cross-sectional, cross-cultural study. *J Adolesc Health* 2021;**69**:S47–55.

61. Wiklund M, Bengs C, Malmgren-Olsson EB, Öhman A. Young women facing multiple and intersecting stressors of modernity, gender orders and youth. *Soc Sci Med* 2010;**71**:1567–75.

62. Younger M, Warrington M. The gender agenda in primary teacher education in England: fifteen lost years? *J Educ Policy* 2008;**23**:429–45.

63. Chinen M, Coombes A, De Hoop T, Castro-Zarzur R, Elmeski M. Can teacher training programs influence gender norms? Mixed-methods experimental evidence from Northern Uganda. *J Educ Emerg* 2017;**3**:44–78.

64. Haslop C, Ringrose J, Cambazoglu I, Milne B. Mainstreaming the manosphere's misogyny through affective homosocial currencies: exploring how teen boys navigate the Andrew tate effect. *Soc Media Soc* 2024;**10**:1–11.

65. Over H, Bunce C, Baggaley J, Zendle D. Understanding the influence of online misogyny in schools from the perspective of teachers. *PLOS ONE* 2024;**20**:e0299339.

66. Stentiford L, Koutsouris G, Nash T, Allan A. Mental health and gender discourses in school: 'Emotional' girls and boys 'at risk'. *Educ Rev* 2024;**77**:1364–82.

67. UK Government. *Equality Act*. 2010. URL: www.legislation.gov.uk/ukpga/2010/15/section/26 (accessed 23 August 2024).

68. Dahlqvist HZ, Landstedt E, Young R, Gådin KG. Dimensions of peer sexual harassment victimization and depressive symptoms in adolescence: a longitudinal cross-lagged study in a Swedish sample. *J Youth Adolesc* 2016;**45**:858–73.

69. Ofsted. *Review of Sexual Abuse in Schools and Colleges*. 2021. URL: www.gov.uk/government/publications/review-of-sexual-abuse-in-schools-and-colleges/review-of-sexual-abuse-in-schools-and-colleges#print-or-save-to-pdf (accessed 23 August 2024).

70. Sweeting H, Blake C, Riddell J, Barrett S, Mitchell KR. Sexual harassment in secondary school: prevalence and ambiguities. A mixed methods study in Scottish schools. *PLOS ONE* 2022;**17**:e0262248.

71. Department for Education. *Keeping Children Safe in Education Government Response to Consultation*. London: Department for Education; 2016.

72. Department for Education. *Keeping Children Safe in Education 2024: Statutory Guidance for Schools and Colleges*. Department for Education; 2024.

73. Firmin C. School rules of (sexual) engagement: government, staff and student contributions to the norms of peer sexual-abuse in seven UK schools. *J Sex Aggress* 2020;**26**:289–301.

74. Lloyd J, Walker J. How Schools are addressing harmful sexual behaviour: findings of 14 school audits. *Br J Educ Stud* 2023;**71**:325–42.

75. Blake C, Lewis R, Riddell J, Willis M, Wylie L, Dawson K, *et al*. Prevention of, and response to, sexual harassment at secondary school: a system map. *Soc Sci Med* 2024;**358**:117092.

76. Horeck T, Ringrose J, Milne B, Mendes K. #MeToo in British schools: gendered differences in teenagers' awareness of sexual violence. *Eur J Cult Stud* 2023;**27**:856–75.

77. Daly AC, Heah R. Mandatory relationships and sex education (RSE) in England – educators' views on children's rights. *Youth* 2023;**3**:1013–29.

78. Whittington E. Rethinking consent with continuums: sex, ethics and young people. *Sex Educ* 2021;**21**:480–96.

79. Oberle E, Ji XR, Kerai S, Guhn M, Schonert-Reichl KA, Gadermann AM. Screen time and extracurricular activities as risk and protective factors for mental health in adolescence: a population-level study. *Prev Med* 2020;**141**:106291.

80. Timonen J, Niemelä M, Hakko H, Alakokkare A, Räsänen S. Social leisure time activities as a mediating link between self-reported psychological symptoms in adolescence and psychiatric morbidity by young adulthood: the Northern Finland 1986 Birth Cohort study. *Eur Child Adolesc Psychiatry* 2023;**32**:2569–80.

81. Oberle EAO, Ji XR, Guhn M, Schonert-Reichl KA, Gadermann AM. Benefits of extracurricular participation in early adolescence: associations with peer belonging and mental health. *J Youth Adolesc* 2019;**48**:2255–70.

82. Department for Culture MS. Youth Review: Summary Findings and Government Response. In Department for Culture MS, editor. 2022.

83. Cowley ES, Watson PM, Foweather L, Belton S, Mansfield C, Whitcomb-Khan G, *et al*. 'Girls aren't meant to exercise': perceived influences on physical activity among adolescent girls-the HERizon project. *Children (Basel)* 2021;**8**:76.

84. O'Reilly M, Talbot A, Harrington D. Adolescent perspectives on gendered ideologies in physical activity within schools: reflections on a female-focused intervention. *Fem Psychol* 2023;**33**:175–96.

85. UK Government. Government response to the Curriculum and Assessment Review. 2025. URL: https://assets.publishing.service.gov.uk/media/690b2a4a14b040dfe82922ea/Government_response_to_the_Curriculum_and_Assessment_Review.pdf (accessed 7 April 2026).

86. Donnelly M, Lazetic P, Sandoval-Hernández A, Kameshwara K, Whewall S. *An Unequal Playing Field: Extra-Curricular Activities, Soft Skills and Social Mobility*. Department of Education and Institute for Policy Research, University of Bath; 2019.

87. Robinson D. *Access to Extra-curricular Provision and the Association with Outcomes*. Education Policy Institute; 2024.

88. Bertram C, Day L, MacLeod S, Campbell-Jack D, Jeyarajah A. *Extended Activity Provision in Secondary Schools*. Department for Education; 2017.

89. Duffey K, Barbosa A, Whiting S, Mendes R, Yordi Aguirre I, Tcymbal A, *et al*. Barriers and facilitators of physical activity participation in adolescent girls: a systematic review of systematic reviews. *Front Public Health* 2021;**9**:743935.

90. Youth Sport Trust. *Girls Active*. URL: www.youthsport-trust.org/programmes/targeted-interventions/girls-active (accessed 23 August 2024).

91. Rice B. *The Missing Link: Social Prescribing for Children and Young People*. Essex: Barnardo's; 2023.

92. Lewis R, Sharp E, Remnant J, Redpath R. 'Safe Spaces': experiences of feminist women-only space. *Sociol Res Online* 2015;**20**:105–18.

93. Ringrose J, Renold E. Normative cruelties and gender deviants: the performative effects of bully discourses for girls and boys in school. *Br Educ Res J* 2013;**36**:573–96.

94. Demkowicz O, Pert K, Bond C, Ashworth E, Hennessey A, Bray L. 'We want it to be a culture': children and young people's perceptions of what underpins and undermines education-based wellbeing provision. *BMC Public Health* 2023;**23**:1–14.

95. The Lancet Child and Adolescent Health. Time to take academic pressure seriously. *Lancet Child Adolesc Health* 2023;**7**:671.

96. Eccles JS, Roeser RW. Schools as developmental contexts during adolescence. *J Res Adolesc* 2011;**21**:225–41.

97. Foulkes L, Stapley E. Want to improve school mental health interventions? Ask young people what they actually think. *J Philos Educ* 2022;**56**:41–50.

98. Public Health England. *Promoting Children and Young People's Mental Health and Wellbeing: A Whole School or College Approach*. London: Public Health England; 2021.

99. National Institute for Health and Care Excellence. *Social, Emotional and Mental Wellbeing in Primary and Secondary Education*. National Institute for Health and Care Excellence; 2022.

100. Billington T, Gibson S, Fogg P, Lahmar J, Cameron H. Conditions for mental health in education: towards relational practice. *Br Educ Res J* 2022;**48**:95–119.

101. Dodds J. *The Views and Experiences of School Leaders Implementing Whole School Relational Approaches in a Single Secondary School: A Reflexive Thematic Analysis*. Doctoral thesis, The University of Nottingham; 2023.

102. Winter LA. Relational equality in education: what, how, and why? *Oxf Rev Educ* 2018;**44**:338–52.

103. Devon County Council. *Quick Guide to Developing Relational Practice and Policy*. 2023. URL: www.devon.gov.uk/support-schools-settings/document/quick-guide-to-developing-relational-practice-and-policy/ (accessed 23 August 2024).

104. The Attachment Research Community. *The Attachment Research Community*. URL: https://the-arc.org.uk/research-and-reports (accessed 23 August 2024).

105. Demkowicz O, Humphrey N. *Whole School Approaches to Promoting Mental Health: What Does the Evidence Say?*. London: Evidence Based Practice Unit; 2019.

106. Weare K, Nind M. Mental health promotion and problem prevention in schools: what does the evidence say? *Health Promot Int* 2011;**26**:i29–69.

107. Ellins J, Hockings L, Al-Haboubi M, Newbould J, Fenton SJ, Daniel K, *et al*. Early Evaluation of the Children and Young People's Mental Health Trailblazer Programme: A Rapid Mixed-methods Study. *Health*

Soc Care Deliv Res 2023;**11**. https://doi.org/10.3310/XQWU4117

108. Dunfee MN. School-based health centers in the united states: roots, reality, and potential. *J Sch Health* 2020;**90**:665–70.

109. O'Reilly M, Adams S, Whiteman N, Hughes J, Reilly P, Dogra N. Whose responsibility is adolescent's mental health in the UK? Perspectives of key stakeholders. *School Ment Health* 2018;**10**:450–61.

110. i-THRIVE. *National i-THRIVE Programme*. URL: https://implementingthrive.org/about-us/i-thrive-implementing-thrive/ (accessed 23 August 2024).

111. Wolpert M, Harris R, Hodges S, Fuggle P, James R, Wiener A, *et al*. *THRIVE Framework for System Change*. London: Anna Freud National Centre for Children and Families and The Tavistock and Portman NHS Foundation Trust; 2019.