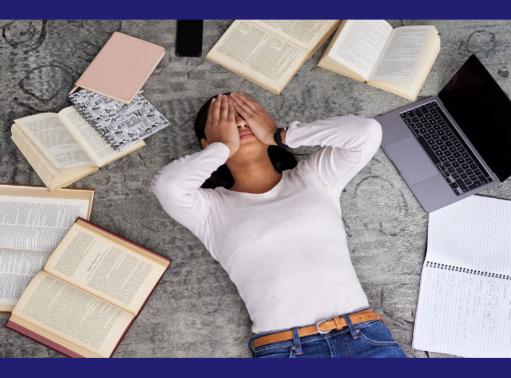
# The hidden impact of menstruation in higher education Rose Stephenson







# About the author

Rose Stephenson is the Director of Policy and Advocacy at the Higher Education Policy Institute. Rose directs HEPI's work on policy, including research, policy analysis and the development of policy recommendations.

Rose is an experienced educator, having worked in outdoor education and as a teacher and Head of Science in secondary education before moving to the higher education sector. Rose worked at the University of Bath, overseeing policies and projects to improve the student experience. She is driven to support the development of considered, evidence-based policy and has an interest in social mobility and equity. Rose is a Governor of Hartpury University.

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# Foreword

### Professor Dame Sally Mapstone, Principal and Vice-Chancellor, University of St Andrews

This report marks an important intervention into a longstanding but often underexamined aspect of the student experience. While the impact of menstruation on learning, wellbeing, and performance is increasingly recognised in some professional fields, particularly elite sport, it remains curiously under-researched in higher education. Rose Stephenson's incisive and necessary report goes some way to redressing that imbalance.

Drawing on responses from over 1,500 students, as well as a series of interviews and institutional contributions, the report sheds new light on how the menstrual cycle affects learning, assessment outcomes, concentration, attendance and, crucially, confidence. The report traverses themes ranging from pedagogy and period poverty to institutional and national policy, and the enduring cultural silence that surrounds menstruation. In doing so, it establishes menstruation firmly within the remit of university leadership and educational strategy.

The findings are clear: for many students, menstruation and the menstrual cycle affect not just comfort but capacity. It shapes how they participate in their education and how they are able to perform across its demands. These effects are far from uniform. For some students, the menstrual cycle brings disruption; for others it brings rhythm. But what emerges unequivocally from this work is that menstruation is a structural feature of academic life for a substantial proportion of the student population. If we are serious about inclusive pedagogy and equitable participation, we must begin to treat it as such.

The report also reminds us that menstruation is not simply a medical or biological fact; it is a lived experience shaped by culture, education, and policy. Historically, that experience has too often been framed as a source of embarrassment, invisibility, or disadvantage. That should no longer be the case. While menstruation can be profoundly debilitating for some students, it should not be characterised exclusively as an affliction, nor assumed to fall within the category of illness or disability. It should instead be understood in the round: a normal, cyclical element of life, with the potential both to challenge and to inform. There is a strong case here for better provision – of products, of support, of policy clarity. There is also, as the report notes, a need for further enquiry. While research into the cognitive implications of the menstrual cycle is emerging in adjacent disciplines, particularly Sport Science, there is a notable gap in higher education. Understanding how students might work with, rather than against, the cycle's patterns would be a welcome area of future study.

Higher education has long aspired to be a space in which individual differences are not only accommodated but understood. This report makes visible a set of experiences that have been quietly present but largely unspoken. It challenges us to reflect on how systems, policies, and assumptions – however inadvertently – may obscure the realities of those they serve. Rose Stephenson prompts us to consider how our sector's commitment to inclusion might be better realised through evidence-led, practically grounded responses to a widely shared but seldom addressed dimension of student life. What this report sets out, others should build on. In that lies both a responsibility and an opportunity: to shape a more intelligent, humane, and responsive academic culture. That is a challenge well worth taking up.

## **Executive summary**

The impact of menstrual cycles and periods on education is underresearched. This report aims to understand students' experiences of menstruation education and the day-to-day impact of menstrual cycles and periods on students' higher education studies. It makes recommendations to higher education providers and policymakers to mitigate these impacts. A survey of over 1,500 UK higher education students and 13 semistructured interviews were completed to inform this report.

## Key findings

- Only one-third of female students (33%) describe the education they received at school and college about menstrual cycles and periods as 'good' or 'very good'.
- Students state that social media is the source they use the most for information on periods and menstrual cycles. Some 72% of female students report learning 'quite a bit' / 'a lot' from social media, compared to 43% of male students.
- On average, students who menstruate miss 10 days of higher education study per year. If we extrapolate this over a three-year degree, students who menstruate miss six full weeks of academic study across a typical degree programme.
- This rises to 19 missed days of study per year for students who have been diagnosed with a menstruation-related illness, equating to over 11 missed academic weeks over a three-year degree course. One-in-10 students who menstruate state that they are in this group.
- Only one-quarter of respondents had not missed any study days in the last 12 months.
- The overwhelming majority of respondents (70%) state they sometimes cannot concentrate properly on their studies or assessments because of period pain and a further 45% state that they sometimes cannot concentrate due to experiencing heavy menstrual bleeding.
- Of students who menstruate, 16% had gone without period products in the previous 12 months because they could not afford them.

- Some groups of students who menstruate are much more likely to experience period poverty than other students. This includes students who have received Free School Meals (24% of whom are in period poverty), have been in care (35% of whom are in period poverty), or have been a young carer (27% of whom are in period poverty).
- Some 71% of respondents experiencing period poverty use alternatives such as toilet paper or cloths. Almost half (47%) of students in period poverty stay at home and miss classes.
- 85% of higher education providers from the sample surveyed in this report stated they do not have a specific menstruation policy. Where institutions did have menstruation policies or guidance, these only related to staff members, and not students.

These figures show the impact that menstruation has on higher education studies. For those who are significantly affected by their periods or menstrual cycle, our research shows many demonstrate extraordinary resilience in completing their studies around pain, mental health challenges and medical diagnoses related to menstruation. It is also important to note that not all students who menstruate are negatively impacted and many students participate in their studies successfully with minor mitigations.

The report also highlights the gendered nature of many of the aspects of menstruation. A large proportion of the female student population experience menstrual symptoms that impact on their studies. However, the report also notes differences by gender in terms of experiences of menstrual education, exposure to and participation in conversations around menstruation and the perception of taboo in relation to periods and menstruation.

#### Recommendations

#### Education

• The Department for Education in England, the Department of Education in Northern Ireland, the Department for Education and Skills in Wales and Education Scotland should review their curricula to ensure they explicitly include:

- teaching about menstruation beyond the biology this should include information on managing physical and mental health symptoms of menstruation;
- teaching about the impacts (which can be both positive and negative) of all stages of the menstrual cycle; and
- teaching about menstruation-related illnesses, such as heavy menstrual bleeding, endometriosis, and polycystic ovary syndrome (PCOS), and when to seek help from healthcare professionals this is included in the *Draft Relationships Education, Relationships and Sex Education and Health Education (RSHE)* guidelines for England.
- Further, to combat the historical (and sometimes current) practice of only delivering menstrual education to girls, the guidelines should specifically outline the importance of teaching about menstrual cycles and periods to all pupils, regardless of gender.
- Policymakers should consider recommending that menstrual health, as part of a broader relationships, sex and health curriculum, should be made statutory for 16-to-18 education and that statutory guidance should be developed for this phase of education.
- For menstrual health and wellbeing to be taught effectively, teachers must be able to access specialist training on this topic. The Department for Education in England and the Department of Education in Northern Ireland, the Department for Education and Skills in Wales and Education Scotland should make funding available for teachers who teach Personal, Social and Health Education (PSHE) lessons to attend highquality training, aimed at supporting them to develop an understanding of what constitutes best practice pedagogy within the context of PSHE and ensure that teachers have access to high-quality PSHE materials.

#### Period poverty

 Higher education providers should ensure that period products are freely available in multiple venues across campus. It is imperative that students, particularly those from under-resourced backgrounds who have been in care or are young carers, know how to access these resources and feel confident in doing so. No one should miss out on their education because they cannot afford to buy period products.  In the longer term, the Westminster Government (for England) and the Welsh Government should follow the lead of the Scottish Government and Northern Irish Executive by enshrining the right to access free period products for those who need them.

#### Assessments

The data outlined in this report demonstrate that students' ability to focus on assessments can be severely impacted by their menstrual cycle or period.

- The Office of the Independent Adjudicator for Higher Educaton (OIAHE) should review its language in the Good Practice Framework for Additional Consideration to ensure that diagnosed women's health conditions are explicitly included and the language is broad enough to take into account students who suffer from severe symptoms during their menstrual cycle but who do not have a medical diagnosis.
- Higher education institutions should review the language in their extenuating circumstances policies to ensure these are inclusive of diagnosed women's health conditions and take into account students who suffer from severe symptoms during their menstrual cycle but who do not have a medical diagnosis.
- Higher education institutions should include references in their policies and guidelines on assessment extension to diagnosed women's health conditions and take into account students who suffer from severe symptoms during their menstrual cycle but who do not have a medical diagnosis.
- Perhaps more radically, institutions may consider a more flexible approach to assessment deadlines. London South Bank University has recently changed its policy to allow students to submit their assessments up to five days later than the deadline with no marking penalty or cap.<sup>1</sup> This initiative reported that there was no increase in the number of late submissions and a significant reduction in the number of extenuating circumstances claims to process (as a claim was not needed to submit an assessment within the five-day window). While this initiative was not designed to support students experiencing menstrual symptoms, an approach like this would offer some flexibility to students who had

planned to complete their assessment on a particular date only to find themselves struggling with symptoms at that time.

### Cultural change

- In the same way that campuses are raising awareness about the impact of menopause, institutions should develop policies, guidelines and / or action plans to raise awareness, reduce stigma, provide training and signpost support regarding menstruation and periods. This should cover both staff and students.
- More broadly, the Department for Health should fund a taboo-busting media campaign, 'It's okay to talk about periods'. This should include community leaders (teachers, sports coaches, doctors) giving the message'It's okay to talk about periods' and 'It's okay to talk about period pain / heavy menstrual bleeding / PMS'. This should specifically include male teachers, doctors and coaches to tackle the gendered nature of discussions about periods and the gendered nature of menstruation education. This campaign should include a link to a straightforward and informative resource for people who have missed out on their menstruation education the 'bloody brilliant' website created by the Welsh Government is a great example of how to approach this.<sup>2</sup>

## Introduction

Menstrual health is an integral part of overall health because between menarche [the first period] and menopause, most women menstruate. Yet for tens of millions of women around the world, menstruation regularly and often catastrophically disrupts their physical, mental, and social well-being.<sup>3</sup>

Hilary Critchley, Professor at the Centre for Reproductive Health, University of Edinburgh

Open and frank discussions about the impact of periods and the menstrual cycle are relatively new phenomena. An increasing number of books, podcasts and other publications focus on the physical and mental effects of the menstrual cycle. There has been a particular increase in publications discussing the impact of the menstrual cycle on sports performance. However, research into how menstrual cycles and periods affect academic study is still in infancy. This report aims to initiate a conversation about how periods and menstrual cycles impact undergraduate students in higher education.

The author acknowledges that women and girls achieve better outcomes than men and boys in many areas of education, including higher education. We should continue to be concerned about and address male underparticipation in higher education, which HEPI has written about previously, including:

- Male and female participation and progression in Higher Education by John Thompson and Bahram Bekhradnia;
- Boys to Men: The underachievement of young men in higher education and how to start tackling it by Nick Hillman and Nicholas Robinson; and
- Boys will be Boys: The educational underachievement of boys and young men, by Nick Hillman and Mark Brooks.<sup>4</sup>

However, we can be concerned about and act on multiple issues simultaneously. Identifying and reducing barriers to academic success, both for the female population as a whole and for individual students, is an important endeavour.

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# Menstrual cycle 101

#### Who menstruates?

Girls tend to start their periods around the age of 12 and will typically have a menstrual cycle and period each month until they reach menopause – at an average age of 51.<sup>5</sup> Barring pregnancy and medical intervention, this suggests women will have between 450 and 500 menstrual cycles and periods in their lifetimes.

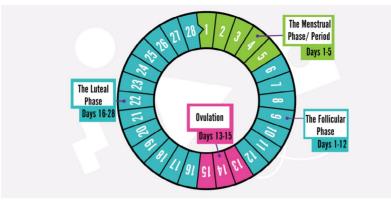
Non-binary people who have a uterus may also menstruate. While some trans men (whose biological sex was recorded as female at birth and who are transitioning to or have transitioned to living as a man) may cease to menstruate as a result of taking masculinising hormones or undergoing a hysterectomy, some trans men may continue to experience menstrual cycles and periods.

Throughout the report, we will refer to 'people who menstruate' or 'students who menstruate'. This language is purposefully chosen as not all women, and not all female students, menstruate. Approximately 90% of the female students in our survey had a menstrual cycle or period in the last 12 months, and 10% had not. The survey did not ask why female students were not menstruating, but this may be linked to taking hormonal contraceptives. In addition, some non-binary folk and some trans men do menstruate. While these phrases 'people who menstruate' or 'students who menstruate' may appear clumsy, they most accurately reflect the data.

#### Phases of the menstrual cycle

The menstrual cycle is split into four phases. The exact length of each phase can differ between individuals:

- i. the menstrual phase / period (days 1 to 5);
- ii. the follicular phase (days 1 to 12);
- iii. ovulation (days 13 to 15); and
- iv. the luteal phase (days 16 to 28).



#### Source: Brook.org.uk<sup>6</sup>

Historical understanding of the impact of the menstrual cycle has focused on the period and premenstrual syndrome or 'PMS' experienced in the luteal phase. (PMS refers to the symptoms people can experience in the weeks before their period. These can include feeling depressed, anxious or irritable, experiencing bloating and headaches, among other symptoms.) However, discussion on the different impacts of all menstrual cycle phases is becoming more common.

Brook (a national charity supporting people with their sexual health and wellbeing) outlines some of the impacts of the different phases as follows:

Phase	Behaviour	Time-for
Menstrual phase / period	Energy at its lowest, less social, need more rest.	Rest, reflection, alone time, low intensity exercise like walking, reviewing past work.
Follicular phase	Higher energy, improved mood, increasing sex drive, better concentration.	Socialising, trying / creating new things, high energy workouts.
Ovulation	High energy, improved mood, increased sex drive, more confidence.	Socialising, trying new things, meeting new people and high intensity / energy workouts or strength training.
Luteal phase	PMS symptoms, declining energy levels, mood swings.	Slowing down, lower intensity exercise, taking more time for yourself. <sup>7</sup>

Discussions about the menstrual cycle (focused on the period and PMS) have traditionally perceived and portrayed the cycle solely in a negative light. However, recent literature takes a more open approach to the impact of menstrual cycles, noting that people who menstruate are impacted differently throughout their cycle and that there can be positive and negative impacts in different phases of the cycle.

Maisie Hill, the author of *Period Power*, refers to the four phases of the menstrual cycle as winter, spring, summer and autumn. In reference to 'summer' (the time around ovulation), Hill explains:

This is the time to do work that is challenging and audacious. Your hormones can help you to break new ground without breaking a sweat, so decide what to do and get to it.

Experiences in different phases of the menstrual cycle are also starting to be investigated through academic research. For example, recent University College London (UCL) research tested participants' mental agility at different stages in their menstrual cycle. Despite participants reporting feeling worse during menstruation – and perceiving that this negatively impacted their performance – their reaction times were faster and they made fewer errors during this phase of their cycle. The findings act as a 'proof-of-principle' that specific types of cognition fluctuate throughout the menstrual cycle, which could have implications for injury and other aspects of women's health.<sup>8</sup>

## Health conditions related to the menstrual cycle

There are several health conditions related to the menstrual cycle that can have a significant impact on the sufferer's life. These include:

- Pre-menstrual dysphoric disorder (PMDD): A severe version of premenstrual syndrome (PMS). Sufferers of PMDD can experience joint and muscle pain, problems sleeping, anxiety, depression and feeling suicidal.<sup>9</sup>
- **Endometriosis:** Where cells similar to those in the lining of the uterus grow in other parts of the body. This can cause severe period pain, heavy periods and extreme fatigue.<sup>10</sup>

- Adenomyosis: Where the lining of the uterus starts growing into the muscle in the wall of the womb. This can cause painful periods and heavy bleeding.<sup>11</sup>
- **Uterine fibroids:** Non-cancerous growths that develop in or around the uterus. They can cause heavy bleeding and pelvic pain.<sup>12</sup> Black women are more likely to suffer from fibroids (20% of whom report experiencing or living with fibroids) compared to white women (5% of whom report this).<sup>13</sup>

#### • Heavy menstrual bleeding (HMB).

The House of Commons Women and Equalities Committee published a report in December 2024 showing that endometriosis and adenomyosis each affect up to one-in-10 women.<sup>14</sup>

Their report states:

Women and girls are missing out on their education, career opportunities, relationships, social lives and are having their fertility impacted because of neglected reproductive health conditions.

Further, the report notes that up to one-in-three women live with heavy menstrual bleeding.<sup>15</sup> Heavy menstrual bleeding can negatively affect sufferers' health as well as their social, professional and family lives.<sup>16</sup>

# The impact of menstrual cycles and periods on early stages of education

Previous research suggests menstruation significantly influences educational experiences in the UK, with challenges ranging from inadequate menstrual education to period poverty and pervasive stigma. Research by Plan International with young people (aged 9 to 24) in England and Northern Ireland revealed:

The anticipation of encountering negative reactions and discrimination after a menstrual leak leads girls to change their behaviour; for example, avoiding white clothing or abstaining from certain activities such as swimming.<sup>17</sup>

A 2023 study of 1,262 female students aged 13-to-18 across the UK and the Republic of Ireland reports that students miss on average nine days per academic year due to menstruation. Throughout their education from the ages of 13-to-18, these students are missing 54 days of education – equivalent to 11 academic weeks. Most students missing school (82%) stated that period cramps were the reason, and 8% missed school because period products were not available to them. Some 19% of students explained that being embarrassed about being on their period was the reason they had missed school.<sup>18</sup>

Research by Swansea University reports schoolteachers observing the detrimental effects of menstruation on students' education. The survey of 789 UK primary and secondary school teachers reveals that 88% believe periods negatively impact attendance, participation in physical activities, behaviour and confidence.<sup>19</sup>

A prospective cohort study in England examined the links between period pain, heavy menstrual bleeding and attendance and achievement at GCSE level. This research found that:

 pupils who reported heavy menstrual bleeding missed on average 1.7 additional days of school per year, were 48% more likely to be persistently absent and had 27% lower odds of achieving five standard passes at GCSE; and  menstrual pain was associated with missing an additional 1.2 days of school per year, having 42% higher odds of being persistently absent and 16% less likely to achieve five standard passes at GCSE.<sup>20</sup>

The study suggests that period pain and heavy bleeding are associated with poorer school attendance and educational achievement. It outlines that more research is needed to understand these findings and to develop ways to mitigate the impact of menstruation on education.<sup>21</sup>

## **Menstruation education**

Government guidance *Relationships Education, Relationships and Sex Education (RSE) and Health Education* in England, published in 2019, states:

Pupils should be taught key facts about the menstrual cycle including what is an average period, range of menstrual products and the implications for emotional and physical health.<sup>22</sup>

Despite this, menstrual cycle education remains inconsistent. A survey of UK-based teachers stated that 63% of secondary school teachers agreed that menstrual education lessons are part of their school's curriculum.<sup>23</sup> This report further outlines that the quality of menstrual education in UK schools is often lacking. Many teachers feel unprepared to deliver comprehensive menstrual education, citing insufficient time, confidence and subject knowledge. Notably, 23% of teachers reported discomfort in teaching about the menstrual cycle.<sup>24</sup>

The Women and Equalities Committee report of December 2024 states:

Girls are leaving school not knowing what constitutes a 'normal' period, unequipped to spot the symptoms of reproductive health conditions. The Government should ensure teachers receive the training necessary to deliver menstrual and gynaecological health education effectively. Statutory guidance should require women's reproductive health conditions to be taught to girls and boys early on in secondary education and include intersectional differences.<sup>25</sup>

# **Period poverty**

Period poverty – the inability to afford menstrual products – remains a pressing issue in the UK. One study found 36% of girls and women aged 14-to-21 had experienced period poverty.<sup>26</sup> Lack of access to period products can adversely affect physical and mental health, as well as academic success.<sup>27</sup>

Efforts to combat period poverty have led to policy changes. In 2018, Scotland became the first country in the world to protect in law the right to access free period products for anyone who needs them. Under the Period Products (Free Provision) (Scotland) Act 2021, local authorities and education providers are legally required to make period products available free of charge.<sup>28</sup> The 'PickUpMyPeriod' app allows people to find free period products in their area.

In 2020, the Department for Education in England launched a scheme to provide access to free period products in primary schools, secondary schools and organisations for 16-to-19-year olds in England.<sup>29</sup>

The Period Products (Free Provision) Act (Northern Ireland) 2022 states that period products should be available free of charge to all persons who need to use them.<sup>30</sup> Free period products can be collected from libraries in Northern Ireland. Northern Ireland also utilises the 'PickUpMyPeriod' app.

The Period Proud Wales Action Plan was launched in 2023 and takes a wideranging approach to ending period poverty and achieving period dignity in Wales. This includes a commitment to expanding free period product provision in communities and the private sector.

## **Researching menstruation**

Dr Lara Owens, an Honorary Research Fellow at the University of St Andrews, states:

Menstrual researchers still experience challenges they consider to be stigma-related in publishing menstrual research, obtaining permanent positions centred on their specialisation, and attracting long-term and large-scale funding.<sup>31</sup>

The Women and Equalities Committee report published in December 2024 states:

Research into women's reproductive health conditions lags behind other, similarly prevalent conditions. It is not adequately prioritised by funders or commissioners and is not incentivised enough in clinical academia.

In a webinar in 2023, Professor Bettina Bildhauer stated:

It is a stigmatised area. Precisely because it is stigmatised, it is difficult to find funding to get the basic research done. I'm saying this as someone who is ... trained as a medievalist, so as someone who studies really old text, really obscure, in German. It is a lot easier to find funding for these things than for anything to do with menstruation because people in power who control the money flow still think that menstruation is a niche topic. We've had that feedback many times, and it's somehow yucky and disgusting. So the stigma affects the researchers as much as the people who do menstruate.<sup>32</sup>

The Women and Equalities Committee report into Women's Reproductive Health Conditions was scathing about the level of research funding available for women's health issues. The report outlines:

Comparatively, there is a lower level of research funding for medical conditions that primarily or exclusively affect women than for those affecting men. Approximately 2% of overall public research funding in the UK is dedicated to reproductive health and childbirth, while past research has shown that five times more research is conducted into erectile dysfunction than premenstrual syndrome. This is staggering considering that 19% of men are affected by erectile dysfunction, while 90% of women have premenstrual syndrome.<sup>33</sup>

Janet Lindsay, Chief Executive of the charity Wellbeing of Women, told the Committee:

In 2018, searching for endometriosis in the UK Research and Innovation awards database, there were 35 hits, meaning that it had funded 35 endometriosis-related projects since 2003. On the other hand, if you search diabetes, a condition with the same incidence rate but one that affects both sexes, it has funded a total of 1,758 projects in the same period, and the amount of money is much bigger. This gives you a flavour of how little money is invested in research [into women's reproductive health conditions].<sup>34</sup>

Research into all health conditions is vital. However, where areas of health have been historically underfunded, such as women's health conditions, this should be addressed.

Nonetheless, there may be signs of progress in relation to research on menstruation.

For example, Loughborough University has recently launched its groundbreaking Women in Sport Research and Innovation Hub. Research at the Hub will include areas such as the menstrual cycle and its physiological impact on sports performance.<sup>35</sup> Again, this demonstrates an emphasis on sports performance.

Further, the newly established Women's Health Research Centre for Wales (funded by the Welsh Government) is expected to undertake research in this area.<sup>36</sup>

While the impact of menstrual cycles, periods and related medical conditions are beginning to be recognised, the evidence of how this affects students in higher education is limited to date.

For example, a PubMed (a search interface for MEDLINE, a biomedical literature database) search using the terms 'menstrual cycle' or 'menstruation' and 'higher education' generates 44 results. However, for most of these returns, higher education was only featured to categorise respondents rather than as a core part of the research. In comparison, a search using the terms 'menstrual cycle' or 'menstruation' and 'exercise' in the title or abstract generates almost 2,000 results.

Understanding the extent and causes of the underfunding of menstrual research and women's health research is beyond the scope of this report. However, analysing this and developing recommendations to address any identified historic underfunding would make for an interesting and worthwhile research project.

# Survey results and analysis

In spring 2025, survey questions were circulated to UK higher education students on their menstruation education to date, their perceptions and experiences of menstrual cycles and periods, and the impact on their studies.

The first part of the survey was for all respondents and focused on menstruation education and perceptions of the impact of menstrual cycles and periods.

The second part of the survey was for respondents who answered 'yes' to the question 'Have you had a menstrual cycle or period in the past 12 months?' This section focuses on respondents' experiences of their menstrual cycles and periods, and how these impact their higher education studies.

# Survey part one – perceptions of menstrual education and the impact of menstrual cycles and periods

### Methodology

Between 3 March 2025 and 5 April 2025, Savanta's student panel members were invited to complete the survey. Savanta's student panel includes more than 48,000 undergraduate students in the UK. These students are primarily recruited through a partnership with the Universities and Colleges Admissions Service (UCAS).

A total of 1,571 respondents completed the survey. To ensure data was representative of the UK student population, it was weighted in line with HESA (Higher Education Statistics Agency) data from the 2023/24 academic year according to gender, ethnicity and year of study. Based on the overall sample size and the population surveyed, there is an anticipated margin of error of  $\pm 3\%$  at the 95% confidence level.

Data were reviewed regularly to ensure genuine responses. Considering the topic, care was taken to ensure the questions were inclusive. However, collecting clear data on sex and gender remains a challenge, with data from the 2021 Census question being challenged over potential confusion among respondents. As such, data relating to the student trans population should be interpreted with caution. Once weighted, this resulted in the following breakdown:

- Gender:
  - 56% of respondents identify as women;
  - 42% of respondents identify as men;
  - 1% of respondents identify as non-binary; and
  - a small number of respondents would describe their gender in another way or prefer not to state their gender.

We have analysed the data by gender and included this analysis where at least one answer shows a statistically significant difference between genders. This was not the case with any answers for the non-binary group of respondents, because only a small number of respondents were nonbinary.

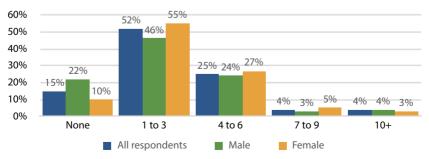
We also held semi-structured interviews with 13 students from institutions across the UK.

## Menstruation education

We asked students: 'Thinking about your education at school and college, how many individual lessons did you attend where you were taught about the menstrual cycle and periods?'.

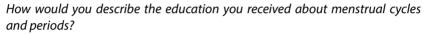
Male students were more likely to state they had received no lessons about menstrual cycles or periods, with 22% of male students responding in this way. Half of students (52%) state they received between one and three lessons on menstrual cycles or periods while at school or college.

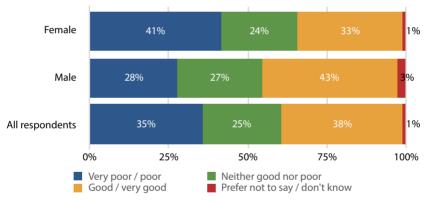
How many individual lessons did you attend during school / college where you were taught about the menstrual cycle or periods?



The hidden impact of menstruation in higher education

We also asked students how they would describe the education they received about menstrual cycles and periods. Over a third of students (35%) stated their education in this area was 'very poor' or 'poor'. This was even more likely to be the case for female students, with 41% stating that their education on periods and the menstrual cycle was 'very poor' or 'poor'. Male students were more likely to be positive about their education, with 43% of male students stating their education was 'good' or 'very good', compared to 33% of female students. These data suggest that school and college education may be suitable for those who do not have periods but may need to understand them. However, the current level of education in schools is only working well for one-third of women and therefore could and should be improved.





Respondents were asked if there was anything they would like to add to their education or understanding of menstrual cycles. There were a few themes in the open text responses, these included:

i. Wanting to know more about the experience of menstrual cycles:

*Periods are well taught, but more education on the actual cycle and its length / processes should be introduced.* 

We were taught about the cycle biologically, but nothing to do with natural and unnatural symptoms, pain management, problems, etc.

More detail about how it affects the person mentally and how it effects them carrying out a normal day. Not just what physically happens.

ii. A desire to know more about menstrual-related health conditions:

More about the conditions that affect so many people such as PCOS [Polycystic Ovary Syndrome] or endometriosis.

I would like to learn more about endometriosis and think it should be taught in schools.

iii. A need for improved education for boys:

I'm male so I don't know much.

Need to educate boys about them better.

I had a particularly poor education on this as I went to an all-boys school.

I'm a guy so we never discussed this issue.

Themes for this answer related to the 'biological' nature of the menstrual cycle being taught, with GCSE Biology being mentioned frequently. Respondents felt as though this did not cover the realities of experiencing periods and menstrual cycles, how to cope with this and what was 'normal'. Many respondents wanted to know more about menstruation-related illnesses, such as endometriosis.

Poor education for male students was frequently mentioned by both male and female students, with both groups advocating for improved education for boys. Boys will grow up to become partners, fathers, colleagues, bosses and healthcare professionals. Having a good understanding of the experiences of menstruation, being supportive of these experiences and being able to openly and confidently discuss menstruation will help to break down the stigma experienced by those who menstruate. Surfacing the impact of menstruation is key to overcoming these challenges, and this can only be done if a conversation can be had with the whole population, not just half of it.

In the interviews with students, it was interesting to hear perspectives from international students, who had completed their earlier education in their

home countries:

We received some information about the whole process, but my school and college were in Pakistan. There was a biological focus on what happens, rather than on the side effects.

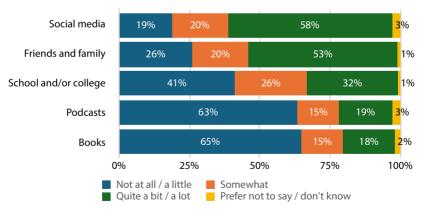
Third-year psychology student

We had two talks about it. At the end of primary school, because girls didn't know what was happening, girls went to the nurse because they thought they were dying. You had to learn as you went along.

Second-year biomedical science student (who attended primary school in Tanzania)

We asked students to what extent they had learned about periods and the menstrual cycle from different sources. Students learn from friends, family, and social media sources the most, with 53% of students learning 'a lot' / 'quite a bit' from friends and family and 58% learning 'a lot' / 'quite a bit' from social media. Notably, social media is the primary source from which students learn. This compares to just 32% of students who feel they learned a lot / quite a bit from school or college.

To what extent have you learnt about periods and menstrual cycles from the following sources?



This demonstrates the power, importance and potential of family, friends and social media as sources for learning about menstrual cycles and periods.

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However, education through these routes is inherently inconsistent.

One student told us:

I learnt everything from the internet. I do have my Mum and my sisters but growing up this topic was very taboo and it was hard to speak about it. I was ashamed to tell them that I got my first period. I just covered it up and dealt with it myself.

Second-year Business student

There could be a role for educating parents on menstruation and periods to better support their children. This, along with improved education at the school and college level would ensure that students receive accurate and up-to-date information.

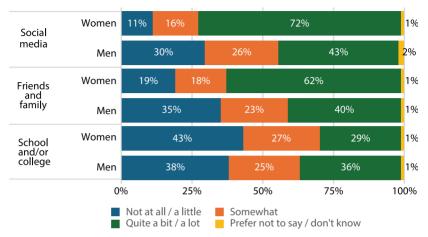
We analysed how education from different sources is perceived by gender. There were significant differences in perceptions of learning through school and college, friends and family and social media for male and female students. Again, male students were more likely (36%) to state that they had learned 'quite a bit' / 'a lot' at school or college compared to female students (29%). This may be due to different expectations of how much they should or need to learn.

Female students were more likely (62%) to state they learn 'quite a bit' / 'a lot' from friends and family compared to male students (40%). This was the same for social media, with female students more likely (72%) to state they learn 'quite a bit' / 'a lot' from social media compared to male students (43%).

This suggests that female respondents are either seeking or being provided with additional learning opportunities outside of their school / college classes.

Respondents could outline 'other' sources they had used to learn about periods and menstrual cycles. A frequent response was period-tracking apps such as Flo or Clue.

To what extent have you learned about menstrual cycles and periods from the following sources?



## Talking about menstrual cycles and periods

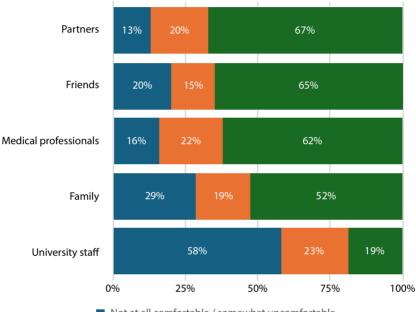
We also asked students how comfortable they were discussing periods and menstruation with different groups of people. Respondents were most comfortable talking about menstruation with friends, partners and medical professionals. Students are slightly less comfortable about discussing this with family members and are collectively uncomfortable discussing menstruation with university staff.

Again, we see some differences by gender:

- eight-in-10 women (81%) are 'somewhat or very comfortable' discussing menstruation with their friends, compared to four-in-10 men (44%);
- some 65% of women are 'somewhat or very comfortable' discussing menstruation with family compared to 36% of men;
- seven-in-10 women (71%) are comfortable discussing this with their partners, compared to six-in-10 men (62%);
- women and men are both relatively comfortable speaking to medical professionals about menstruation, at 64% and 60% respectively; and

 women and men are less comfortable speaking to university staff about menstruation, with only 16% of women and 23% of men feeling 'somewhat or very comfortable' doing so.

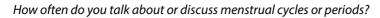
To what extent are you comfortable or uncomfortable discussing menstrual cycles or periods with the following people?

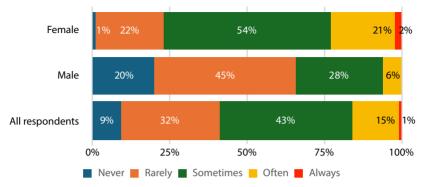


Not at all comfortable / somewhat uncomfortable
 Neither comfortable or uncomfortable
 Somewhat comfortable / very comfortable

We asked students how often they talk about or discuss menstrual cycles or periods. The most common response for all respondents was 'sometimes', with 43% of respondents selecting this answer.

Some 65% of male respondents never or rarely discuss menstrual cycles or periods, suggesting that when conversations about menstruation happen, they happen within gendered groups.





This was echoed by the students interviewed for this report:

I learnt from my mum; she taught me how to use pads and how to track my cycle. I feel more comfortable speaking with female friends and family.

Final-year Biomedical Science and Biochemistry student

Mostly from my friends. They assisted me with my first period. My Mum explained how to manage.

Third-year Psychology student

Despite the increase in resources available to learn about menstruation, such as through social media, there is still a pervasive taboo about periods and the menstrual cycle. Students reported:

Even though I went to an all-girls school, there was some taboo with products. People notice you going to the bathroom a lot of the time -I was self-conscious about this.

Second-year Sports Psychology student

If people know it is awkward.

Second-year Criminology with Forensic Biology student

One student reflected on the positive nature of shared experiences:

*I remember my friends all cheering when I first got my period. I had a good community of friends where we shared products and stuff.* 

Second-year Media, Journalism and Culture student

There seems to be a particular taboo associated with discussing menstruation with men:

It's easy with other females. In my household, it was okay with my Dad, but my brothers were really grossed out and didn't want to talk about it. It was awkward when I was talking to a male doctor about it.

Final-year Biomedical Science and Biochemistry student

I got extreme cramps at school. It was very difficult to explain to a male teacher how one feels, particularly in PE.

Second-year Business student

There should be less taboo about periods. Especially that you can't talk to male teachers about it, or you should hide it. It was embedded slightly from school, but also from social interaction.

Second-year Media, Journalism and Culture student

My coach is a man, so it is kind of a bit awkward. He gets a bit awkward if we start talking about it – like he can't relate.

Second-year sports psychology student

There is a pervasive cycle of taboo here. There are generations of men who received little to no menstruation education at school (including a fifth of current male students). Women have conversations about menstruation with other women, further perpetuating the gendered nature of menstruation knowledge and the normality of periods. Breaking down the taboo of speaking about menstruation, particularly around male partners, friends, lecturers and employers, will be a key mechanism to improving experiences for people who menstruate.

Some students have already transcended the taboo, with one student stating:

Nowadays, I am very comfortable discussing it with anyone, as it is literally biology. It happens to half the population, why should I be ashamed about it?

Fourth-year Veterinary Medicine student

# Survey part two – experiences of menstrual cycles and periods and how this impacts higher education studies

### Methodology

We asked all survey respondents 'Have you had a menstrual cycle or period in the past 12 months?', and 950 respondents stated 'yes'. Given the gendered nature of the responses to this question, the weighting for gender was removed for this section of the survey. The weightings for ethnicity and year of study were still applied. Once weighted, this resulted in the following breakdown:

Gender:

- 97% of respondents identify as women;
- 1% of respondents identify as men (these are men who state they are trans or have a trans history);
- 1% of respondents identify as non-binary; and
- a small number of respondents would describe their gender in another way or prefer not to state their gender.

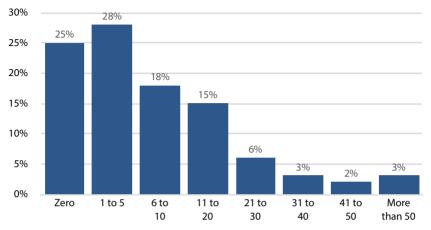
We also held semi-structured interviews with 13 students from institutions across the UK. Students were offered remuneration to encourage participation.

#### Days missed from higher education study

We asked respondents: 'How many days of study have you missed in the past 12 months due to your menstrual cycle, including your period?'. Only one-quarter of respondents had not missed any study days in the last 12 months. On average, respondents had missed 10 days of higher education study in the past 12 months.

If we extrapolate this over a three-year degree, students who menstruate miss 30 days of lectures or classes, equivalent to six full weeks of academic study across a typical degree programme.

# How many days of study have you missed in the last 12 months due to your menstrual cycle or period?



In relation to attendance, students explained:

I have missed lectures because of my period, due to exhaustion or pain. I might not sleep the night before due to bad cramps.

Second-year Media, Journalism and Culture student

Sometimes I would miss lectures during the first few days of my cycle. I might miss morning lectures or perhaps the entire day depending on how serious it is.

Final-year Biomedical Science and Biochemistry student

On occasion, I've missed lectures due to nausea or migraines.

Second-year Media and Communications student

Highlighting the variety of experiences in relation to menstruation, one student outlined:

I don't get a lot of pain. During the first few days, I have low energy, but I'm still able to go to my lectures.

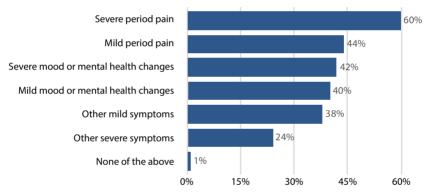
Third-year Psychology student

We asked all respondents (the 1,571 respondents in part one of the survey) to estimate the number of days they think people who menstruate miss from higher education due to their menstrual cycle or period. The average estimation was 28 days per year, well beyond the actual average of 10 days.

## Symptoms relating to menstrual cycles and periods

We asked students about the symptoms they experience during their menstrual cycle and period. Six-in-10 respondents who menstruate (60%) report they have experienced severe period pain in the last 12 months. Four-in-10 respondents (42%) state they have experienced severe mood or mental health changes in relation to their menstrual cycle or period and 24% of respondents have experienced other severe symptoms.

### Which of the following symptoms have you experienced in the last 12 months?



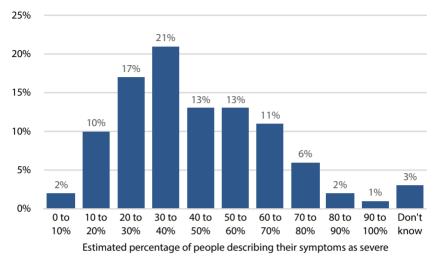
One student explained:

Day 1 and Day 2 of my period are really painful – I've had to miss lectures a few times. I wouldn't be able to concentrate. I just have to stay in my space and take the pain.

Second-year Business Management student

We asked all respondents (the 1,571 respondents in part one of the survey) what percentage of people who menstruate they estimate experience symptoms described as 'severe'. For all respondents, they estimate that 42% of people who menstruate experience severe symptoms.

What percentage of people who menstruate would you estimate experience symptoms they would describe as severe, relating to their menstrual cycle or period?



Respondents who menstruate estimate 46% of people who menstruate experience symptoms they would describe as severe. Respondents who do not menstruate estimate 37% of people experience symptoms they would describe as severe. Across both groups, there is a significant underestimation of the 60% outlined above.

It is interesting that respondents across the board underestimate the percentage of people who experience severe menstrual symptoms, and at the same time overestimate the days missed from higher education. The reason for the juxtaposition of these two perceptions is unclear.

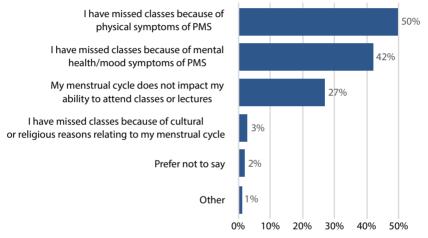
Impact of menstrual cycles and periods on higher education study

We asked students how their experiences had impacted their ability to study in higher education. We first asked about their menstrual cycle – not including their period, and then we asked about the impact of their period specifically. We asked them to give their answers based on the last 12 months.

Half of respondents had missed classes due to physical symptoms of premenstrual syndrome (PMS), such as fatigue, gastrointestinal changes or bloating. Four-in-10 respondents (42%) had missed classes because of mood or mental health-related PMS symptoms.

Only one-quarter of respondents (27%) state their menstrual cycle does not impact their ability to attend classes or lectures. It is notable that the menstrual cycle has such an impact on students' ability to attend classes, even when the period phase of the menstrual cycle is excluded.

How has your menstrual cycle affected your ability to attend classes or lectures?

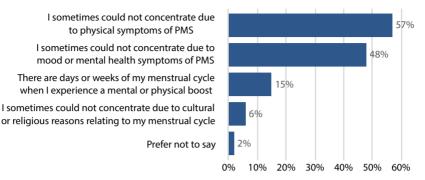


In addition to missing classes, 57% of respondents told us that they sometimes could not concentrate properly on their studies or assessments due to physical symptoms of PMS, such as fatigue, gastrointestinal changes or bloating. Almost half of respondents (48%) explained they sometimes could not concentrate properly on their studies or assessments due to mood or mental health symptoms of PMS.

Interestingly, 15% of respondents explained there are days or weeks of their menstrual cycle when they experience a mental or physical 'boost' that increases their ability to focus or perform in exams.

How has your menstrual cycle affected your ability to focus on your studies?

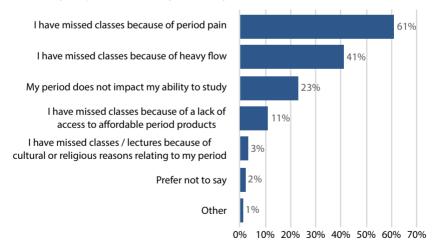
to physical symptoms of PMS



We then asked students about the impact of periods on their ability to study.

Some 61% of respondents have missed classes in the past 12 months because of period pain. A further 41% of respondents have missed classes due to experiencing heavy menstrual bleeding. Only 23% of respondents state their period has not impacted their ability to study.

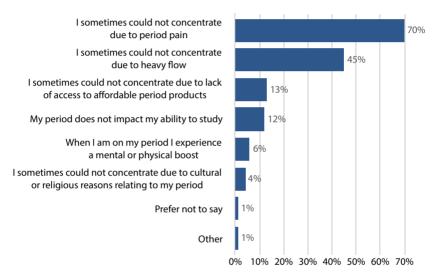
How has your period affected your ability to attend classes or lectures?



The majority of respondents (70%) state they sometimes could not concentrate properly on their studies or assessments because of period pain. Almost half of respondents (45%) state they sometimes could not concentrate due to experiencing heavy menstrual bleeding.

It is important to remember the individual nature of period experiences. Some 6% of respondents explain they experience a mental or physical boost that increases their ability to focus or perform in exams during their period.

How has your period affected your ability to focus on your studies?



Students outlined their differing experiences:

My assessments are all coursework so it hasn't affected my assessments.

Second-year Media, Journalism and Culture student

We do all our exams at the end of the year in a one-week block. In previous years, I have had my period during that one-week block, and I worry that I won't be able to perform my best.

Fourth-year Veterinary Medicine student

At my university, all the exams are in a week at the end. I got my period in the middle of the exam. We were told that 50% would not pass. I was so scared that I wouldn't pass. So, I sat through the entire exam and then rushed to the toilet. I sat through the whole exam in pain. I didn't think I did as well because I was so focused on the pain. If you went to the toilet, they would follow you to where the toilets were and then follow you back in. You weren't allowed to go to your bag – they were at the back, and you weren't allowed to touch them. So you couldn't take any medication.

Second-year Biomedical Science student

In addition to answering the questions above, students used the free-text option to add:

I remember having to finish a 2-hour assessment whilst my period had started because we were not allowed to leave and I had severe pain.

Just horrible headaches to the point where I cannot open my eyes and it stops me from going to class or doing my best on an assignment due at the same time as my period which has happened before.

Reviewing the last three sections of the report, we see that 75% of students who menstruate have missed at least one day of higher education study in the past 12 months, 60% of these students experience severe pain and 70% of students who menstruate are unable to fully concentrate on their studies or assessments due to period pain. As such, the majority of students who menstruate (and therefore, the majority of female students) are finding that their studies are negatively impacted by their menstrual cycle or period.

# Placements

In interviews with students, managing menstruation while on placements was highlighted as a challenge. Students outlined:

When I do placements, such as going on to farms, a lot of the time there are not always toilets you can use – you will have to get to a service station to use the loo.

Fourth-year Veterinary Medicine student

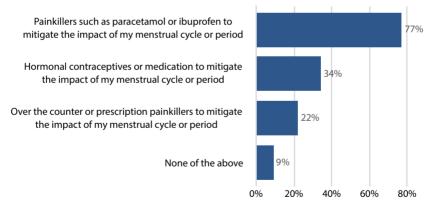
It hasn't affected me in terms of assessment but it has in terms of clinical placements. Talking about it isn't comfortable because you want to be on your best form. At my uni, it is drilled into us right from the off that we've got to be willing to learn and be involved. It is hard to suggest how to help as you need someone you are comfortable with to say that you might need to take a break or sit down for a moment.

Fourth-year Diagnostic Radiography student

# Mitigating the impact of menstrual cycles and periods

Most respondents have used painkillers such as ibuprofen or paracetamol to mitigate the impact of their menstrual cycle or period in the last 12 months. Almost a quarter of respondents (22%) are using over-the-counter or prescription painkillers (such as naproxen or co-codamol) to mitigate their symptoms and over a third of respondents (34%) have used hormonal contraceptives or medications for this purpose.

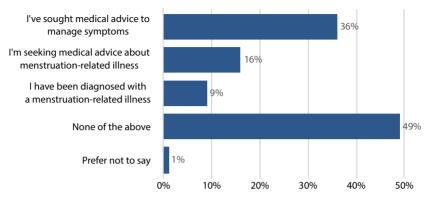
In the last 12 months, have you used any of the following to mitigate the impact of your menstrual cycle or period?



More than one-third of respondents (36%) have sought medical advice to manage their symptoms, with 16% of respondents seeking medical advice about potential endometriosis, adenomyosis or other menstruation-related illnesses and 9% of respondents diagnosed with a menstruation-related illness.

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# In relation to your menstrual cycle or period, do any of the following statements apply to you?



We looked specifically at the days of study missed by these groups of respondents:

- students who have sought medical advice to help manage their menstrual symptoms missed 12 days of study in the last 12 months;
- students seeking advice about possible menstruation-related illness missed 14 days of study;
- students who have been diagnosed with a menstruation-related illness missed 19 days of study; and
- respondents who fall into the 'none of the above' group, who missed seven days of study on average.

This means students who have a diagnosis of endometriosis, adenomyosis or another menstruation-related illness miss on average 57 days of study across the course of a three-year degree. This equates to over 11 academic weeks. One-in-10 of the (predominantly female) student survey respondents state that they are in this group.

Students in the interview groups gave some details about their experiences of menstruation-related illness:

I have recently been diagnosed with PCOS [polycystic ovary syndrome]. My doctor didn't go into detail about what it was. I was

sent straight for surgery. I've had to do my own research about how to manage my symptoms – no one told me how to do this. Not even the doctors.

Second-year Business Management student

The first few times [I sought medical advice] was because of extreme cramps and pain and heavy bleeding. It got so bad I had to go to the hospital to get blood transfusions because I was so anaemic. Now I am on the pill.

Second-year Criminology with Forensic Biology student

I was anaemic as I was bleeding way too much. I only found out when I was treated for something else. They said a lot of people are iron deficient because they bleed too much but you don't know until you have a blood test. I was so tired and didn't have the energy to do anything. I used all my energy on my studies. I was like a zombie the rest of the time.

Second-year Biomedical Science student

It is imperative not to create a narrative that students who menstruate, or female students, cannot do difficult things due to their periods. While the impact of menstruation is real, many students are showing a significant level of resilience to succeed in their studies despite the pain and inconvenience they experience due to menstruation.

I just deal with it – I have to take painkillers and hope that will do me for the day.

Second-year Sports Psychology student

Mine does affect me quite a lot. As part of our course we do a lot of clinical placements where you do most of your learning. I get quite bad PMS, I get quite emotional, tired and have bad mood swings. [When you are on placement] you have to be on top of your game and grasp every single scenario and patient.

Fourth-year Diagnostic Radiography student

Women have worked hard over decades, if not centuries, to overcome the idea that they cannot cope, or should be considered 'hysterical' due to the fact that they menstruate. The fear of perpetuating this misogynistic historical narrative may have reinforced the taboo around the impact of menstruation.

Students explained some of their experiences that chimed with this:

I would say I have a headache rather than being on my period. I feel like people would look at me and think 'why are you a cry-baby' rather than just getting on with it.

Second-year Business student

I get in the mindset that it isn't a good excuse, as other people will be at lectures on their periods.

Second-year Media, Journalism and Culture student

It is striking how many of the scenarios would be easily overcome if students felt they could say: 'I've just started my period, can I get some paracetamol out of my bag and go to the loo?', or on placement: 'I've just started my period, I need to drive to the service station' or 'I've got awful period pains, I'm just going to sit down for 5 minutes' or 'I'm on day one of my period, can I arrange another time for this assessment?'

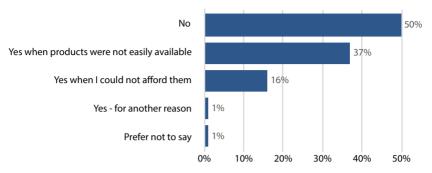
It is perhaps ironic that the narrative claiming periods never hinder women's full participation in society is now preventing menstruating students from accessing accommodations that would allow them to do so.

#### Period poverty

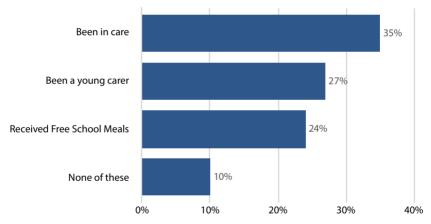
Some 16% of students who menstruate have gone without period products in the last 12 months because they could not afford them. We can describe this group of respondents as experiencing period poverty.

Students who have been in receipt of Free School Meals, have been in care, or have been a young carer are much more likely to experience period poverty.

# In the last 12 months, have you ever gone without period products when you needed them?



*Respondents who have gone without period products in the last 12 months because they could not afford them - by demographic group* 

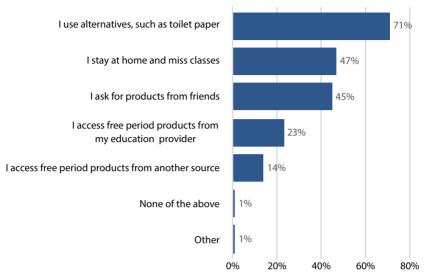


We asked respondents who could not afford period products what action they take when they do not have access to products. A big majority (71%) of these respondents use alternatives such as toilet paper or cloths. Almost half (47%) of students in period poverty stay at home and miss classes. A further 45% ask for products from friends.

Almost a quarter (23%) of respondents access free period products from their education providers and 14% access free period products from other sources.

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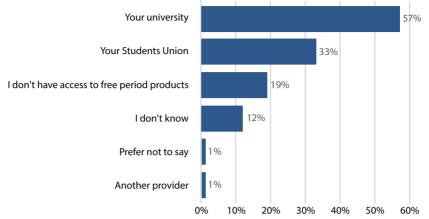




No student should be using alternatives to period products or missing out on their education because they cannot afford them. In my view, there should only be one bar on this chart which states: 'I access free period products from my education provider'. Until we reach this point, more free period products need to be in more places on campus. Given that the legislative model in Scotland and Northern Ireland is already tested (although not fully evaluated), England and Wales should follow suit, requiring local authorities and education providers to make period products available to those who need them. Institutions have a role to play in ensuring these products are well-stocked and widely available. Students should not need to travel across campus or ask a staff member for access to free products.

We asked students if they could access free period products on campus. Some 57% responded that they could, and this is reassuring to see. However, given that the above data show that only 23% of students in period poverty are accessing free products on campus, we should be curious as to why these products are not reaching the right students or why they do not feel able to acquire them.

# Are you able to access free period products from any of the following sources?



In relation to free period products, students told us via the free text option:

The university provides free period products in almost every toilet and they are always stocked.

I am grateful that I am from Scotland as it is policy for all public toilets to have free menstrual products available at all times.

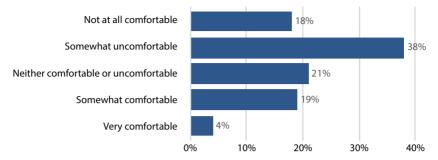
We used to have tampons and pads in the bathrooms but they were removed.

There needs to be free products in bathrooms not having to ask someone for a product.

I wish they provided free menstrual products at university as we pay a lot and I've seen free condoms around.

How can higher education providers support students?

Given that students are missing lectures and classes and at times are struggling to focus on their studies and assessments due to the symptoms of their menstrual cycles, periods and the impact of period poverty, we were interested in how comfortable students felt in approaching their institutions for support. Most respondents (56%) felt uncomfortable about approaching their institution for support. Less than one-quarter (23%) of respondents would feel comfortable doing so. How comfortable would you feel approaching your institution for support?



We asked students how higher education providers could support students impacted by their menstrual cycle or period.

Some 72% of students who menstruate stated their institution should provide free menstrual products for all students who need them. More than half (58%) of respondents wanted to see more flexibility around coursework and assessments for those who need it.

Campaigns to break down the taboo of discussing menstrual cycles and periods, training staff on the impact these have and dedicating research time to understanding impacts were all popular options.

Only 2% of respondents stated they did not need any support from their institution relating to their menstrual cycle or period.

Respondents could also give free-text responses to explain how their studies had been impacted by their menstrual cycle or periods and how they felt higher education providers could mitigate these impacts. Students told us:

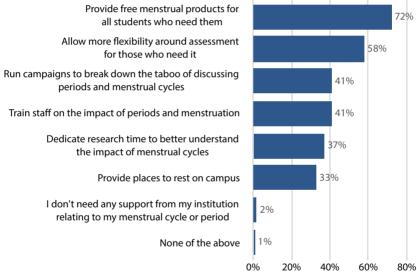
I really struggle and I don't get taken seriously.

The Black Women's Project Society at Warwick is amazing for holding talks regarding menstruation.

Honestly, my uni is really iffy with periods. Some teachers understand, some teachers don't and the inconsistency can be really upsetting.

The course I study is completely practical and I dance for around 5 hours every day, painful periods and heavy flow significantly impact my ability [to] complete classes well and managing my pain can be a struggle. My teachers are understanding with letting us wear joggers or shorts over tights and leotards, however, more needs to be done especially within the performing arts industry to make people understand the pain mentally and physically that comes with being a person who menstruates.

I'd love for more to be done for menstruating individuals. It has been so debilitating and has been normalised for so long.



How could universities better support students?

Some students from the interview groups had positive experiences to share:

My university is doing about as much as can be done. There are loads [of period products] in the majority of the toilets, and they are well stocked. A lot of what affects me is the inconvenience of my period arriving and the impact of intensive assessments.

Fourth-year Veterinary Medicine student

I believe I would be able to receive that support if necessary. My lecturers are approachable and provide support when needed.

Third-year Animation student

# Work already being undertaken in higher education institutions

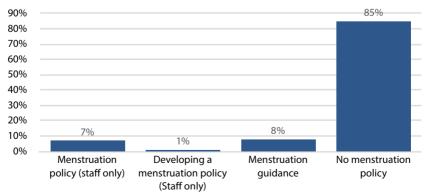
#### Menstruation policies

In March 2025, Freedom of Information (Fol) requests were sent to 138 higher education providers across the UK. We received responses from 117 providers. We did not receive responses from 21 providers.

Through this research, we asked institutions about their menstruationrelated policies. We found that:

- Eight providers (7%) had a specific menstruation policy. Each of these providers' policies related to staff only; there were no policies that supported students.
- One provider was developing a specific menstruation policy, and again this related only to staff members.
- Nine institutions (8%) did not have a specific menstruation policy but did have menstruation-related guidance. Many of these have a menopause focus.
- The majority of providers (99 institutions, 85% of respondents) stated they do not have a specific menstruation policy or women's health-related guidance.

The percentage of higher education providers with menstruation policies or guidance



Most providers indicate that staff can refer to health and wellbeing policies such as flexible working, occupational health and the sickness absence management policy. Several institutions that do not have a menstruation policy told us that they do have a menopause policy in place. The focus on staff wellbeing relating to menopause is welcome. Hopefully, the success in breaking down the taboos of discussing the impact of menopause may lead to a similar dismantling of taboos in relation to menstruation.

Given the impact of menstrual cycles on higher education studies demonstrated in this report, it is surprising to see the impact on students is not addressed by institutions through policy or guidelines. The lack of previous research in this area may have influenced this.

# Extenuating circumstances

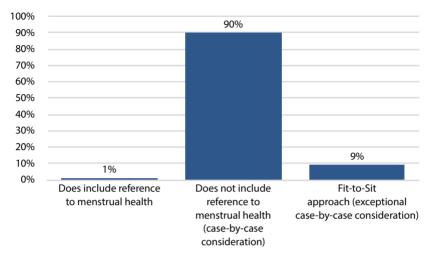
We also asked providers whether they specify menstrual symptoms, period pain or similar as valid reasons for assessment extension and or an extenuating circumstances review following poor exam performance.

Only Anglia Ruskin University responded positively to this, outlining:

Anglia Ruskin considers adjustment requests for dysmenorrhea [period pain], menorrhagia [heavy menstrual bleeding] and other menstrual health conditions if they affect a student being able to participate in an exam or meet a deadline.

Most providers (105 providers, 90% of respondents) do not specifically mention menstrual symptoms, period pain or similar as valid reasons for assessment extensions but would consider mitigation (on a case-bycase basis) for assessment extension and review following poor exam performance.

A small number of providers (11 providers, 9% of respondents) would not consider menstrual symptoms, period pain or similar as valid reasons for review following poor exam performance due to having a 'Fit to Sit' principle approach. That is, sitting an examination means declaring oneself fit to do so, hence not permitting mitigation unless in extraordinary circumstances. These providers would consider mitigation (on a case-bycase basis) for assessment extension. The percentage of providers that refer to menstrual health in extenuating circumstances / extension policies



Students in the interview groups reflected on the differing approaches of their institutions, stating:

It shouldn't be seen as a niche sort of thing, especially if you have PMDD [pre-menstrual dysphoric disorder]. You should have the option to make an extenuating circumstances claim if it has impacted you. However, my university would not accept this as valid.

Final-year Biomedical Science and Biochemistry student

I don't think I'd be overly comfortable to ask. In terms of extension, I don't know if they would see it as a valid excuse.

Fourth-year Diagnostic Radiography student

You can ask for an extension without giving a reason which was good.

Second-year Media, Journalism and Culture student

Following this analysis, I reviewed the *Good Practice Framework for Additional Consideration* published by the Office of the Independent Adjudicator for Higher Education (OIAHE).

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The *Framework* sets out that for a student to apply for additional consideration 'usually the event or circumstance will be unexpected and beyond the student's control' and:

processes are normally designed to deal with acute but shorter-term circumstances that impact a student's performance or ability to study. If a student's circumstances have had (or are likely to have) a longerterm impact, then the additional consideration process may not be appropriate. It may be necessary to consider additional actions to support their learning, for example referring them to the provider's disability support staff or allowing them to take some time away from their studies until they are able to resume.

However, issues such as severe period pain, severe mental-health symptoms relating to PMS and symptoms of menstruation-related illness are cyclical in nature and therefore unlikely to be 'unexpected'. They may be part of a long-term issue, with symptoms showing up in an 'acute but short-term' manner. For many students, their experiences may not qualify them for disability support services, and some might argue or interpret that menstrual cycles are part of the 'normal life events' that the *Framework* sets out that students should, in general, be expected to cope with.

The *Framework* goes on to outline that circumstances likely to be accepted include: 'serious short-term illness or injury' and 'worsening of an ongoing illness or disability, including mental health conditions'.

It is unclear whether menstrual-related illnesses would fit into these categories due to their long-term but fluctuating nature. Further, the current language suggests that students experiencing severe period pain or other severe symptoms without a diagnosed illness may be unable to apply for additional consideration.

The *Framework* does include a case study on 'fluctuating conditions', with rheumatoid arthritis as the example. The approach outlined here would be useful for students with menstruation-related illnesses and those without a diagnosed illness who suffer from severe symptoms. Listing specific conditions in institutional policies or the *Framework* risks becoming a hostage to fortune if one is missed. However, given the taboo associated with menstrual issues, the language in the *Framework* and institutional

policies would benefit from being more explicitly inclusive of women's health issues. Specifically, language around severe menstrual symptoms that might not be framed in many students' or lecturers' minds as 'medical' would provide clarity.

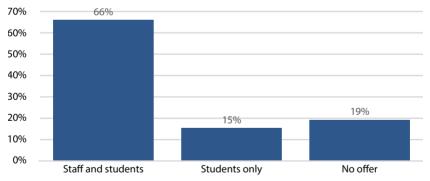
# Period poverty

Freedom of Information requests were also sent to institutions to understand the work happening on campuses to tackle period poverty. Fols were sent to 133 institutions and 109 institutions responded. This research only looked at the provision from higher education providers; it does not capture free period product provision from students' unions.

This research found that:

- 72 providers (66%) offer free period products to staff and students;
- 16 institutions (15%) offer free period products just to students; and
- 21 institutions (19%) do not offer free period products to their students.

The percentage of providers that offer free period products



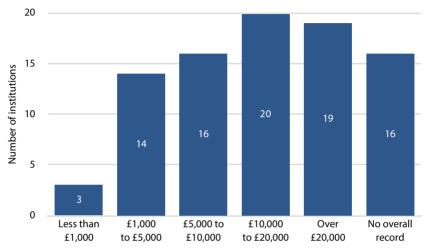
We asked providers how much they spend per year providing free period products. Of the 88 providers offering free period products, we found that:

- Some three institutions (3%) spend less than £1,000 per year;
- 14 institutions (16%) spend between £1,000 and £5,000 per year;
- 16 institutions (18%) spend between £5,000 and £10,000 per year;

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- 20 institutions (23%) spend £10,000 to £20,000 per year;
- 19 institutions spent over £20,000 per year; and
- 16 institutions (18%) kept no record of overall spend.

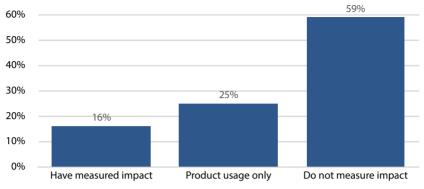
Annual cost of free period product provision per institution



We also asked whether institutions were measuring the impact of the free period product schemes. This research found that:

- Some 14 institutions (16%) have measured the impact of their free period product offer;
- 22 institutions (25%) measure product usage (to ensure appropriate replenishment); and
- 52 institutions (59%) do not measure the impact of their period product offer.

Institutions are measuring the impact of their free period product schemes using various approaches. These include QR codes at locations stocking products, surveying students and liaising with students' unions or student groups. Feedback from evaluations showed the schemes were well received. Changes to the free period product offer as a result of evaluation included a wider provision of products and ensuring that free period products are available to trans students. The percentage of providers who have measured the impact of a free period product scheme



The future of menstrual support at education providers?

One higher education provider is taking a proactive and forwardthinking approach to support their students and mitigate the impact of menstruation on their studies.

The University of East London (UEL) has launched a pioneering new initiative called *The Shine Project*, the world's first university-wide screening programme focused on iron deficiency, anaemia, and heavy menstrual bleeding. Designed by Professor Toby Richards and led by student researchers, the project seeks to redefine how women's health is understood, diagnosed, and supported within a higher education setting.

Iron deficiency is one of the most common yet underdiagnosed health issues globally, with significant links to fatigue, anxiety, low mood, and impaired cognitive performance. Through this initiative, UEL is screening thousands of female students across its campuses through pop-up stands, to raise awareness and offer practical, evidence-based interventions that empower students to understand and take control of their own health. Early findings already show a clear link between low iron levels and low mood, highlighting the life-changing potential of simple treatments for conditions that often go unnoticed.

The project has been launched in support of UEL's wider charitable purpose to tackle health and economic inequalities wherever they are found, and

its commitment to inclusive innovation. With further support, UEL hope to expand the reach of the programme, ensuring more women benefit from early detection, education, and care.

### The role of students' unions

Awareness-raising work around menstruation, including about period poverty, has in many instances been driven by sabbatical officers and students' union staff.

The Middlesex University Students' Union developed an awarenessraising campaign, led by Mihita Parekh, Middlesex University Students' Union Education Officer. This included the use of a period pain simulator (TENS machine) to raise awareness of how menstruation affects daily life and academic performance, as well as canvassing students' views on the provision of free period products on our campus. Mihita explained:

> Students and staff were invited to try the device, which simulates menstrual cramps at varying intensities. Most male participants struggled to reach even 50% of the pain level and admitted they hadn't realised how intense period pain could be. Some arrived joking, but left with a greater appreciation and understanding of the challenges faced by those who menstruate. Female students, by contrast, reported the pain as similar to a mild or normal period. The activity helped break stigma and highlighted the need for accessible period products and better menstrual health awareness on campus.

The campaign secured funding for free period products on campus for both the 2024/25 and 2025/26 academic years.

At the University of Huddersfield, the Students' Union partnered with the University Estates Team to end the use of pay-to-vend machines selling period products and replace these with free products for both staff and students. The products the university supplies are 100% certified organic, ethical and sustainable period products, and are chemical-free and biodegradable.

Tribute should be paid to these sabbatical officers and others who have raised awareness of this topic and simultaneously reduced the taboo and stigma associated with conversation about menstruation in higher education settings.

# Recommendations

This report outlines the real impact that menstruation has on higher education studies. However, it is important to note that not all students who menstruate are negatively impacted and many students participate in their studies successfully with minor mitigations. For those who are significantly affected by their periods or menstrual cycle, our research shows that many demonstrate extraordinary resilience in completing their studies around pain, mental health challenges and medical diagnoses related to menstruation. However, steps can be taken to reduce barriers to access, participation and success in higher education for those who are significantly impacted by their period or menstrual cycle.

#### Education

The Department for Education in England and the Department of Education in Northern Ireland, the Department for Education and Skills in Wales and Education Scotland should review their curricula to ensure they explicitly include:

- teaching about menstruation beyond the biology this should include information on managing physical and mental health symptoms of menstruation;
- teaching about the impacts (which can be both positive and negative) of all stages of the menstrual cycle;
- include information on menstruation-related illnesses, such as heavy menstrual bleeding, endometriosis, and polycystic ovary syndrome (PCOS), and when to seek help from healthcare professionals. (This is included in the *Draft Relationships Education, Relationships and Sex Education and Health Education (RSHE)* guidelines for England).

Further, to combat the historical (and sometimes still current) practice of only delivering menstrual education to girls, the guidelines should specifically outline the importance of teaching about menstrual cycles and periods to all pupils, regardless of gender.

Policymakers should consider recommending that menstrual health, as part of a broader relationships, sex and health curriculum should be made

statutory for 16-to-18 education and that statutory guidance should be developed for this phase of education. In England, changes to this aspect of the curriculum could be incorporated into the Government's Curriculum and Assessment Review programme, led by Professor Becky Francis.

For menstrual health and wellbeing to be taught effectively, teachers must be able to access specialist training on this topic. The Education Departments in England, Northern Ireland and Wales and Education Scotland should make funding available for teachers to attend high-quality training, aimed at supporting them to develop an understanding of what constitutes best practice pedagogy within the context of Personal, Social and Health Education (PSHE) and ensure that teachers have access to highquality PSHE materials.

# Period poverty

Higher education providers should ensure that period products are freely available in multiple venues across campus. It is imperative that students, particularly those from under-resourced backgrounds who have been in care or are young carers, know how to access these resources and feel able to access them. No one should miss out on their education in 2025 because they cannot afford to buy period products.

The Westminster Government (for England) and the Welsh Government should follow the lead of the Scottish Government and Northern Irish Assembly by enshrining the right to access free period products for those who need them.

#### Assessments

The data outlined in this report demonstrate that students' ability to focus on assessments can be impacted by their menstrual cycle or period. The OIAHE should review its language in the *Good Practice Framework for Additional Consideration* to ensure that women's health conditions are explicitly included and the language is broad enough to take into account students who suffer from severe symptoms during their menstrual cycle.

Institutions should review the language in their extenuating circumstance policies to ensure these are inclusive of diagnosed women's health conditions and take into account students who suffer from severe symptoms during their menstrual cycle.

Institutions should include references in their policies and guidelines on assessment extension to diagnosed women's health conditions and take into account students who suffer from severe symptoms during their menstrual cycle.

Perhaps more radically, institutions may consider a more flexible approach to assessment deadlines. One example is at London South Bank University, where there is a new policy to allow students to submit their assessments up to five days later than the deadline with no marking penalty or cap.<sup>37</sup> This initiative reported that there was no increase in the number of late submissions and a significant reduction in the number of extenuating circumstances claims to process (as a claim was not needed to submit an assessment within the five-day window). While this initiative was not designed to support students experiencing menstrual symptoms, an approach like this would offer some flexibility to students who had planned to complete their assessment on a particular date only to find themselves struggling with symptoms at that time.

# Cultural change

In the same way that campuses are raising awareness about the impact of the menopause, institutions should develop policies, guidelines and / or action plans to raise awareness, reduce stigma, provide training and signpost support regarding menstruation and periods. This should cover both staff and students.

More broadly, the Department for Health should fund a taboo-busting media campaign, 'It's okay to talk about periods'. This should include community leaders (teachers, sports coaches, doctors) giving the message 'It's okay to talk about periods' and 'It's okay to talk about period pain / heavy menstrual bleeding / PMS'. This should specifically include male teachers, doctors and coaches to tackle the gendered nature of discussions about periods and the gendered nature of menstruation education. This campaign should include a link to a straightforward and informative resource for people who have missed out on their menstruation education – the 'bloody brilliant' website created by the Welsh Government is a great example of how to approach this.<sup>38</sup>

# Endnotes

- 1 Antony Moss et al, 'Trusting students and reducing barriers by abolishing penalties for late work', *Wonkhe*, 14 April 2025, <u>https://wonkhe.com/blogs/trusting-students-and-reducing-barriers-by-abolishing-penalties-for-late-work/</u>
- 2 https://www.bloodybrilliant.wales/
- 3 Hilary OD Critchley et al, 'Menstruation: science and society', American Journal of Obstetrics & Gynaecology, November 2020, Issue 223, Volume 5, pp 624-664 <u>https://pubmed.ncbi.nlm.nih.gov/32707266/</u>
- 4 John Thompson and Bahram Bekhradnia, *Male and female participation and progression in Higher Education*, HEPI Report 41, June 2009 <u>https://www.hepi.ac.uk/2009/06/05/</u> <u>male-and-female-participation-and-progression-in-higher-education/;</u> Nick Hillman and Nicholas Robinson, *Boys to Men: The underachievement of young men in higher education – and how to start tackling it*, HEPI Report 84, May 2016 <u>https://www.hepi.</u> <u>ac.uk/2016/05/12/3317/;</u> Nick Hillman and Mark Brooks, *Boys will be Boys: The educational underachievement of boys and young men*, HEPI Report 188, March 2025 <u>https://www. hepi.ac.uk/2025/03/20/boys-will-be-boys/</u>
- 5 'Starting your periods', NHS <u>https://www.nhs.uk/conditions/periods/starting-periods/;</u> 'What is the menopause?', The British Menopause Society, 2022 <u>https://thebms.org.uk/wp-</u>content/uploads/2023/08/17-BMS-TfC-What-is-the-menopause-AUGUST2023-A.pdf
- 6 Brook, <u>https://www.brook.org.uk/your-life/menstrual-cycle-and-pregnancy/</u>
- 7 Brook, https://www.brook.org.uk/your-life/menstrual-cycle-and-pregnancy/?gad\_ source=1&gclid=CjwKCAjwp8--BhBREiwAj7og1zZdq\_t-qc2ycA\_JNpcTGdEbp096SVQoyOJyavgW3ifPzTDoWgrHBoCiYMQAvD\_BwE
- 8 Flaminia Ronca et al, 'Attentional, anticipatory and spatial cognition fluctuate throughout the menstrual cycle: Potential implications for female sport', *Neuropsychologia*, Volume 206, January 2025 <u>https://www.sciencedirect.com/science/article/pii/</u> <u>S0028393224001246?via%3Dihub</u>
- 9 'Pre-menstrual syndrome', NHS https://www.nhs.uk/conditions/pre-menstrual-syndrome/
- 10 'Endometriosis', NHS https://www.nhs.uk/conditions/endometriosis/
- 11 'Adenmyosis', NHS https://www.nhs.uk/conditions/adenomyosis/
- 12 'Fibroids' NHS https://www.nhs.uk/conditions/fibroids/
- 13 Melissa J Palmer et al, The Burden of Poor Reproductive Health in England: Results From a Cross-Sectional Survey', British Journal of Obstetrics and Gynaecology, March 2025 https://doi.org/10.1111/1471-0528.18133
- 14 'Women's reproductive health conditions', *House of Commons*, December 2024 <u>https://</u> <u>committees.parliament.uk/publications/45909/documents/228040/default/</u>
- 15 'Women's reproductive health conditions', *House of Commons*, December 2024 <u>https://</u> <u>committees.parliament.uk/publications/45909/documents/228040/default/</u>
- 16 Johannes Bitzer et al, 'Medical management of heavy menstrual bleeding: a comprehensive review of the literature', Obstetrical & Gynecological Survey, February 2015 Volume 70, Issue 2, pp 115-130 <u>https://pubmed.ncbi.nlm.nih.gov/25671373/</u>

- 17 Chloe Tringle and Shailini Vora, 'Break the Barriers: Girls' experiences of menstruation in the UK', *Plan Internationa UK*, January 2018 <u>https://plan-uk.org/file/plan-uk-break-thebarriers-report-032018pdf/download?token=Fs-HYP3v</u>
- 18 Phs Group, 'Breaking the cycle, period equality research in the UK', 2023 <u>https://www.phs.</u> <u>co.uk/media/l5idzgti/breaking-the-cycle.pdf</u>
- 19 Natalie Brown et al, 'Teachers' Perceptions and Experiences of Menstrual Cycle Education and Support in UK Schools', Frontiers in Global Women's Health, Volume 3, 2022 <u>https://www.frontiersin.org/journals/global-womens-health/articles/10.3389/fgwh.2022.827365</u>
- 20 Gemma Sawyer et al, 'Associations of adolescent menstrual symptoms with school absences and educational attainement: analysis of a prospective cohort study', *medRxiv*, April 2024 <u>https://www.medrxiv.org/content/10.1101/2024.04.24.24306294v1.full</u>
- 21 Gemma Sawyer et al, 'Associations of adolescent menstrual symptoms with school absences and educational attainement: analysis of a prospective cohort study', *medRxiv*, April 2024 <u>https://www.medrxiv.org/content/10.1101/2024.04.24.24306294v1.full</u>
- 22 Department for Education, Relationships Education, Relationships and Sex Education (RSE) and Health Education, 2019 <u>https://assets.publishing.service.gov.uk/</u> media/62cea352e90e071e789ea9bf/Relationships\_Education\_RSE\_and\_Health\_Education. pdf
- 23 Natalie Brown et al, 'Teachers' Perceptions and Experiences of Menstrual Cycle Education and Support in UK Schools', Frontiers in Global Women's Health, Volume 3, 2022 <u>https://</u> www.frontiersin.org/journals/global-womens-health/articles/10.3389/fgwh.2022.827365
- 24 Natalie Brown et al, 'Teachers' Perceptions and Experiences of Menstrual Cycle Education and Support in UK Schools', Frontiers in Global Women's Health, Volume 3, 2022 <u>https://www.frontiersin.org/journals/global-womens-health/articles/10.3389/fgwh.2022.827365</u>
- 25 'Women's reproductive health conditions', *House of Commons*, December 2024 <u>https://</u> <u>committees.parliament.uk/publications/45909/documents/228040/default/</u>
- 26 Plan International UK, 'Over one million girls in the UK struggled to afford or access period products during the pandemic', May 2021 <u>https://plan-uk.org/press/one-million-</u> girls-in-the-uk-struggled-to-afford-or-access-period-products-during-the-pandemic
- 27 Laura Coryton, 'Period Poverty in UK Higher Education: Addressing Stigma and Empowering Students', HEPI Blog, 22 January 2024 <u>https://www.hepi.ac.uk/2024/01/22/</u> period-poverty-in-uk-higher-education-addressing-stigma-and-empowering-students/
- 28 Scottish Government, 'Poverty and social justice' <u>https://www.gov.scot/policies/poverty-and-social-justice/access-to-free-period-products/</u>
- 29 https://civilservice.blog.gov.uk/2021/12/08/how-dfe-helped-learners-access-educationperiod/
- 30 'Period Products (Free Provision) Act (Northern Ireland) 2022' <u>https://www.legislation.gov.uk/nia/2022/25/enacted</u>
- 31 Lara Owen, 'Researching the Researchers: The Impact of Menstrual Stigma on the Study of Menstruation', Open Library of Humanities, Volume 8, Issue 1, February 2022 <u>https://doi. org/10.16995/olh.6338</u>

- 32 Professor Bettina Bildhauer, 'The case for including humanities perspectives in menstrual cycle research,' Webinar, 4M Consortium, October 2023 <u>https://www.youtube.com/</u> watch?v=ob-RDK2l2Qg
- 33 'Women's reproductive health conditions', *House of Commons*, December 2024 <u>https://</u> <u>committees.parliament.uk/publications/45909/documents/228040/default/</u>
- 34 'Women's reproductive health conditions', *House of Commons*, December 2024 <u>https://</u> <u>committees.parliament.uk/publications/45909/documents/228040/default/</u>
- 35 https://www.lboro.ac.uk/schools/sport-exercise-health-sciences/news/2025/women-insport-hub-launched/
- 36 https://healthandcareresearchwales.org/about/news/health-care-research-walessupports-womens-health-centre
- 37 Antony Moss et al, 'Trusting students and reducing barriers by abolishing penalties for late work', *Wonkhe*, 14 April 2025 <u>https://wonkhe.com/blogs/trusting-students-and-reducing-barriers-by-abolishing-penalties-for-late-work/</u>
- 38 https://www.bloodybrilliant.wales/

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This report from HEPI's Director of Policy, Rose Stephenson, aims to understand students' experiences of menstruation education and the day-to-day impact of menstrual cycles and periods on students' higher education studies. Based on a survey of over 1,500 UK higher education students and 13 semi-structured interviews, it makes a series of recommendations for higher education providers and policymakers to best support students who menstruate.



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