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# Toolkit for applying behavioural science to barriers in reproductive health

March 2021



Public Health  
England



WARWICK  
MEDICAL SCHOOL

# Key terms

Term	Definition
<b>Category (of behavioural influence)</b>	These categories represent different types of influence on behaviour, such as 'Beliefs about consequences', 'Knowledge' or 'Social influences'. These categories are referred to as Mechanisms of Action (MoAs) in the literature. A full list of these categories and their definitions can be found in the <b>Theory and Techniques Tool</b> from UCL - this toolkit contains only those categories identified as relevant in this behavioural analysis project.
<b>Behaviour change techniques (BCTs)</b>	The specific techniques used within the intervention to change behaviour – they are the irreducible 'active ingredients' of an intervention.  For each category, this toolkit outlines: <ul style="list-style-type: none"><li>• Recommended BCTs: BCTs with the strongest evidence</li><li>• Other BCTs to consider: BCTs with inconclusive evidence as of yet but which could still be considered</li></ul>
<b>Barrier</b>	Factors that prevent a behaviour from occurring.
<b>Facilitator</b>	Factors that enable a behaviour to occur.
<b>Behavioural influences</b>	Term to collectively refer to barriers and facilitators.





# About this toolkit

**The purpose of this toolkit is to enable those who develop interventions to adopt an evidence-based approach to behaviour change.**

The toolkit takes a behavioural science approach, with a focus on what influences women when they seek information or support for:

- ▶ **Choosing and accessing an appropriate contraception method**
- ▶ **Planning and preparing for a pregnancy**
- ▶ **Managing reproductive symptoms**

This toolkit recommends behaviour change intervention strategies that can be used to support women to achieve these goals.

The content of this toolkit has been drawn from a research project that systematically explored the barriers and facilitators women face when making healthy reproductive choices, and critically assessed these influences using behaviour change tools.



**The toolkit can be used to:**

- 1 Develop a new intervention or programme of interventions
- 2 Evaluate and improve an existing intervention
- 3 Select an intervention from different options

**For each of the topic areas outlined above, this toolkit presents:**

- 1 Barriers and facilitators, grouped into categories which represent different behavioural influences
- 2 BCTs that are appropriate for targeting these categories
- 3 Ideas and examples of how these BCTs could be applied

Due to the broad applicability of the toolkit, not all the recommendations will be relevant to every reader. The methods and tools included provide guidance to select an appropriate BCT.

## Acknowledgements



This tool was created as a result of a rapid evidence review and behavioural analysis on improving reproductive health outcomes to reduce inequalities. The original research project was conducted by Dr. Abimbola Ayorinde, Prof. Felicity Boardman and Dr. Oyinlola Oyebode at Warwick Medical School, with support from Bushra Alzouebi, Rosanna Buck, Nwamaka Eze, Samantha Johnson and Majel McGranahan at Warwick Medical School, and Nicola Pearce-Smith at Public Health England (PHE). The project steering group also included Alison Hadley, Melissa Ludeke, Dr. Sue Mann, Lucy Porter, Dr. Anna Sallis and Faye Callaghan at PHE. Prof. Susan Michie (UCL) oversaw the interim mapping of the COM-B model to the Theory and Techniques Tool. Additionally, Foleshill Women's Training (FWT) - a centre for women participated in the public engagement activities conducted as part of the work. This toolkit was further developed by Elizabeth Remfry and Kirsty Bennett (PHE), with support from Dr. Paul Chadwick (PHE, UCL), Georgina Wilkinson (PHE) and Isabel Carrick (East Riding of Yorkshire Council).

For more information or support in using this tool, please contact: Abimbola Ayorinde [A.Ayorinde.1@warwick.ac.uk](mailto:A.Ayorinde.1@warwick.ac.uk).

This toolkit was designed and edited by the Research Retold team at [www.researchretold.com](http://www.researchretold.com).

# Background to this toolkit

This toolkit on reproductive health behavioural insights is part of a working programme in women's reproductive health led by Public Health England. It aims to take a system-wide approach to:

- Improve reproductive health-related quality of life
- Support women to fulfil reproductive choices
- Identify future reproductive illness at an early stage

The outputs of this work will provide insights to the health system on:

- How information is provided
- Which strategies are adopted to improve access to care
- Which educational tools can be developed to optimise workforce quality



Health outcomes are determined by several factors including an individual's behaviour and their physical, social and economic environment. In order to improve population health, a multi-faceted approach is required. Behavioural science includes a range of disciplines that study individual behaviour and social systems (e.g. psychology, sociology, anthropology, economics). Behavioural science tools, methods and frameworks can be used to understand behaviour and the wider social and environmental factors influencing it, and to develop and evaluate interventions. Public Health England Behavioural Insights (PHEBI) and the Centre for Behaviour Change at UCL have produced **guides for achieving behaviour change** aimed at those in local and national government.

The research that informed this toolkit examined factors that influence women's behaviour in three areas of reproductive health, by exploring the barriers and facilitators that impact women when seeking help for:

Choosing and accessing an appropriate method of contraception

Managing reproductive symptoms

Planning and preparing for pregnancy

By using behavioural science methods and tools to assess the barriers and facilitators that impact women, we identified which intervention strategies could be used in these three areas.

## Methods and process to create this toolkit

### 1 Drawing up behavioural pathways for each topic.

These mapped out all the steps a woman would need to take, from recognising a need for action, to seeking help or information, to ultimately engaging in the desired behaviours. We used these pathways to select a target behaviour to focus on. For this project, we focused on the help and information seeking stage of the pathway, as this is a relevant stage for women regardless of the symptom, contraceptive or type of pre-pregnancy care.

### 2 Identifying which kinds of barriers and facilitators women experience most often when seeking help.

To do this, we conducted a systematic review for each of our three topic areas, exploring barriers and facilitators to women's help-seeking behaviour in the UK. We then assessed these barriers and facilitators using a framework from behavioural science. This framework lists categories representing different kinds of behavioural influences

(for example, knowledge or social influences or the wider environmental context and resources). In this way, we can understand which types of influence are most important for women's behaviour, and therefore where intervention efforts should be directed.

### 3 Linking these categories with existing taxonomies of intervention strategies - both broad intervention types

that represent the overall function of the intervention, and specific BCTs which make up the more detailed content of the intervention. By linking across in this way, we can identify which intervention strategies should theoretically be most relevant for targeting the identified barriers and facilitators. We can use these findings to develop new interventions from scratch, and to evaluate existing interventions and programmes, identifying areas of missed opportunity and where resources would be better directed elsewhere.

The original aim of this work was to focus specifically on the experiences of Black African and Black Caribbean women, and to explore the barriers they face when accessing sexual and reproductive health services. Unfortunately, our systematic reviews did not identify much research conducted in the UK. This represents an important limitation of the research body, and therefore this toolkit. It is likely that other significant barriers experienced by these groups have not been identified. It is recommended that, where possible, stakeholders conduct user research or focus groups with these women to explore and represent their experiences and views.

# Using the toolkit

This toolkit is intended for the following health professionals:



- Commissioners
- Providers of services
- Strategy developers
- Intervention designers
- Working in health promotion and social marketing



Developing interventions from scratch



Evaluating existing interventions



Going through the toolkit in full can take time and require team involvement. The toolkit may be used as an accompaniment to a longer programme of work.



Use the toolkit to quickly understand behavioural influences in sexual and reproductive healthcare, or to find a BCT for a specific barrier that you have in mind.

- The toolkit can help you make sure you have considered all aspects of an issue, and to broaden the scope of your thinking
- It may also help to troubleshoot and offer alternative approaches where an existing intervention may not be having the intended impact with the target population
- It will be especially of use to those who have recently started in their role

▶ **Let's see how to use this toolkit on the next page**

# How to use this toolkit

## Step 1: Identify barriers and facilitators

F Facilitator

B Barrier

- This toolkit contains lists of barriers and facilitators grouped into categories representing different types of influence on behaviour, such as 'Knowledge', 'Beliefs about consequences'. These categories help us identify which intervention strategies should be most effective.
- Browse through all the categories, even though you may have pre-existing ideas about which categories are relevant to you depending on your role - there may be some barriers under other categories that you can address.
- Link any additional barriers/facilitators that you identified from your own research or practice to appropriate intervention strategies. You can do this by working out which category they belong under. For example, the barrier 'limited opening hours', would go under the category 'Environmental context and resources' because it refers to a barrier in terms of which resources are available in the environment.
- Identify from this list which behavioural influence category or categories have the most relevance to you.

## Step 2: Create your list of relevant BCTs

- Look at the tables displayed within the relevant behavioural influence category to find BCTs that can target the barriers/facilitators identified in Step 1.
- Go through the lists of 'Recommended BCTs' and 'Other BCTs to consider' for each category. We included both so that potentially useful techniques for changing behaviour are not overlooked.
- Read the BCT definitions and the hypothetical examples of how to implement them.
- Start compiling a list of the BCTs you want to investigate further, along with the most useful examples of interventions.

## Step 3: Use the APEASE criteria and worksheet to narrow down your BCT selection

- Consider each potential BCT and proposed intervention example that resulted from Step 2 and how it might work in your context at this stage. Some BCTs may immediately strike you as irrelevant due to your role and context (e.g. as a commissioner, developer or provider). Many BCTs/interventions can be applied in multiple contexts at multiple levels.
- Use the APEASE criteria (page 7) to narrow down your list of BCTs. Download the worksheet (page 7) to apply the APEASE criteria to your list of BCTs and intervention examples.

## Next steps to develop behaviour change interventions

To assist you in developing behaviour change interventions you may consult the guides from [PHEBI](#) and the [Centre for Behaviour Change \(UCL\)](#).

These guides will help you consider important aspects of the intervention such as:

1. The source (the individual or organisation delivering it)
2. The mode of delivery (e.g. face-to-face, written materials, via a website)
3. The schedule (the timing of the intervention and its components)

A worked example of a case study follows on page 8.

# APEASE criteria for designing and evaluating interventions

Download this worksheet to assess your list of potential BCTs against the APEASE criteria

The **APEASE criteria** were developed by researchers at UCL's Centre for Behaviour Change, and outline 6 factors that should be considered when designing and evaluating interventions. You can learn more about APEASE [here](#).

<b>A</b> Acceptability	Is the intervention acceptable to key stakeholders (e.g. the target group, practitioners delivering the interventions)?
<b>P</b> Practicability	Can it be implemented at scale within the intended context, material and human resources?
<b>E</b> Effectiveness	How effective is it in achieving the policy objective(s)? Will it reach the intended target group and how large an effect will it have on those who are reached?
<b>A</b> Affordability	Is it affordable when delivered at the scale intended? Can the necessary budget be found for it? Will it provide a good return on investment?
<b>S</b> Side-effects	Will it lead to unintended adverse or beneficial outcomes?
<b>E</b> Equity	Will it increase or decrease differences between advantaged and disadvantaged sectors of society?



# Case study

## Maternity commissioner addressing low uptake of folic acid

**Decision-maker:**  
Commissioner of maternity services



**Issue:**  
Only 20% of women take folic acid when they are planning for a pregnancy



### 1. The commissioner identifies barriers and facilitators

- In the toolkit the commissioner clicks on the 'Planning and preparing for a pregnancy' menu section and looks at the barriers/facilitators listed under the behavioural influence categories.
- In addition, the Maternity Voices Partnership have received feedback from local women identifying further issues. The commissioner maps the locally identified barriers against those listed under the behavioural influence categories.
- Based on the above, the commissioner identifies several barriers that could be preventing women from seeking help or information about folic acid.
- The barriers highlight issues with understanding and awareness of folic acid, but also some negative perceptions of taking supplements.
- The commissioner clicks on the behavioural influence categories which seem most relevant, e.g. 'Knowledge' and 'Attitudes towards the behaviour'.

### 2. The commissioner selects relevant BCTs

- The commissioner reads the 'Recommended BCTs', the 'Other BCTs to consider' and the linked example interventions which are associated with the identified behavioural influence categories.
- The commissioner copy and pastes only the most relevant BCTs/interventions from these categories into the toolkit worksheet.

### 3. The commissioner uses the APEASE criteria to narrow down the BCTs

- In the worksheet, the commissioner conducts the APEASE assessment for each of the BCTs/interventions
- The assessment identifies that the BCT 'Instruction on how to perform the behaviour' fits most APEASE criteria and is easy to implement in an intervention (e.g. by including a video of a woman taking folic acid).
- In addition, the commissioner notes that this BCT is not necessarily going to target one of the identified barriers, that women hold negative views of micronutrient supplementation.
- Therefore they decide to supplement this BCT with other relevant BCTs identified through the APEASE assessment, such as:
  - 'information about health consequences' (e.g. including information about the benefits of folic acid and the types of birth defects it can help avoid);
  - 'information about social and environmental consequences' (e.g. by providing information that taking folic acid is well accepted and approved by other women).

### Next steps for the commissioner to develop the behaviour change intervention

In this case study, the commissioner makes three decisions about how to implement the intervention in practice:

1. maternity and/or primary care services and potentially sexual health services will deliver the information (source)
2. the information will be delivered through a website (mode of delivery)
3. the video will be freely available for women to access at any point (schedule)

## How to navigate this toolkit

This toolkit works best if you **click the links to get to different sections** instead of scrolling through the pages. The document is designed in an A4 format, and a **view of the whole page** will enable you to see all the menus available. This is the “Start” page where you have the navigation instructions.

**1** You can come back to this page by clicking on “Start”

**2** Click on the top buttons to access different categories of behavioural influences

The colour highlights the current selection

The definition of the current category

**3** Click on the tabs to access the relevant BCTs

The colour highlights the current selection

The screenshot shows the 'Start' page of the toolkit. At the top, there is a navigation menu with four main sections: 'Start', 'Choosing and accessing contraception', 'Planning and preparing for a pregnancy', and 'Seeking help for reproductive symptoms'. Below the menu, there are several sections: 'Environmental context and resources', 'Behavioural influences', 'Recommended BCTs (1/2)', 'Recommended BCTs (2/2)', and 'Other BCTs to consider'. The 'Environmental context and resources' section is highlighted in blue. Underneath, the 'Behavioural influences' section is selected, and the 'Recommended BCTs (1/2)' tab is active. The 'Social support (practical)' BCT is highlighted in blue, and its definition is shown in bold text. The bottom of the page has a footer with links: 'About | Key terms | Background | How to use this toolkit | APEASE criteria | Case study | Start here'.

The top menu has links for the three main sections of the toolkit

The colour highlights the current selection

The bottom menu has links for the introductory pages of the document in case you want to revisit them

The bold text highlights the current selection

To help you decide which section to navigate to first, here are the questions that were asked to understand what enables women to make healthy reproductive choices and achieve positive reproductive outcomes. **Choose the section you want to navigate to by clicking on one of the coloured headers:**

**Women seeking help to choose and access an appropriate method of contraception**

What enables women to use an appropriate and preferred method of contraception for preventing pregnancy?

How can healthcare providers and system structures effectively support women to choose and use an appropriate and preferred method of contraception for preventing pregnancy?

**Women seeking help to plan and prepare for a pregnancy**

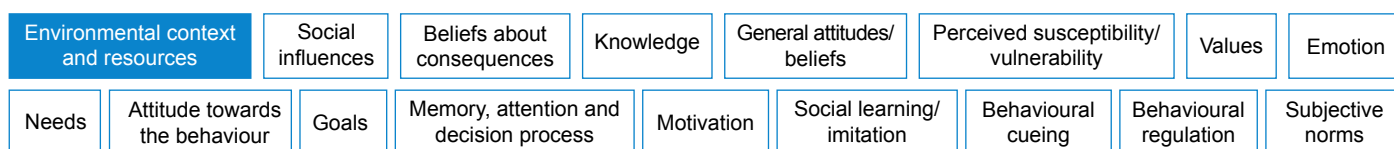
What enables women to plan a pregnancy and consider what might be needed in preparation for pregnancy?

How can healthcare providers effectively support women to plan a pregnancy and consider what might be needed in preparation for pregnancy?

**Women seeking help to manage reproductive symptoms**

What enables women to self-care when they have unwanted or debilitating reproductive symptoms or to seek help when appropriate?

How can healthcare providers effectively support women to self-care and seek help to manage unwanted or debilitating reproductive symptoms?



## Environmental context and resources

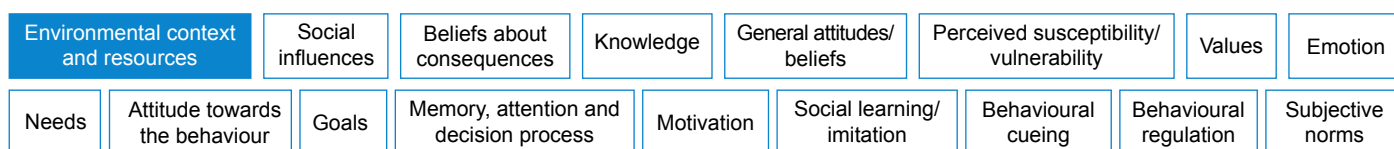
Factors in one's environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc.)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Advice from healthcare professionals influences which method of contraception women choose</li> <li>Advice from informal sources - e.g. family (especially mothers), friends and women's magazines when choosing a method of contraception - influences which contraception method women choose</li> <li>Ease of method (e.g. due to availability and/or mode of delivery)</li> <li>Women with intellectual disability accompanied by another female (such as key workers) during contraception appointments</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Reluctance of healthcare professionals to offer sterilisation to individuals under 30</li> <li>Healthcare professionals' lack of knowledge about different contraception methods</li> <li>Healthcare professionals not discussing contraception or providing limited/insufficient information about different contraception options with women</li> <li>Perceived resistance by healthcare professionals to remove the contraceptive implant as it's considered an effective form of contraception and is expensive, so shouldn't be removed without careful consideration</li> <li>Using contraception is not a priority for homeless women due to competing priorities and transient lifestyle</li> <li>Lack of information about contraception available in other languages, particularly around side-effects, long-term effects and other non-efficacy information</li> <li>Women with learning disabilities not being involved in deciding their method of contraception, or not being provided with accessible information resources</li> <li>Perceived financial cost of methods</li> <li>Having a medical condition (e.g. diabetes, high blood pressure) which limits which types of contraception an individual can use</li> <li>Not being registered with a GP</li> <li>Lack of knowledge of the UK healthcare system, such as the need to register with a GP to access services, or the availability of sexual health services</li> <li>The perception that a healthcare setting is unwelcoming (because of short appointment times) which discourages women from talking about issues they may be facing</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>Accessibility of service location and opening hours (including chemists, supermarkets, the internet and health services)</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)		Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples	
<b>Social support (practical)</b>	Advise on, arrange, or provide practical help (e.g. from friends, relatives, colleagues, 'buddies' or staff) for performance of the behaviour	<ul style="list-style-type: none"> <li>Ensure female support workers can assist women with learning differences to attend sexual health clinic appointments and facilitate their involvement in decision-making.</li> <li>Suggest that women bring somebody along (e.g. a friend, partner or relative) to appointments that they might feel nervous about attending</li> </ul>	
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day</li> <li>Create visible campaign materials that encourage women to seek support from their doctor/local service (e.g. adverts on social media to prompt women to explore help-seeking options, in doctors' surgery waiting rooms to encourage women to bring up these issues at appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>	
<b>Remove aversive stimulus</b>	Advise or arrange for the removal of an aversive stimulus to facilitate behaviour change (includes 'Escape learning')	<ul style="list-style-type: none"> <li>Aim to reduce negative pressure from male partners by targeting interventions towards men that increase acceptance of contraceptive methods such as condoms.</li> <li>Ensure female healthcare professionals are available if women prefer not to have an appointment with male practitioners.</li> <li>Remove the perceived financial cost of some methods (e.g. condoms) by signposting women to services where they can be obtained for free.</li> <li>Facilitate interactions between healthcare professionals and communities where women can remain anonymous if they wish to ask questions that they might find embarrassing (e.g. online forums or livestream drop-in Q&amp;A sessions)</li> </ul>	



## Environmental context and resources

Factors in one's environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc.)

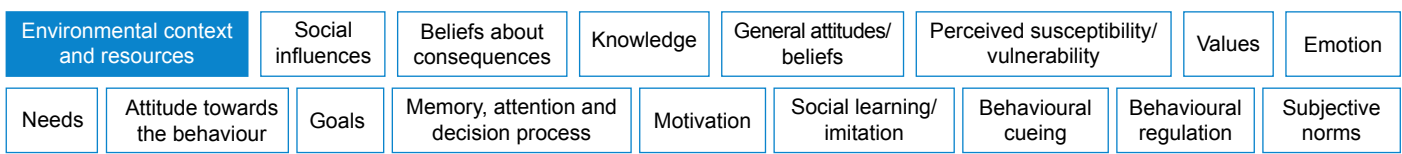
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Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples
<b>Restructuring the physical environment</b>	Change, or advise to change the physical environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>Ensure services are accessible and available to women (e.g. consider opening times and locations and how easy it is to sign up to the service or access their offer, ensure that resources are available in different languages).</li> </ul>
<b>Avoidance/reducing exposure to cues for the behaviour</b>	Advise on how to avoid exposure to specific social and contextual/physical cues for the behaviour, including changing daily or weekly routines	<ul style="list-style-type: none"> <li>If a woman has a goal to reduce unprotected sex/need for emergency contraception, work with her to identify situations that may lead to these incidents and find ways that these situations can be avoided.</li> </ul>
<b>Adding objects to the environment</b>	Add objects to the environment in order to facilitate performance of the behaviour <i>Note: Provision of information (e.g. written, verbal, visual) in a booklet or leaflet is insufficient.</i>	<ul style="list-style-type: none"> <li>Ensure availability of a range of contraceptive methods at different services and locations where possible/appropriate (e.g. surgeries, clinics, pharmacies, schools, etc.)</li> <li>Provide online services (e.g. webinars, moderated forums) where women can receive information from trusted healthcare professionals and ask questions anonymously.</li> <li>Ensure availability of female healthcare professionals for booking appointments to discuss sexual and reproductive health issues.</li> <li>Ensure availability of information resources that use accessible language (e.g. plain language resources to increase accessibility for different levels of literacy; resources translated into different languages for women who may not speak English fluently)</li> </ul>





## Environmental context and resources

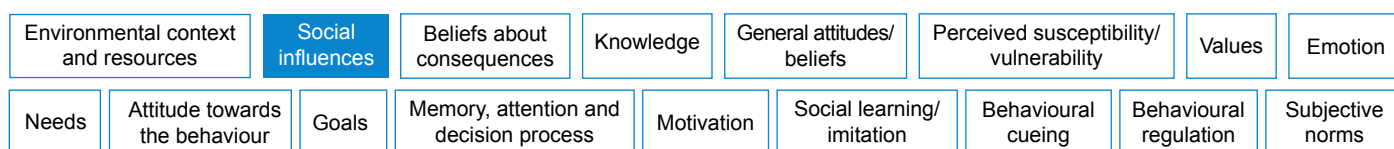
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Recommended BCTs (1/2)		Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples	
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>• Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these (e.g. smartphone alarms for forgetting pills). In non-interactive settings, consider listing common issues and ways of working around these.</li> </ul>	
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise on strategies such as setting alarms/putting visible prompts in home to remind to take contraceptive pills, or vitamin supplements.</li> </ul>	



## Social influences

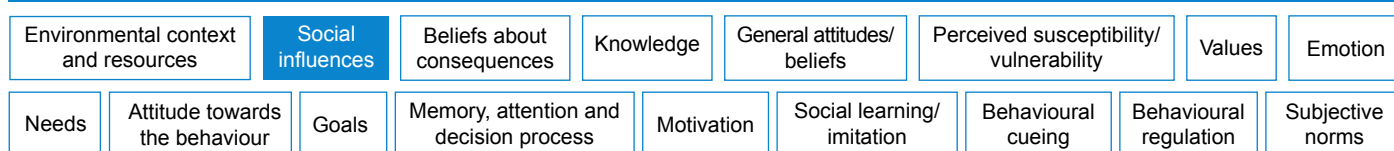
Social relationships and/or interactions that can change one's behaviour, thoughts or feelings

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>• Advice from informal sources – e.g. family (especially mothers), friends and women's magazines when choosing a method of contraception – has an influence on which method women choose</li> <li>• Social norms (e.g. behaviour and expectations of peer groups and partners) that women will be responsible for contraception (e.g. instigate the use of condoms or already be on the contraceptive pill)</li> <li>• Perceived willingness of partner to use condoms</li> <li>• Positive relationships with healthcare professionals</li> <li>• Women with intellectual disability being accompanied by someone female (such as key workers) during contraception appointments</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Embarrassment discussing contraception with healthcare professionals, parents and sexual partners</li> <li>• The perception that a healthcare setting is unwelcoming (because of short appointment times) which discourages women from talking about issues they may be facing</li> <li>• Pressure or influence from sexual partners on contraception use (e.g. male partners not being willing to use condoms)</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>• Positive or negative personal experiences and other people's (e.g. friends) experiences of contraception</li> <li>• Religious background (e.g. belief that contraception is not appropriate, or increased desire to prevent pregnancy before marriage)</li> <li>• Perceived trustworthiness of information source</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider (1/2)	Other BCTs to consider (2/2)
BCT	Definition	Examples	
<b>Social support (unspecified)</b>	Advise on, arrange or provide social support (e.g. from friends, relatives, colleagues, 'buddies' or staff) or noncontingent praise or reward for performance of the behaviour. It includes encouragement and counselling, but only when it is directed at the behaviour	<ul style="list-style-type: none"> <li>• Advise or enable women to discuss their reproductive symptoms in a safe place e.g. a clinically moderated online forum.</li> <li>• Set up buddy systems or nominate women's health champions within certain settings, who can help women with any needs they might have with regards to that setting (e.g. negotiating time off from the workplace, accessing services for homeless women or those with drug-use issues).</li> <li>• Create communities or support groups (e.g. on social media or in real life) where women with common needs (e.g. those who are struggling with reproductive symptoms, or those from certain religious or cultural backgrounds who are exploring their options for contraception) can offer each other advice and reassurance.</li> </ul>	
<b>Social support (practical)</b>	Advise on, arrange, or provide practical help (e.g. from friends, relatives, colleagues, 'buddies' or staff) for performance of the behaviour	<ul style="list-style-type: none"> <li>• Ensure female support workers can assist women with learning differences to attend sexual health clinic appointments and facilitate their involvement in decision-making.</li> <li>• Suggest that women bring somebody along (e.g. a friend, partner or relative) to appointments that they might feel nervous about attending.</li> </ul>	



## Social influences

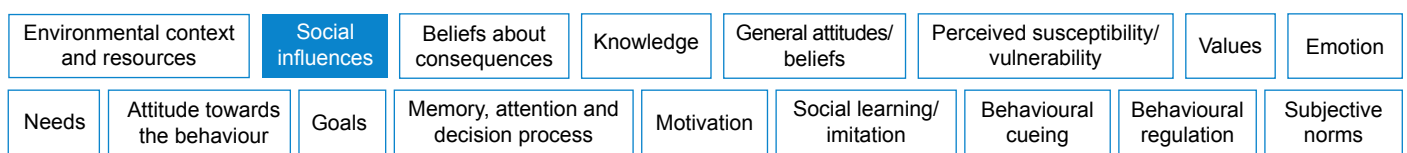
Social relationships and/or interactions that can change one's behaviour, thoughts or feelings

**F** Facilitator      **B** Barrier

### Behavioural influences

<ul style="list-style-type: none"> <li>• Advice from informal sources – e.g. family (especially mothers), friends and women's magazines when choosing a method of contraception – has an influence on which method women choose</li> <li>• Social norms (e.g. behaviour and expectations of peer groups and partners) that women will be responsible for contraception (e.g. instigate the use of condoms or already be on the contraceptive pill)</li> <li>• Perceived willingness of partner to use condoms</li> <li>• Positive relationships with healthcare professionals</li> <li>• Women with intellectual disability being accompanied by someone female (such as key workers) during contraception appointments</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Embarrassment discussing contraception with healthcare professionals, parents and sexual partners</li> <li>• The perception that a healthcare setting is unwelcoming (because of short appointment times) which discourages women from talking about issues they may be facing</li> <li>• Pressure or influence from sexual partners on contraception use (e.g. male partners not being willing to use condoms)</li> </ul> <p style="text-align: right;"><b>B</b></p>
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Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider (1/2)	Other BCTs to consider (2/2)
BCT	Definition	Examples	
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>	
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>	
<b>Social reward</b>	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Ensure that healthcare professionals use positive and encouraging language when women are nervous about discussing their needs (e.g. "I'm glad you have talked to me about this today...")</li> </ul>	



## Social influences

Social relationships and/or interactions that can change one's behaviour, thoughts or feelings

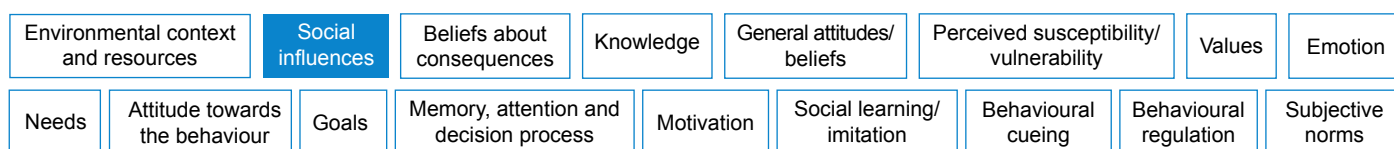
**F** Facilitator      **B** Barrier

### Behavioural influences

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<ul style="list-style-type: none"> <li>• Positive or negative personal experiences and other people's (e.g. friends) experiences of contraception</li> <li>• Religious background (e.g. belief that contraception is not appropriate, or increased desire to prevent pregnancy before marriage)</li> <li>• Perceived trustworthiness of information source</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider (1/2)	Other BCTs to consider (2/2)
<b>BCT</b>	<b>Definition</b>	<b>Examples</b>	
<b>Restructuring the social environment (1/2)</b>	Change, or advise to change the social environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>• Ensure that workplaces receive training to raise awareness of the requirements of women undergoing menopause and premenstrual dysphoric disorder, and to remove the taboo associated with reproductive symptoms.</li> <li>• Encourage workplaces to appoint health champions who can support employees with conversations with management that they might find embarrassing.</li> <li>• Develop media and education campaigns that break down taboos around women's reproductive and sexual health, encourage it as a topic for discussion regardless of a woman's life stage, and place equal responsibility on the genders for taking care of contraception.</li> <li>• Collaborate with services that support homeless women and those with drug-use issues to facilitate women's access to trusted sexual and reproductive health advisers (e.g. visiting healthcare professionals or trained champions within the services).</li> <li>• Ensure that workplace policies include supportive practical approaches for women experiencing menopausal symptoms.</li> <li>• Enable and encourage greater sharing of women's personal experiences of different contraceptive options/treatments for reproductive symptoms/outcomes from pre-conception care in a clinically moderated forum (e.g. such as the NHS SH:24 forum).</li> </ul>	





## Social influences

Social relationships and/or interactions that can change one's behaviour, thoughts or feelings

### Behavioural influences

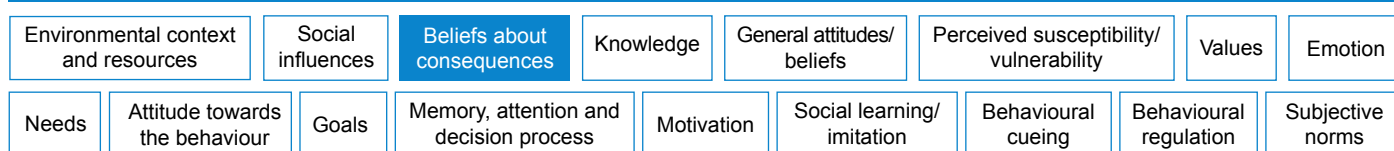
**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>• Advice from informal sources – e.g. family (especially mothers), friends and women's magazines when choosing a method of contraception – has an influence on which method women choose</li> <li>• Social norms (e.g. behaviour and expectations of peer groups and partners) that women will be responsible for contraception (e.g. instigate the use of condoms or already be on the contraceptive pill)</li> <li>• Perceived willingness of partner to use condoms</li> <li>• Positive relationships with healthcare professionals</li> <li>• Women with intellectual disability being accompanied by someone female (such as key workers) during contraception appointments</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Embarrassment discussing contraception with healthcare professionals, parents and sexual partners</li> <li>• The perception that a healthcare setting is unwelcoming (because of short appointment times) which discourages women from talking about issues they may be facing</li> <li>• Pressure or influence from sexual partners on contraception use (e.g. male partners not being willing to use condoms)</li> </ul> <p style="text-align: right;"><b>B</b></p>
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<ul style="list-style-type: none"> <li>• Positive or negative personal experiences and other people's (e.g. friends) experiences of contraception</li> <li>• Religious background (e.g. belief that contraception is not appropriate, or increased desire to prevent pregnancy before marriage)</li> <li>• Perceived trustworthiness of information source</li> </ul> <p style="text-align: right;"><b>F B</b></p>
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Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider (1/2)	Other BCTs to consider (2/2)
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BCT	Definition	Examples
<b>Restructuring the social environment (2/2)</b>	Change, or advise to change the social environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>• Provide training for healthcare professionals to sensitively handle conversations with women around their sexual and reproductive health that focuses on empowering women to make choices that work for them, for example:                             <ul style="list-style-type: none"> <li>• Ensure that healthcare professionals are aware of the positive and negative influences that they can have on women's healthcare experiences (e.g. see the specific barriers and facilitators reported in the tables above)</li> <li>• Upskill the workforce in delivering behaviour change (e.g. through using motivational interviewing techniques that help to identify the woman's own goals, priorities and self-generated solutions as a path to empowered behaviour change. Professionals can also be trained to deliver some of the techniques described here in their appointments e.g. goal setting and problem solving).</li> <li>• Ensure that women's preferences are prioritised in guidance for healthcare professionals (e.g. preferred contraception is held over and above more "cost-effective" methods) and that professionals will not be penalised for delivering on women's preferences (e.g. by missing out on incentive schemes for prescribing/fitting certain methods of contraception).</li> <li>• Support healthcare professionals to deliver up-to-date information about women's options, ensuring that information is appropriate for their health conditions and life circumstances, and sensitively balances risks (e.g. through training or the provision of information resources/digital tools that can be taken away by women or used together in consultations).</li> </ul> </li> <li>• Work with religious and community leaders/representatives to develop information materials and campaigns that are culturally sensitive and acceptable to different communities of women; ensure that these materials help women to identify their available options and identify support resources. Consider targeting interventions at other members of communities in order to alleviate the pressures on women.</li> <li>• Create a media campaign that emphasise the positive and supportive role of healthcare services during pregnancy, showing that involvement can be supportive and reassuring rather than just reactive during an emergency.</li> </ul>



## Beliefs about consequences

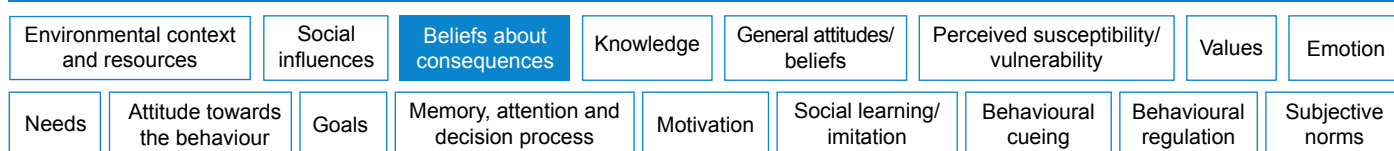
Beliefs about the consequences of a behaviour (e.g. what will be gained or lost, and the probability of those consequences)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Perceived effectiveness of protecting against sexually transmitted infections (STIs)</li> <li>Perceived comfort or convenience of method</li> <li>Perceived effectiveness of method of contraception at preventing pregnancy</li> <li>Perceived positive benefits of using long-acting reversible contraception (LARC)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Anticipated high 'emotional cost' of accessing services for women with drug problems (due to low self-regard, traumatic experiences and drug use-related stigma from healthcare professionals)</li> <li>Concern about introducing chemicals or hormones to the body when using contraception</li> <li>Concern about side-effects of contraception, including past experiences of unexpected side-effects leading to distrust of services and healthcare professionals (facilitator of condom use)</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>Expected impact on menstrual cycle; perceptions around method's ability to affect/disrupt period timing, stop bleeding altogether or increase menstrual flow</li> <li>The way in which the contraception is delivered and whether a procedure of getting the method inserted (IUD, injection, implant, etc.) is needed</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)		Recommended BCTs (2/2)
BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>Develop an online media campaign which highlights the positive and negative outcomes associated with pre-conception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>
<b>Anticipated regret</b>	Induce or raise awareness of expectations of future regret about performance of the unwanted behaviour	<ul style="list-style-type: none"> <li>Highlight the potential for future feelings of regret if women do not seek support for reproductive symptoms.</li> </ul>



## Beliefs about consequences

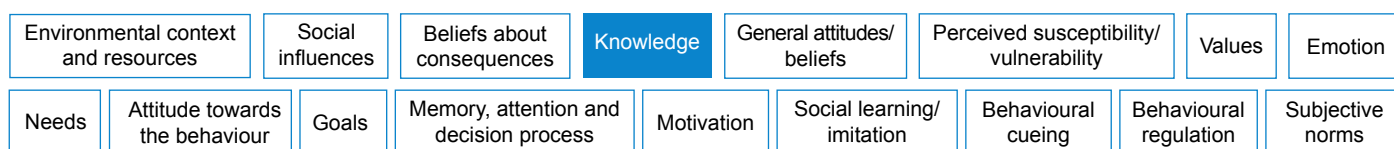
Beliefs about the consequences of a behaviour (e.g. what will be gained or lost, and the probability of those consequences)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>• Anticipated high 'emotional cost' of accessing services for women with drug problems (due to low self-regard, traumatic experiences and drug use-related stigma from healthcare professionals)</li> <li>• Concern about introducing chemicals or hormones to the body when using contraception</li> <li>• Concern about side-effects of contraception, including past experiences of unexpected side-effects leading to distrust of services and healthcare professionals (facilitator of condom use)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Perceived effectiveness of protecting against sexually transmitted infections (STIs)</li> <li>• Perceived comfort or convenience of method</li> <li>• Perceived effectiveness of method of contraception at preventing pregnancy</li> <li>• Perceived positive benefits of using long-acting reversible contraception (LARC):</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>• Expected impact on menstrual cycle; perceptions around method's ability to affect/disrupt period timing, stop bleeding altogether or increase menstrual flow</li> <li>• The way in which the contraception is delivered and whether a procedure of getting the method inserted (IUD, injection, implant, etc.) is needed</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)	Recommended BCTs (2/2)	
BCT	Definition	Examples
<b>Information about social and environmental consequence</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>• In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Comparative imagining of future outcomes</b>	Prompt or advise the imagining and comparing of future outcomes of changed versus unchanged behaviour	<ul style="list-style-type: none"> <li>• Prompt the person to imagine and compare likely or possible outcomes following seeking healthcare professional advice for contraception versus what could happen if they do not seek support (e.g. having to use a method that does not suit them, or having an unintended pregnancy).</li> </ul>
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/ or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>



## Knowledge

An understanding of something (e.g. awareness of its existence, awareness of its importance, awareness of how to do it, etc.)

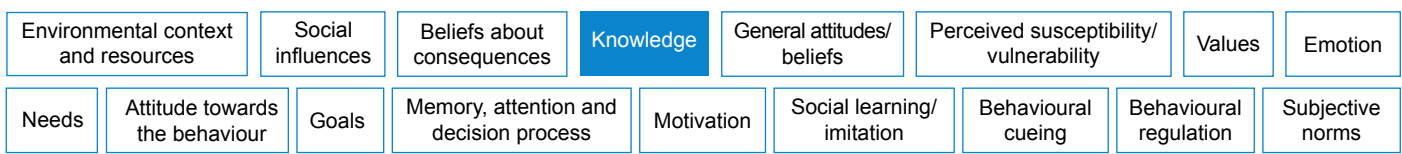
### Behavioural influences

**F** Facilitator    **B** Barrier

<ul style="list-style-type: none"> <li>• Real life experience of seeing an IUD</li> <li>• Knowledge of where to access services</li> </ul> <p style="text-align: center;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Lack of knowledge of the UK healthcare system, such as the need to register with a GP to access services, or the availability of sexual health services</li> <li>• Lack of information on contraception available in other languages, particularly around side effects, long term effects and other non-efficacy information</li> <li>• Lack of knowledge about different types of contraception</li> <li>• Healthcare professionals not discussing contraception with women, or not providing sufficient information</li> <li>• Not knowing where to get help or advice</li> <li>• Misconceptions about intrauterine devices (IUDs) - e.g. it's only for older women, it's painful/uncomfortable, can cause infertility</li> <li>• Low perceived value of using contraception for women with drug problems</li> </ul> <p style="text-align: center;"><b>B</b></p>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Instruction on how to perform behaviour</b>	Advise or agree on how to perform the behaviour (includes 'Skills training')	<ul style="list-style-type: none"> <li>• Provide information on what pre-pregnancy care is, and all of the different ways that women can choose to prepare for conception, with specific instructions on how these goals can be achieved.</li> <li>• Provide women with accessible information on where and how they can access sexual and reproductive health services in the UK, including information on eligibility for NHS treatment and how to register with a GP.</li> </ul>
<b>Information about antecedents</b>	Provide information about antecedents (e.g. social and environmental situations and events, emotions, cognitions) that reliably predict performance of the behaviour	<ul style="list-style-type: none"> <li>• Advise women to keep a record of the situations or events that occur prior to forgetting to use a contraceptive method, such as the pill or condoms.</li> </ul>
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>





## Knowledge

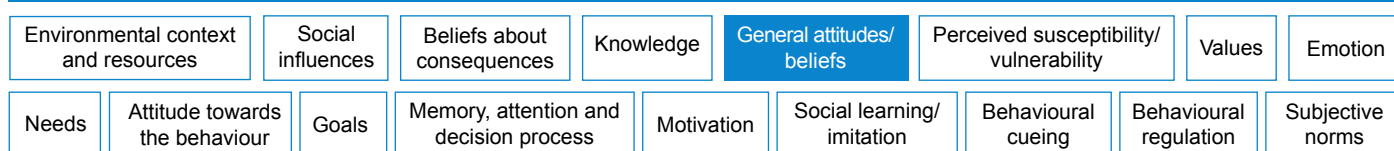
An understanding of something (e.g. awareness of its existence, awareness of its importance, awareness of how to do it, etc.)

### Behavioural influences

**F** Facilitator      **B** Barrier

<ul style="list-style-type: none"> <li>• Real life experience of seeing an IUD</li> <li>• Knowledge of where to access services</li> </ul> <p style="text-align: center;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Lack of knowledge of the UK healthcare system, such as the need to register with a GP to access services, or the availability of sexual health services</li> <li>• Lack of information on contraception available in other languages, particularly around side effects, long term effects and other non-efficacy information</li> <li>• Lack of knowledge about different types of contraception</li> <li>• Healthcare professionals not discussing contraception with women, or not providing sufficient information</li> <li>• Not knowing where to get help or advice</li> <li>• Misconceptions about intrauterine devices (IUDs) - e.g. it's only for older women, it's painful/uncomfortable, can cause infertility</li> <li>• Low perceived value of using contraception for women with drug problems</li> </ul> <p style="text-align: center;"><b>B</b></p>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>• During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy.</li> </ul>



## General attitudes/beliefs

What a person thinks and feels about a person, object, group, issue or idea related to the behaviour; this can be negative or positive

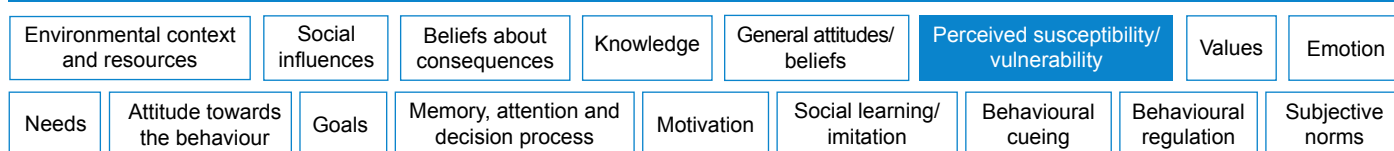
### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Careless/carefree attitude or belief that pregnancy is not a problem</li> <li>Being 'in the moment' impacts contraception use (e.g. of condoms)</li> <li>Concern about introducing chemicals or hormones to the body when using contraception</li> </ul> <p style="text-align: right;"><b>B</b></p>	<ul style="list-style-type: none"> <li>Perceived trustworthiness of information source</li> <li>Preference for female GP or dedicated 'women's health' professional</li> <li>Religious background (e.g. belief that contraception is not appropriate at all, or increased desire to prevent pregnancy before marriage)</li> </ul> <p style="text-align: right;"><b>F B</b></p>
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Recommended BCTs		
BCT	Definition	Examples
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>

Other BCTs to consider		
BCT	Definition	Examples
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



## Perceived sustainability/vulnerability

Perceptions of the likelihood that one is vulnerable to a threat

### Behavioural influences

F Facilitator B Barrier

<ul style="list-style-type: none"> <li>Anticipated high 'emotional cost' of accessing services for women with drug problems (due to low self-regard, traumatic experiences and drug use-related stigma)</li> <li>Misconceptions about IUD e.g. it's only for older women, it's painful/uncomfortable, can cause infertility</li> </ul> <p style="text-align: right;"><span style="background-color: #0070C0; color: white; border-radius: 50%; padding: 2px 6px;">B</span></p>	<ul style="list-style-type: none"> <li>The way in which the contraception is delivered and whether a procedure of getting the method inserted (IUD, injection, implant, etc.) is needed</li> </ul> <p style="text-align: right;"><span style="background-color: #0070C0; color: white; border-radius: 50%; padding: 2px 6px;">F</span> <span style="background-color: #0070C0; color: white; border-radius: 50%; padding: 2px 6px;">B</span></p>
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### Recommended BCTs

BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>Develop an online media campaign which highlights the positive and negative outcomes associated with pre-conception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>

Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	<b>Values</b>	Emotion	
Needs	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	Social learning/imitation	Behavioural cueing	Behavioural regulation	Subjective norms

## Values

One's judgement on what is important in life (including moral, social, aesthetic principles)

### Behavioural influences



Facilitator

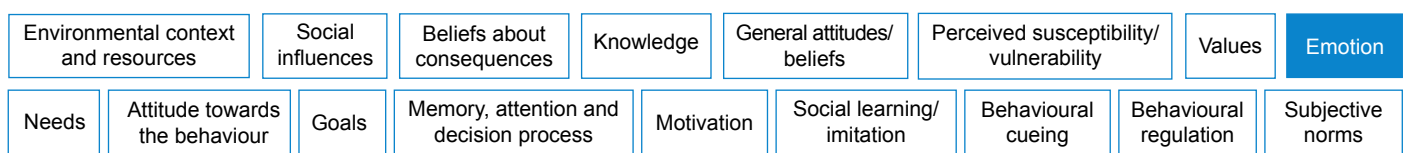


Barrier

<ul style="list-style-type: none"> <li>Perception that method of contraception protects against STIs</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Careless/carefree attitude or belief that pregnancy is not a problem</li> <li>Low perceived value of using contraception for women with drug problems</li> </ul> <p style="text-align: right;"><b>B</b></p>
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#### Other BCTs to consider

BCT	Definition	Examples
<b>Commitment</b>	Ask the person to affirm or reaffirm statements indicating commitment to change the behaviour	<ul style="list-style-type: none"> <li>Where a woman has decided upon a goal, suggest that she write an "I will" statement to affirm or reaffirm a strong commitment to the goal (i.e. using the words "strongly", "committed" or "high priority").</li> </ul>
<b>Identity associated with changed behaviour</b>	Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behaviour'	<ul style="list-style-type: none"> <li>Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>
<b>Mental rehearsal of successful performance</b>	Advise to practice imagining performing the behaviour successfully in relevant contexts	<ul style="list-style-type: none"> <li>Advise women to imagine a successful GP appointment, or successful discussion with friends regarding heavy menstruation – consider rehearsing what they might say depending on different responses from the GP or friends.</li> </ul>



## Emotion

An individual's feelings towards a behaviour/potential outcome

### Behavioural influences



Facilitator



Barrier

- Anticipated high 'emotional cost' of accessing services for women with drug problems (due to low self-regard, traumatic experiences and drug use-related stigma)
- Being 'in the moment' impacts contraception use (e.g. of condoms)
- Embarrassment discussing contraception with healthcare professionals, with parents and with sexual partners

B

#### Recommended BCTs

BCT	Definition	Examples
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>• For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>• Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>

#### Other BCTs to consider

BCT	Definition	Examples
<b>Anticipated regret</b>	Induce or raise awareness of expectations of future regret about performance of the unwanted behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential for future feelings of regret if women do not seek support for reproductive symptoms.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>• Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>• Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
<b>Needs</b>	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	Social learning/imitation	Behavioural cueing	Behavioural regulation	Subjective norms

## Needs

Requirements for survival or well being

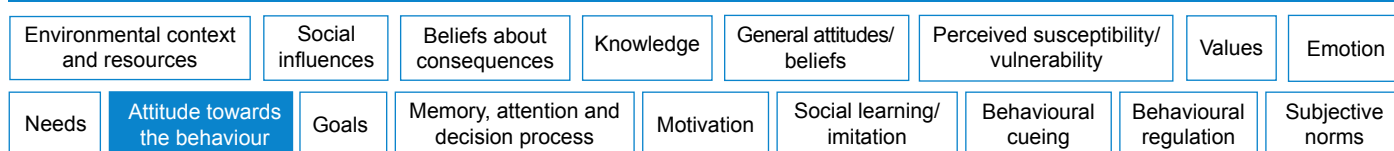
### Behavioural influences

**F** Facilitator    **B** Barrier

<ul style="list-style-type: none"> <li>• Comfort or convenience of method</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Contraception use not a priority for homeless women due to competing priorities and transient lifestyle</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>• Perceived control (including control of when to start and stop contraception, and reversibility of method)</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

### Other BCTs to consider

BCT	Definition	Examples
<b>Focus on past success</b>	Advise to think about or list previous successes in performing the behaviour (or parts of it)	<ul style="list-style-type: none"> <li>• Ask the woman to focus on the previous occasions where she had successfully sought medical advice for reproductive symptoms or had a positive experience when seeking medical advice for another condition or symptom.</li> <li>• Ask the woman to remember the occasions on which she successfully navigated situations that could have led to risky behaviour (e.g. monitoring alcohol intake on a night out).</li> </ul>



## Attitude towards the behaviour

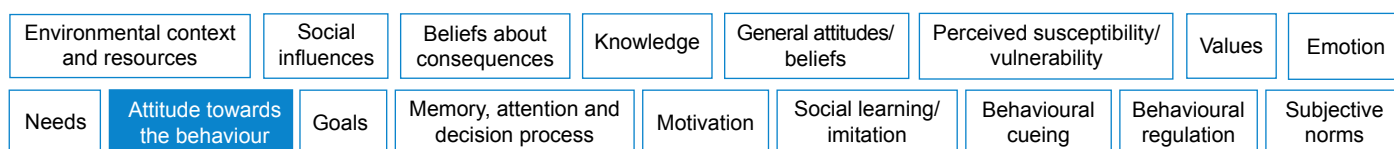
A person's thoughts and feelings towards the behaviour, which can be positive or negative

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Concern about introducing chemicals or hormones to the body when using contraception</li> </ul> <p style="text-align: right;"><b>B</b></p>	<ul style="list-style-type: none"> <li>Positive or negative personal experiences and other people's (e.g. friends') experiences of contraception</li> </ul> <p style="text-align: right;"><b>F B</b></p>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



## Attitude towards the behaviour

A person's thoughts and feelings towards the behaviour, which can be positive or negative

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Concern about introducing chemicals or hormones to the body when using contraception</li> </ul> <p style="text-align: right;"><b>B</b></p>	<ul style="list-style-type: none"> <li>Positive or negative personal experiences and other people's (e.g. friends') experiences of contraception</li> </ul> <p style="text-align: right;"><b>F B</b></p>
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Recommended BCTs	Other BCTs to consider	
BCT	Definition	Examples
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>Develop an online media campaign which highlights the positive and negative outcomes associated with pre-conception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>
<b>Incompatible beliefs</b>	Draw attention to discrepancies between current or past behaviour and self-image, in order to create discomfort	<ul style="list-style-type: none"> <li>Create campaign materials that highlight the discrepancy between a woman's self-image of being in charge of her life and creating positive change when things are not to her satisfaction, and the current behaviour of not seeking help for reproductive symptoms.</li> </ul>

Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
Needs	Attitude towards the behaviour	<b>Goals</b>	Memory, attention and decision process	Motivation	Social learning/imitation	Behavioural cueing	Behavioural regulation	Subjective norms

## Goals

Aims or outcomes an individual wants to achieve

### Behavioural influences

**F** Facilitator

- Perception that method of contraception protects against STIs
- Perceived effectiveness of method of contraception at preventing pregnancy

**F**

### Recommended BCTs

BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>• Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Goal setting (outcome)</b>	Set or agree on a goal defined in terms of a positive outcome of wanted behaviour	<ul style="list-style-type: none"> <li>• Encourage women to set a goal with regards to an outcome they want to achieve for their sexual and reproductive health (e.g. not needing to use emergency contraception for a year, for someone who has repeated contraception failures).</li> </ul>
<b>Review behaviour goals</b>	Review behaviour goal(s) jointly with the person and consider modifying goal(s) or behaviour change strategy in light of achievement. This may lead to re-setting the same goal, a small change in that goal or setting a new goal instead of (or in addition to) the first, or no change	<ul style="list-style-type: none"> <li>• Encourage women to set a time to review their goal (e.g. whether they are taking their contraceptive pill every day at the same time as prescribed) and to reflect on whether the goal needs adjusting (e.g. choosing a different method of contraception).</li> </ul>
<b>Discrepancy between current behaviour and goal</b>	Draw attention to discrepancies between a person's current behaviour (in terms of the form, frequency, duration, or intensity of that behaviour) and the person's previously set outcome goals, behavioural goals or action plans (goes beyond self-monitoring of behaviour)	<ul style="list-style-type: none"> <li>• Invite women to review their levels of contraceptive pill taking behaviour and ask them to reflect on whether they are taking it reliably enough to prevent their desired outcome to not become pregnant.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Behavioural contract</b>	Create a written specification of the behaviour to be performed, agreed on by the person, and witnessed by another	<ul style="list-style-type: none"> <li>• Encourage women to make a pledge to take care of their sexual health and to seek support for reproductive symptoms and continue going back until they receive the support they need (e.g. in an online community of peers).</li> </ul>
<b>Graded tasks</b>	Set easy-to-perform tasks, making them increasingly difficult, but achievable, until behaviour is performed	<ul style="list-style-type: none"> <li>• Advise women to confide in a trusted friend to overcome embarrassment of talking about their symptoms before going to healthcare services.</li> </ul>
<b>Material reward (behaviour)</b>	Arrange for the delivery of money, vouchers or other valued objects if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Arrange for the woman to receive (vouchers for or actual) free condoms if they attend a sexual health clinic to discuss contraception.</li> </ul>

Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
Needs	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	Social learning/imitation	Behavioural cueing	Behavioural regulation	Subjective norms

## Memory, attention and decision process

The cognitive abilities needed be able to remember things, focus on specific details and make choices between alternative options

### Behavioural influences

**B** Barrier

- Being 'in the moment' impacts contraception use (e.g. of condoms)
- Forgetting and worry about missing contraceptive pill

**B**

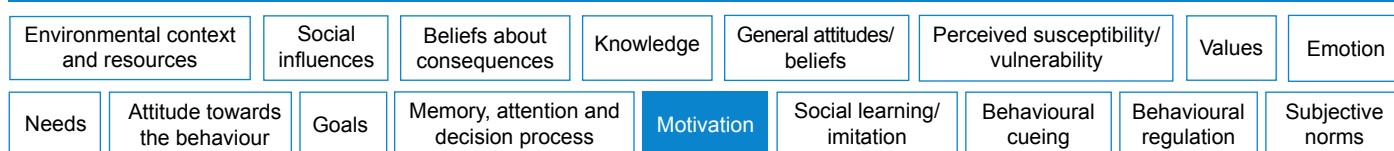
#### Recommended BCTs

BCT	Definition	Examples
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>• Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day.</li> <li>• Create visible campaign materials that encourage women to seek support from their doctor or a local service (e.g. adverts on social media to prompt women to explore help-seeking options, or in doctors' surgery waiting rooms to encourage women to bring up these issues during appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise on strategies such as setting alarms/putting visible prompts in home to remind to take contraceptive pills, or vitamin supplements.</li> </ul>

#### Other BCTs to consider

BCT	Definition	Examples
<b>Commitment</b>	Ask the person to affirm or reaffirm statements indicating commitment to change the behaviour	<ul style="list-style-type: none"> <li>• Where a woman has decided upon a goal, suggest that she write an "I will" statement to affirm or reaffirm a strong commitment to the goal (i.e. using the words "strongly", "committed" or "high priority").</li> </ul>
<b>Associative learning</b>	Present a neutral stimulus jointly with a stimulus that already elicits the behaviour repeatedly until the neutral stimulus elicits that behaviour	<ul style="list-style-type: none"> <li>• Encourage women to take their contraceptive pill just before brushing their teeth, so that the act of brushing teeth becomes a cue to take medication.</li> </ul>
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>





## Motivation

Internal processes and thoughts that drive people and give them purpose, making them want to do a specific behaviour (these can be conscious or unconscious)

### Behavioural influences



Facilitator



Barrier

<ul style="list-style-type: none"> <li>Perceived effectiveness of method of contraception at preventing pregnancy</li> </ul> <p style="text-align: right; font-size: 24px; color: #00A651;">F</p>	<ul style="list-style-type: none"> <li>Perceived control (including control of when to start and stop contraception, and reversibility of method)</li> </ul> <p style="text-align: right; font-size: 24px; color: #00A651;">F B</p>
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Recommended BCTs		
BCT	Definition	Examples
<b>Goal setting (outcome)</b>	Set or agree on a goal defined in terms of a positive outcome of wanted behaviour	<ul style="list-style-type: none"> <li>Encourage women to set a goal with regards to an outcome they want to achieve for their sexual and reproductive health (e.g. not needing to use emergency contraception for a year, for someone who has repeated contraception failures).</li> </ul>
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Self-talk</b>	Prompt positive self-talk (aloud or silently) before and during the behaviour	<ul style="list-style-type: none"> <li>Suggest that women use positive self-talk to reassure themselves when going into an appointment that they are nervous about – perhaps they could write a letter to themselves ahead of time to take along and look back over in the waiting room.</li> </ul>

Other BCTs to consider		
BCT	Definition	Examples
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Self-incentive</b>	Plan to reward self in future if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Encourage women to plan to treat themselves (e.g. go for dinner) or other valued objects if and only if they discuss their reproductive symptoms at the doctors.</li> </ul>
<b>Identity associated with changed behaviour</b>	Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behaviour'	<ul style="list-style-type: none"> <li>Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>
<b>Mental rehearsal of successful performance</b>	Advise to practice imagining performing the behaviour successfully in relevant contexts	<ul style="list-style-type: none"> <li>Advise women to imagine a successful GP appointment, or successful discussion with friends regarding heavy menstruation – consider rehearsing what they might say depending on different responses from the GP or friends.</li> </ul>

Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
Needs	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	<b>Social learning/imitation</b>	Behavioural cueing	Behavioural regulation	Subjective norms

## Social learning/imitation

Copying behaviour, feelings or thoughts from others after observing them - conscious awareness of the observation-copying link is not required

### Behavioural influences



Facilitator



Barrier

- Positive or negative personal experiences and other people's (e.g. friends') experiences of contraception

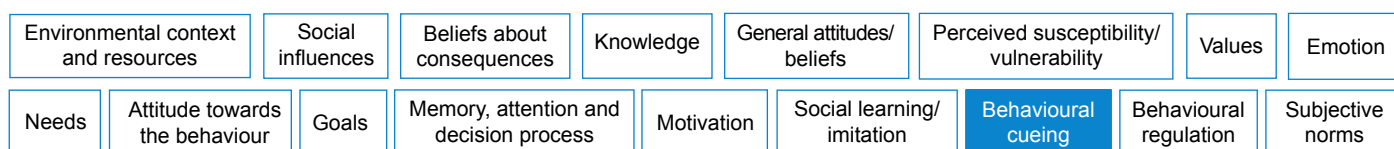


#### Recommended BCTs

BCT	Definition	Examples
<b>Demonstration of behaviour</b>	Provide an observable sample of the performance of the behaviour, directly in person or indirectly e.g. via film, pictures, for the person to aspire to or imitate	<ul style="list-style-type: none"> <li>• Provide a video (online, television adverts and campaigns) that demonstrates how to access healthcare services in the local area.</li> <li>• Provide a video that demonstrates where to find the best online resources to help planning with pregnancy, highlighting the different languages available.</li> <li>• Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences (e.g. having difficult or embarrassing conversations with healthcare professionals) to facilitate social learning.</li> </ul>

#### Other BCTs to consider

BCT	Definition	Examples
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>• Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>• Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning.</li> </ul>
<b>Vicarious consequences</b>	Prompt observation of the consequences (including rewards and punishments) for others when they perform the behaviour	<ul style="list-style-type: none"> <li>• Create a series of videos discussing personal experiences and side effects of various contraceptive methods focussing on the positive aspects but also acknowledging the factors that are important to women when decision making (e.g. different levels of efficacy, impact on menstrual cycle, etc.)</li> <li>• Share stories and case studies (consider different forms of media such as podcast interviews, videos, blogs, etc.) where women discuss their experiences, for example those who have engaged in pre-conception care and have found that it achieved positive outcomes (e.g. a healthy baby and reduced stress/anxiety for the woman).</li> <li>• Facilitate women's sharing of experiences with help-seeking/symptom management/contraception use/pre-conception care (e.g. in a clinically moderated forum such as the NHS:24 service).</li> </ul>



## Behavioural cueing

Situations in which behaviour is triggered automatically, e.g. by cues in the person's environment, other behaviours the person has performed, or ideas

### Behavioural influences

**F** Facilitator

- Advice from healthcare professionals about choosing a method of contraception influences which method women choose

**F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Action planning</b>	Prompt detailed planning of performance of the behaviour (must include the what, when and for how long). Context may be environmental (physical or social) or internal (physical, emotional or cognitive)	<ul style="list-style-type: none"> <li>• Support women to make specific plans to achieve their goals, that include the what, when and how long for (e.g. a plan to carry condoms when going out socially at weekends, or to take folic acid for at least three months before trying for a second child). Can be used in conjunction with problem solving.</li> </ul>
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>• Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day.</li> <li>• Create visible campaign materials that encourage women to seek support from their doctor or a local service (e.g. adverts on social media to prompt women to explore help-seeking options, or in doctors' surgery waiting rooms to encourage women to bring up these issues during appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>• Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Restructuring the physical environment</b>	Change, or advise to change the physical environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>• Ensure services are accessible and available to women (e.g. consider opening times and locations and how easy it is to sign up to the service or access their offer, ensure that resources are available in different languages).</li> </ul>
<b>Avoidance/reducing exposure to cues for the behaviour</b>	Advise on how to avoid exposure to specific social and contextual/physical cues for the behaviour, including changing daily or weekly routines	<ul style="list-style-type: none"> <li>• If a woman has a goal to reduce unprotected sex/need for emergency contraception, work with her to identify situations that may lead to these incidents and find ways that these situations can be avoided.</li> </ul>
<b>Adding objects to the environment</b>	Add objects to the environment in order to facilitate performance of the behaviour <i>Note: Provision of information (e.g. written, verbal, visual) in a booklet or leaflet is insufficient.</i>	<ul style="list-style-type: none"> <li>• Ensure availability of a range of contraceptive methods at different services and locations where possible/appropriate (e.g. surgeries, clinics, pharmacies, schools, etc.)</li> <li>• Provide online services (e.g. webinars, moderated forums) where women can receive information from trusted healthcare professionals and ask questions anonymously.</li> <li>• Ensure availability of female healthcare professionals for booking appointments to discuss sexual and reproductive health issues.</li> <li>• Ensure availability of information resources that use accessible language (e.g. plain language resources to increase accessibility for different levels of literacy; resources translated into different languages for women who may not speak English fluently).</li> </ul>

Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
Needs	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	Social learning/imitation	<b>Behavioural cueing</b>	Behavioural regulation	Subjective norms

## Behavioural cueing

Situations in which behaviour is triggered automatically, e.g. by cues in the person's environment, other behaviours the person has performed, or ideas

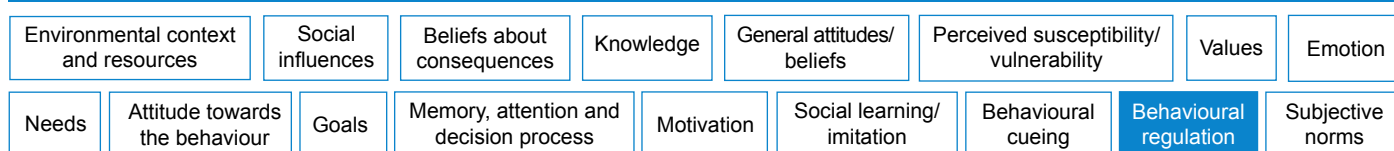
### Behavioural influences

**F** Facilitator

- Advice from healthcare professionals about choosing a method of contraception influences which method women choose

**F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Associative learning</b>	Present a neutral stimulus jointly with a stimulus that already elicits the behaviour repeatedly until the neutral stimulus elicits that behaviour	<ul style="list-style-type: none"> <li>• Encourage women to take their contraceptive pill just before brushing their teeth, so that the act of brushing teeth becomes a cue to take medication.</li> </ul>
<b>Behavioural practice/rehearsal</b>	Prompt practice or rehearsal of the performance of the behaviour one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill	<ul style="list-style-type: none"> <li>• Encourage women to practice having conversations with potential partners about the use of condoms with their friends so that they are better able to negotiate this with new sexual partners.</li> <li>• Encourage women to start having conversations about their sexual and reproductive health with trusted others such as friends so that they can get used to discussing potentially embarrassing topics with healthcare professionals.</li> </ul>
<b>Behaviour substitution</b>	Prompt substitution of the unwanted behaviour with a wanted or neutral behaviour	<ul style="list-style-type: none"> <li>• Suggest that women access recommended sources of information (such as speaking to her healthcare practitioner or visiting authorised online resources) rather than going to resources that may present misinformation.</li> </ul>
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>



## Behaviour regulation

The behavioural, cognitive and/or emotional skills required for managing or changing behaviour

### Behavioural influences

**B** Barrier

- Influence of alcohol on using contraception
- Being 'in the moment' impacts contraception use (e.g. of condoms)

**B**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>• Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these if they would otherwise be interested in the method (e.g. smartphone alarms for forgetting pills). In non-interactive settings such as websites, consider listing common issues/barriers reported by women, and potential ways of working around these.</li> </ul>
<b>Self-monitoring of behaviour</b>	Establish a method for the person to monitor and record their behaviour(s) as part of a behaviour change strategy	<ul style="list-style-type: none"> <li>• Encourage women to keep a record of any slip-ups (e.g. not using a condom, forgetting to take a pill).</li> </ul>
<b>Behaviour substitution</b>	Prompt substitution of the unwanted behaviour with a wanted or neutral behaviour	<ul style="list-style-type: none"> <li>• Suggest that women access recommended sources of information (such as speaking to her healthcare practitioner or visiting authorised online resources) rather than going to resources that may present misinformation.</li> </ul>
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>• For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>• Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise on strategies such as setting alarms/putting visible prompts in home to remind to take contraceptive pills, or vitamin supplements.</li> </ul>



Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
Needs	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	Social learning/imitation	Behavioural cueing	Behavioural regulation	Subjective norms

## Behaviour regulation

The behavioural, cognitive and/or emotional skills required for managing or changing behaviour

### Behavioural influences

**B** Barrier

- Influence of alcohol on using contraception
- Being 'in the moment' impacts contraception use (e.g. of condoms)

**B**

Recommended BCTs	Other BCTs to consider	
BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>• Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Action planning</b>	Prompt detailed planning of performance of the behaviour (must include the what, when and for how long). Context may be environmental (physical or social) or internal (physical, emotional or cognitive)	<ul style="list-style-type: none"> <li>• Support women to make specific plans to achieve their goals, that include the what, when and how long for (e.g. a plan to carry condoms when going out socially at weekends, or to take folic acid for at least three months before trying for a second child). Can be used in conjunction with problem solving.</li> </ul>
<b>Discrepancy between current behaviour and goal</b>	Draw attention to discrepancies between a person's current behaviour (in terms of the form, frequency, duration, or intensity of that behaviour) and the person's previously set outcome goals, behavioural goals or action plans (goes beyond self-monitoring of behaviour)	<ul style="list-style-type: none"> <li>• Invite women to review their levels of contraceptive pill taking behaviour and ask them to reflect on whether they are taking it reliably enough to prevent their desired outcome to not become pregnant.</li> </ul>
<b>Behavioural contract</b>	Create a written specification of the behaviour to be performed, agreed on by the person, and witnessed by another	<ul style="list-style-type: none"> <li>• Encourage women to make a pledge to take care of their sexual health and to seek support for reproductive symptoms and continue going back until they receive the support they need (e.g. in an online community of peers).</li> </ul>
<b>Self-monitoring outcomes of behaviour</b>	Establish a method for the person to monitor and record the outcome(s) of their behaviour as part of a behaviour change strategy	<ul style="list-style-type: none"> <li>• Ask the person to keep a diary of their premenstrual dysphoric disorder symptoms for 2 to 3 menstrual cycles and record emotional and physical signs.</li> </ul>
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>• Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>

Environmental context and resources	Social influences	Beliefs about consequences	Knowledge	General attitudes/beliefs	Perceived susceptibility/vulnerability	Values	Emotion	
Needs	Attitude towards the behaviour	Goals	Memory, attention and decision process	Motivation	Social learning/imitation	Behavioural cueing	Behavioural regulation	Subjective norms

## Subjective norms

A person's perceptions of how other people behave, or what other people think is acceptable

### Behavioural influences

**F** Facilitator

- Expectations from sexual partners and social group for women to instigate the use of condoms or already be on the contraceptive pill

**F**

#### Recommended BCTs

BCT	Definition	Examples
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>

#### Other BCTs to consider

BCT	Definition	Examples
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>

Environmental context and resources		Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation	
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Environmental context and resources

Factors in one's environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc.)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Ad-hoc prompts or information on pre-pregnancy service from health professional or in health settings</li> <li>Making a conscious decision to try to get pregnant</li> <li>Opportunity to discuss preconception care with health professional in the context of other care</li> <li>Advice and information from friends and the internet</li> <li>Information from the internet regarding folic acid use</li> <li>Previous positive health care experiences</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Healthcare professionals don't initiate discussions on pre-pregnancy healthy behaviours even when prompted</li> <li>Healthcare professionals holding stereotypical views on the 'correct' age and relationship status for women to have a baby impacts whether pre-pregnancy health is discussed</li> <li>Lack of information and advice from health professionals</li> <li>Lack of pre-pregnancy planning phase due to unexpected speed of conception, changes in medication, changes in contraception or in relationships (e.g. unplanned pregnancy)</li> <li>Seeking information pre-pregnancy is not a priority for homeless women due to competing priorities</li> <li>Reluctance to seek information from healthcare professionals as perception that the advice will conflict with personal views and wishes</li> <li>Preference for female GP or dedicated 'women's health' professional</li> <li>Perceived lack of control over when to become pregnant as it relies on various factors – e.g. 'right' relationship, financial stability, health and fertility</li> <li>Lack of visibility of pre-pregnancy care in secondary care services (rheumatology, epilepsy and Type 2 diabetes)</li> <li>Lack of pre-pregnancy planning phase due to perceived issues getting pregnant with specific health conditions, such as diabetes and high blood pressure</li> <li>Lack of/poor coordination between primary and secondary care for chronic diseases</li> <li>Administrative barriers with receiving free folic acid (hard to navigate benefits system)</li> <li>Inconsistent advice or incorrect information given from healthcare professionals</li> <li>Information provided is inappropriate, inadequate, unrealistic for woman's circumstances</li> <li>Incorrect information given by informal sources (e.g. friends and family)</li> <li>Information received too late</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>Accessibility of services</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)		Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Example	
<b>Social support (practical)</b>	Advise on, arrange or provide practical help (e.g. from friends, relatives, colleagues, 'buddies' or staff) for performance of the behaviour	<ul style="list-style-type: none"> <li>Ensure female support workers can assist women with learning differences to attend sexual health clinic appointments and facilitate their involvement in decision-making.</li> <li>Suggest that women bring somebody along (e.g. a friend, partner or relative) to appointments that they might feel nervous about attending.</li> </ul>	
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day.</li> <li>Create visible campaign materials that encourage women to seek support from their doctor or a local service (e.g. adverts on social media to prompt women to explore help-seeking options, or in doctors' surgery waiting rooms to encourage women to bring up these issues during appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>	
<b>Remove aversive stimulus</b>	Advise or arrange for the removal of an aversive stimulus to facilitate behaviour change (includes 'Escape learning')	<ul style="list-style-type: none"> <li>Aim to reduce negative pressure from male partners by targeting interventions towards men that increase acceptance of contraceptive methods such as condoms.</li> <li>Ensure female healthcare professionals are available if women prefer not to have an appointment with male practitioners.</li> <li>Remove the perceived financial cost of some methods (e.g. condoms) by signposting women to services where they can be obtained for free.</li> <li>Facilitate interactions between healthcare professionals and communities where women can remain anonymous if they wish to ask questions that they might find embarrassing (e.g. online forums or livestream drop-in Q&amp;A sessions).</li> </ul>	

Environmental context and resources		Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation	
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Environmental context and resources

Factors in one's environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc.)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Ad-hoc prompts or information on pre-pregnancy service from health professional or in health settings</li> <li>Making a conscious decision to try to get pregnant</li> <li>Opportunity to discuss preconception care with health professional in the context of other care</li> <li>Advice and information from friends and the internet</li> <li>Information from the internet regarding folic acid use</li> <li>Previous positive health care experiences</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Lack of pre-pregnancy planning phase due to unexpected speed of conception, changes in medication, changes in contraception or in relationships (e.g. unplanned pregnancy)</li> <li>Lack of pre-pregnancy planning phase due to perceived issues getting pregnant with specific health conditions, such as diabetes and high blood pressure</li> <li>Seeking information pre-pregnancy is not a priority for homeless women due to competing priorities</li> <li>Reluctance to seek information from healthcare professionals as perception that the advice will conflict with personal views and wishes</li> <li>Preference for female GP or dedicated 'women's health' professional</li> <li>Healthcare professionals don't initiate discussions on pre-pregnancy healthy behaviours even when prompted</li> <li>Healthcare professionals holding stereotypical views on the 'correct' age and relationship status for women to have a baby impacts whether pre-pregnancy health is discussed</li> <li>Perceived lack of control over when to become pregnant as it relies on various factors – e.g. 'right' relationship, financial stability, health and fertility</li> <li>Lack of visibility of pre-pregnancy care in secondary care services (rheumatology, epilepsy and Type 2 diabetes)</li> <li>Administrative barriers with receiving free folic acid (hard to navigate benefits system)</li> <li>Inconsistent advice or incorrect information given from healthcare professionals</li> <li>Lack of information and advice from health professionals</li> <li>Incorrect information given by informal sources (e.g. friends and family)</li> <li>Information provided is inappropriate, inadequate, unrealistic for woman's circumstances</li> <li>Information received too late</li> <li>Lack of/poor coordination between primary and secondary care for chronic diseases</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>Accessibility of services</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)		Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples	
<b>Restructuring the physical environment</b>	Change, or advise to change the physical environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>Ensure services are accessible and available to women (e.g. consider opening times and locations and how easy it is to sign up to the service or access their offer, ensure that resources are available in different languages).</li> </ul>	
<b>Avoidance/reducing exposure to cues for the behaviour</b>	Advise on how to avoid exposure to specific social and contextual/physical cues for the behaviour, including changing daily or weekly routines	<ul style="list-style-type: none"> <li>If a woman has a goal to reduce unprotected sex/need for emergency contraception, work with her to identify situations that may lead to these incidents and find ways that these situations can be avoided.</li> </ul>	
<b>Adding objects to the environment</b>	Add objects to the environment in order to facilitate performance of the behaviour <i>Note: Provision of information (e.g. written, verbal, visual) in a booklet or leaflet is insufficient.</i>	<ul style="list-style-type: none"> <li>Ensure availability of a range of contraceptive methods at different services and locations where possible/appropriate (e.g. surgeries, clinics, pharmacies, schools, etc.)</li> <li>Provide online services (e.g. webinars, moderated forums) where women can receive information from trusted healthcare professionals and ask questions anonymously.</li> <li>Ensure availability of female healthcare professionals for booking appointments to discuss sexual and reproductive health issues.</li> <li>Ensure availability of information resources that use accessible language (e.g. plain language resources to increase accessibility for different levels of literacy; resources translated into different languages for women who may not speak English fluently).</li> </ul>	

Environmental context and resources		Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation	
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Environmental context and resources

Factors in one's environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc.)

### Behavioural influences

**F**

Facilitator

**B**

Barrier

<ul style="list-style-type: none"> <li>• Ad-hoc prompts or information on pre-pregnancy service from health professional or in health settings</li> <li>• Making a conscious decision to try to get pregnant</li> <li>• Opportunity to discuss preconception care with health professional in the context of other care</li> <li>• Advice and information from friends and the internet</li> <li>• Information from the internet regarding folic acid use</li> <li>• Previous positive health care experiences</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Lack of pre-pregnancy planning phase due to unexpected speed of conception, changes in medication, changes in contraception or in relationships (e.g. unplanned pregnancy)</li> <li>• Lack of pre-pregnancy planning phase due to perceived issues getting pregnant with specific health conditions, such as diabetes and high blood pressure</li> <li>• Seeking information pre-pregnancy is not a priority for homeless women due to competing priorities</li> <li>• Reluctance to seek information from healthcare professionals as perception that the advice will conflict with personal views and wishes</li> <li>• Preference for female GP or dedicated 'women's health' professional</li> <li>• Healthcare professionals don't initiate discussions on pre-pregnancy healthy behaviours even when prompted</li> <li>• Healthcare professionals holding stereotypical views on the 'correct' age and relationship status for women to have a baby impacts whether pre-pregnancy health is discussed</li> <li>• Perceived lack of control over when to become pregnant as it relies on various factors – e.g. 'right' relationship, financial stability, health and fertility</li> <li>• Lack of visibility of pre-pregnancy care in secondary care services (rheumatology, epilepsy and Type 2 diabetes)</li> <li>• Administrative barriers with receiving free folic acid (hard to navigate benefits system)</li> <li>• Inconsistent advice or incorrect information given from healthcare professionals</li> <li>• Lack of information and advice from health professionals</li> <li>• Incorrect information given by informal sources (e.g. friends and family)</li> <li>• Information provided is inappropriate, inadequate, unrealistic for woman's circumstances</li> <li>• Information received too late</li> <li>• Lack of/poor coordination between primary and secondary care for chronic diseases</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>• Accessibility of services</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs (1/2)		Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples	
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>• Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these if they would otherwise be interested in the method (e.g. smartphone alarms for forgetting pills). In non-interactive settings such as websites, consider listing common issues/barriers reported by women, and potential ways of working around these.</li> </ul>	
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise on strategies such as setting alarms/putting visible prompts in home to remind to take contraceptive pills, or vitamin supplements.</li> </ul>	



Environmental context and resources	<b>Knowledge</b>	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Knowledge

An understanding of something (e.g. awareness of its existence, awareness of its importance, awareness of how to do it etc.)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Understanding the need to plan pregnancy</li> <li>Repeated messaging on health behaviours increases awareness of importance</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Lack of awareness that one needs to plan/prepare for pregnancy</li> <li>Lack of pre-pregnancy planning phase due to perceived issues getting pregnant with specific health conditions, such as diabetes and high blood pressure</li> <li>Lack of visibility of pre-pregnancy care in secondary care services (rheumatology, epilepsy and Type 2 diabetes)</li> <li>Limited awareness of the services and support available for preconception care</li> <li>Administrative barriers with receiving free folic acid (hard to navigate benefits system)</li> <li>Lack of awareness of the connection between pregnancy-related complications, risk factors and negative outcomes and lack of pre-pregnancy care</li> <li>Knowledge (or lack of) of what recommended pre-pregnancy behaviours might be and when to start these</li> <li>Lack of knowledge about risks of pregnancy to both mother and foetus, particularly those with medical conditions</li> <li>Lack of knowledge about risks of taking valproate whilst pregnant/trying to conceive</li> <li>Lack of knowledge of age as a barrier to conception</li> <li>Lack of understanding of how factors such as age, folic acid and having health conditions can affect fertility/pregnancy</li> <li>Negative views of micronutrient supplementation (e.g. vitamins)</li> </ul> <p style="text-align: right;"><b>B</b></p>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Instruction on how to perform behaviour</b>	Advise or agree on how to perform the behaviour (includes 'Skills training')	<ul style="list-style-type: none"> <li>Provide information on what pre-pregnancy care is, and all of the different ways that women can choose to prepare for conception, with specific instructions on how these goals can be achieved.</li> <li>Provide women with accessible information on where and how they can access sexual and reproductive health services in the UK, including information on eligibility for NHS treatment and how to register with a GP.</li> </ul>
<b>Information about antecedents</b>	Provide information about antecedents (e.g. social and environmental situations and events, emotions, cognitions) that reliably predict performance of the behaviour	<ul style="list-style-type: none"> <li>Advise women to keep a record of the situations or events that occur prior to forgetting to use a contraceptive method, such as the pill or condoms.</li> </ul>
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Provide information on the efficacy of different contraceptive methods for reducing STI risk</li> <li>Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>

Environmental context and resources	<b>Knowledge</b>	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Knowledge

An understanding of something (e.g. awareness of its existence, awareness of its importance, awareness of how to do it, etc.)

### Behavioural influences

**F** Facilitator      **B** Barrier

<ul style="list-style-type: none"> <li>• Understanding the need to plan pregnancy</li> <li>• Repeated messaging on health behaviours increases awareness of importance</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Lack of awareness that one needs to plan/prepare for pregnancy</li> <li>• Lack of pre-pregnancy planning phase due to perceived issues getting pregnant with specific health conditions, such as diabetes and high blood pressure</li> <li>• Lack of visibility of pre-pregnancy care in secondary care services (rheumatology, epilepsy and Type 2 diabetes)</li> <li>• Limited awareness of the services and support available for preconception care</li> <li>• Administrative barriers with receiving free folic acid (hard to navigate benefits system)</li> <li>• Lack of awareness of the connection between pregnancy-related complications, risk factors and negative outcomes and lack of pre-pregnancy care</li> <li>• Knowledge (or lack of) of what recommended pre-pregnancy behaviours might be and when to start these</li> <li>• Lack of knowledge about risks of pregnancy to both mother and foetus, particularly those with medical conditions</li> <li>• Lack of knowledge about risks of taking valproate whilst pregnant/trying to conceive</li> <li>• Lack of knowledge of age as a barrier to conception</li> <li>• Lack of understanding of how factors such as age, folic acid and having health conditions can affect fertility/pregnancy</li> <li>• Negative views of micronutrient supplementation (e.g. vitamins)</li> </ul> <p style="text-align: right;"><b>B</b></p>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>• During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy.</li> </ul>

Environmental context and resources	Knowledge	<b>Social influences</b>	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Social influences

Social relationships and/or interactions that can change one's behaviour, thoughts or feelings

### Behavioural influences

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<ul style="list-style-type: none"> <li>• Advice and information from friends and the internet</li> <li>• Peer support whilst planning for pregnancy with a chronic disease</li> <li>• Positive health care experiences</li> <li>• Support from informal sources (such as friends, family and the internet)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Perception it is not socially acceptable to discuss pregnancy prior to conception</li> <li>• Reluctance to seek information from healthcare professionals as perception that the advice will conflict with personal views and wishes</li> <li>• Embarrassment or feeling judged if planning pregnancy outside of a relationship or at a young age</li> <li>• Shame and stigma of having Type 2 diabetes reduces health-seeking behaviour</li> <li>• Healthcare professionals holding stereotypical views on the 'correct' age and relationship status for women to have a baby, which impacts whether pre-pregnancy health is discussed</li> <li>• Perceived lack of control over when to become pregnant as it relies on various factors; right relationship, financial stability, health, and fertility</li> <li>• Personal experience, or experience in social network that goes against healthcare professional advice</li> <li>• Incorrect information from informal sources (such as friends, family and the internet)</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>• Quality of relationship with the healthcare professionals</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Social support (unspecified)</b>	Advise on, arrange or provide social support (e.g. from friends, relatives, colleagues, 'buddies' or staff) or noncontingent praise or reward for performance of the behaviour. It includes encouragement and counselling, but only when it is directed at the behaviour	<ul style="list-style-type: none"> <li>• Advise or enable women to discuss their reproductive symptoms in a safe place e.g. a clinically moderated online forum.</li> <li>• Set up buddy systems or nominate women's health champions within certain settings, who can help women with any needs they might have with regards to that setting (e.g. negotiating time off from the workplace, accessing services for homeless women or those with drug-use issues).</li> <li>• Create communities or support groups (e.g. on social media or in real life) where women with common needs (e.g. those who are struggling with reproductive symptoms, or those from certain religious or cultural backgrounds who are exploring their options for contraception) can offer each other advice and reassurance.</li> </ul>
<b>Social support (practical)</b>	Advise on, arrange, or provide practical help (e.g. from friends, relatives, colleagues, 'buddies' or staff) for performance of the behaviour	<ul style="list-style-type: none"> <li>• Ensure female support workers can assist women with learning differences to attend sexual health clinic appointments and facilitate their involvement in decision-making.</li> <li>• Suggest that women bring somebody along (e.g. a friend, partner or relative) to appointments that they might feel nervous about attending.</li> </ul>
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>
<b>Social reward</b>	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Ensure that healthcare professionals use positive and encouraging language when women are nervous about discussing their needs (e.g. "I'm glad you have talked to me about this today...").</li> </ul>

Environmental context and resources	Knowledge	<b>Social influences</b>	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Social influences

Social relationships and/or interactions that can change one's behaviour, thoughts or feelings

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>• Advice and information from friends and the internet</li> <li>• Peer support whilst planning for pregnancy with a chronic disease</li> <li>• Positive health care experiences</li> <li>• Support from informal sources (such as friends, family and the internet)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>• Perception it is not socially acceptable to discuss pregnancy prior to conception</li> <li>• Reluctance to seek information from healthcare professionals as perception that the advice will conflict with personal views and wishes</li> <li>• Embarrassment or feeling judged if planning pregnancy outside of a relationship or at a young age</li> <li>• Shame and stigma of having Type 2 diabetes reduces health-seeking behaviour</li> <li>• Healthcare professionals holding stereotypical views on the 'correct' age and relationship status for women to have a baby, which impacts whether pre-pregnancy health is discussed</li> <li>• Perceived lack of control over when to become pregnant as it relies on various factors; right relationship, financial stability, health, and fertility</li> <li>• Personal experience, or experience in social network that goes against healthcare professional advice</li> <li>• Incorrect information from informal sources (such as friends, family and the internet)</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>• Quality of relationship with the healthcare professionals</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Restructuring the social environment</b>	Change, or advise to change the social environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>• Ensure that workplaces receive training to raise awareness of the requirements of women undergoing menopause and premenstrual dysphoric disorder, to remove the taboo associated with reproductive symptoms.</li> <li>• Encourage workplaces to appoint health champions who can support employees with conversations with management that they might find embarrassing.</li> <li>• Develop media and education campaigns that break down taboos around women's reproductive and sexual health, encourage it as a topic for discussion regardless of a woman's life stage, and place equal responsibility on the genders for taking care of contraception.</li> <li>• Collaborate with services that support homeless women and those with drug-use issues to facilitate women's access to trusted sexual and reproductive health advisers (e.g. visiting healthcare professionals or trained champions within the services).</li> <li>• Ensure that workplace policies include practical approaches for women experiencing menopausal symptoms.</li> <li>• Enable and encourage greater sharing of women's personal experiences of different contraceptive options/treatments for reproductive symptoms/outcomes from pre-conception care in a clinically moderated forum (e.g. such as the NHS SH:24 forum).</li> <li>• Provide training for healthcare professionals to sensitively handle conversations with women around their sexual and reproductive health that focuses on empowering women to make choices that work for them:                         <ul style="list-style-type: none"> <li>• Ensure that healthcare professionals are aware of the positive and negative influences that they can have on women's healthcare experiences (e.g. see the barriers and facilitators reported in the tables above).</li> <li>• Upskill the workforce in delivering behaviour change (e.g. through using motivational interviewing techniques that help to identify the woman's own goals, priorities and self-generated solutions as a path to empowered behaviour change. Professionals can also be trained to deliver some of the techniques described here in their appointments e.g. goal setting and problem solving).</li> <li>• Ensure that women's preferences are prioritised in guidance for healthcare professionals (e.g. preferred contraception is held over and above more "cost-effective" methods) and that professionals will not be penalised for delivering on women's preferences (e.g. by missing out on incentive schemes for prescribing/fitting certain methods of contraception)</li> </ul> </li> <li>• Support healthcare professionals to deliver up-to-date information about women's options, ensuring that information is appropriate for their health conditions and life circumstances, and sensitively balances risks (e.g. through training or the provision of information resources/digital tools that can be taken away by women or used together in consultations).</li> <li>• Work with religious and community leaders/representatives to develop information materials and campaigns that are culturally sensitive and acceptable to different communities of women; ensure that these materials help women to identify their available options and identify support resources. Consider targeting interventions at other members of communities in order to alleviate the pressures on women.</li> <li>• Create a media campaign that emphasises the positive role of healthcare services during pregnancy, showing that involvement can be supportive and reassuring rather than reactive during an emergency.</li> </ul>

Environmental context and resources	Knowledge	Social influences	<b>Emotion</b>	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Emotion

An individual's feelings towards a behaviour/potential outcome

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Personal experience of bad outcome promotes pregnancy planning</li> <li>Feeling of responsibility for baby's health (epilepsy, diabetes and general)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Perception that actively planning and preparing for a baby may lead to pressure from family and friends and amplify disappointment if conception does not occur</li> <li>Feelings of embarrassment or feeling judged if planning pregnancy outside of a relationship or at a young age</li> <li>Shame and stigma of having Type 2 diabetes reduces health-seeking behaviour</li> <li>Avoidance of information from healthcare professionals, online forums, family and friends which is negative and prompts fear and anxiety</li> <li>Desire to have a child over-riding all else (not wanting to wait)</li> </ul> <p style="text-align: right;"><b>B</b></p>
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### Recommended BCTs

BCT	Definition	Examples
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Anticipated regret</b>	Induce or raise awareness of expectations of future regret about performance of the unwanted behaviour	<ul style="list-style-type: none"> <li>Highlight the potential for future feelings of regret if women do not seek support for reproductive symptoms.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



Environmental context and resources	Knowledge	Social influences	Emotion	<b>Beliefs about consequences</b>	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Beliefs about consequences

Beliefs about the consequences of a behaviour (e.g. what will be gained or lost, and the probability of those consequences)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Personal experience of bad outcome promotes pregnancy planning</li> <li>Understanding the need to plan pregnancy</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Perception that actively planning and preparing for a baby may lead to pressure from family and friends and amplify disappointment if conception does not occur</li> <li>Lack of awareness of the connection between pregnancy-related complications, risk factors and negative outcomes and lack of pre-pregnancy care</li> <li>Personal experience or experience in social network that goes against healthcare professional advice</li> <li>Delaying pregnancy among women with diabetes, due to feeling of responsibility for impact of blood sugar levels on baby's health</li> <li>Lack of understanding of how factors such as age, folic acid and having health conditions can affect fertility/pregnancy</li> </ul> <p style="text-align: right;"><b>B</b></p>
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Recommended BCTs (1/2)		Recommended BCTs (2/2)
BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>Develop an online media campaign which highlights the positive and negative outcomes associated with pre-conception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>
<b>Information about social and environmental consequence</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Anticipated regret</b>	Induce or raise awareness of expectations of future regret about performance of the unwanted behaviour	<ul style="list-style-type: none"> <li>Highlight the potential for future feelings of regret if women do not seek support for reproductive symptoms.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	<b>Beliefs about consequences</b>	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Beliefs about consequences

Beliefs about the consequences of a behaviour (e.g. what will be gained or lost, and the probability of those consequences)

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Personal experience of bad outcome promotes pregnancy planning</li> <li>Understanding the need to plan pregnancy</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Perception that actively planning and preparing for a baby may lead to pressure from family and friends and amplify disappointment if conception does not occur</li> <li>Lack of awareness of the connection between pregnancy-related complications, risk factors and negative outcomes and lack of pre-pregnancy care</li> <li>Personal experience or experience in social network that goes against healthcare professional advice</li> <li>Delaying pregnancy among women with diabetes, due to feeling of responsibility for impact of blood sugar levels on baby's health</li> <li>Lack of understanding of how factors such as age, folic acid and having health conditions can affect fertility/pregnancy</li> </ul> <p style="text-align: right;"><b>B</b></p>
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Recommended BCTs (1/2)		Recommended BCTs (2/2)
BCT	Definition	Examples
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Comparative imagining of future outcomes</b>	Prompt or advise the imagining and comparing of future outcomes of changed versus unchanged behaviour	<ul style="list-style-type: none"> <li>Prompt the person to imagine and compare likely or possible outcomes following seeking healthcare professional advice for contraception versus what could happen if they do not seek support (e.g. having to use a method that does not suit them, or having an unintended pregnancy).</li> </ul>
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	<b>Perceived susceptibility/vulnerability</b>	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Perceived susceptibility/vulnerability

Perceptions of the likelihood that one is vulnerable to a threat

**B** Barrier

### Behavioural influences

- Lack of pre-pregnancy planning phase due to perceived issues getting pregnant with specific health conditions, such as diabetes and high blood pressure
- Lack of awareness of the connection between pregnancy-related complications, risk factors and negative outcomes and lack of pre-pregnancy care
- Personal experience, or experience in social network that goes against healthcare professional advice
- Lack of knowledge about risks of pregnancy to both mother and foetus, particularly those with medical conditions
- Lack of knowledge about risks of taking valproate whilst pregnant/trying to conceive
- Lack of knowledge of age as a barrier to conception

**B**

### Recommended BCTs

BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>• Develop an online media campaign which highlights the positive and negative outcomes associated with pre-conception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	<b>Reinforcement</b>	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Reinforcement

When a behaviour is reliably followed by a (positive or negative) outcome, which leads to encouragement or discouragement of that behaviour in future

### Behavioural influences



Facilitator



Barrier

<ul style="list-style-type: none"> <li>Repeated messaging on health behaviours increases awareness of importance</li> <li>Personal experience of bad outcome (e.g. miscarriage) promotes pregnancy planning</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Lack of visibility of pre-pregnancy care in secondary care services (rheumatology, epilepsy and Type 2 diabetes)</li> </ul> <p style="text-align: right;"><b>B</b></p>
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### Recommended BCTs

BCT	Definition	Examples
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>
<b>Material reward (behaviour)</b>	Arrange for the delivery of money, vouchers or other valued objects if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Arrange for the woman to receive (vouchers for or actual) free condoms if they attend a sexual health clinic to discuss contraception.</li> </ul>
<b>Social reward</b>	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Ensure that healthcare professionals use positive and encouraging language when women are nervous about discussing their needs (e.g. "I'm glad you have talked to me about this today...")</li> </ul>
<b>Non/specific incentive</b>	Inform that a reward will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Ensure that women know that they can access contraceptive care from pharmacies if they come forward for emergency contraception when it's needed.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy.</li> </ul>
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day.</li> <li>Create visible campaign materials that encourage women to seek support from their doctor or a local service (e.g. adverts on social media to prompt women to explore help-seeking options, or in doctors' surgery waiting rooms to encourage women to bring up these issues during appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>
<b>Associative learning</b>	Present a neutral stimulus jointly with a stimulus that already elicits the behaviour repeatedly until the neutral stimulus elicits that behaviour	<ul style="list-style-type: none"> <li>Encourage women to take their contraceptive pill just before brushing their teeth, so that the act of brushing teeth becomes a cue to take medication.</li> </ul>
<b>Self-reward</b>	Prompt self-praise or self-reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Encourage women to reward self with material (e.g. new clothes) or other valued objects after attending an appointment to discuss their reproductive symptoms with their doctor.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	<b>Goals</b>	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Goals

Aims or outcomes an individual wants to achieve

### Behavioural influences

**F**

Facilitator

**B**

Barrier

<ul style="list-style-type: none"> <li>Confidence in dealing with healthcare professionals and managing one's health</li> <li>Feeling the need to balance risks between their health and the health of the baby</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Other priorities before having a baby, not health related, such as having a career, enjoying oneself, travelling, finding the right partner</li> </ul> <p style="text-align: right;"><b>B</b></p>
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### Recommended BCTs

BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Goal setting (outcome)</b>	Set or agree on a goal defined in terms of a positive outcome of wanted behaviour	<ul style="list-style-type: none"> <li>Encourage women to set a goal with regards to an outcome they want to achieve for their sexual and reproductive health (e.g. not needing to use emergency contraception for a year, for someone who has repeated contraception failures).</li> </ul>
<b>Review behaviour goals</b>	Review behaviour goal(s) jointly with the person and consider modifying goal(s) or behaviour change strategy in light of achievement. This may lead to re-setting the same goal, a small change in that goal or setting a new goal instead of (or in addition to) the first, or no change	<ul style="list-style-type: none"> <li>Encourage women to set a time to review their goal (e.g. whether they are taking their contraceptive pill every day at the same time as prescribed) and to reflect on whether the goal needs adjusting (e.g. choosing a different method of contraception).</li> </ul>
<b>Discrepancy between current behaviour and goal</b>	Draw attention to discrepancies between a person's current behaviour (in terms of the form, frequency, duration, or intensity of that behaviour) and the person's previously set outcome goals, behavioural goals or action plans (goes beyond self-monitoring of behaviour)	<ul style="list-style-type: none"> <li>Invite women to review their levels of contraceptive pill taking behaviour and ask them to reflect on whether they are taking it reliably enough to prevent their desired outcome to not become pregnant.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Behavioural contract</b>	Create a written specification of the behaviour to be performed, agreed on by the person, and witnessed by another	<ul style="list-style-type: none"> <li>Encourage women to make a pledge to take care of their sexual health and to seek support for reproductive symptoms and continue going back until they receive the support they need (e.g. in an online community of peers).</li> </ul>
<b>Graded tasks</b>	Set easy-to-perform tasks, making them increasingly difficult, but achievable, until behaviour is performed	<ul style="list-style-type: none"> <li>Advise women to confide in a trusted friend to overcome embarrassment of talking about their symptoms before going to healthcare services.</li> </ul>
<b>Material reward (behaviour)</b>	Arrange for the delivery of money, vouchers or other valued objects if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>Arrange for the woman to receive (vouchers for or actual) free condoms if they attend a sexual health clinic to discuss contraception.</li> </ul>



Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Attitude towards the behaviour

A person's thoughts and feelings towards the behaviour, which can be positive or negative

### Behavioural influences

**B** Barrier

- Lack of awareness that one needs to plan/prepare for pregnancy
- Lack of pre pregnancy planning phase due to the perceived fertility issues with specific health conditions, such as diabetes and high blood
- Negative views of micronutrient supplementation (e.g. vitamins)

**B**

Recommended BCTs	Other BCTs to consider	
BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>• Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>• Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>• In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>• Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>• Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Attitude towards the behaviour

A person's thoughts and feelings towards the behaviour, which can be positive or negative

### Behavioural influences

**B** Barrier

- Lack of awareness that one needs to plan/prepare for pregnancy
- Lack of pre pregnancy planning phase due to the perceived fertility issues with specific health conditions, such as diabetes and high blood
- Negative views of micronutrient supplementation (e.g. vitamins)

**B**

Recommended BCTs	Other BCTs to consider	
BCT	Definition	Examples
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>• Develop an online media campaign which highlights the positive and negative outcomes associated with preconception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>
<b>Incompatible beliefs</b>	Draw attention to discrepancies between current or past behaviour and self-image, in order to create discomfort	<ul style="list-style-type: none"> <li>• Create campaign materials that highlight the discrepancy between a woman's self-image of being in charge of her life and creating positive change when things are not to her satisfaction, and the current behaviour of not seeking help for reproductive symptoms.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Motivation

Internal processes and thoughts that drive people and give them purpose, making them want to do a specific behaviour (these can be conscious or unconscious)

### Behavioural influences

**F** Facilitator

- Women requesting to receive a prescription from their GP for folic acid (i.e. at no cost if eligible for free prescriptions).
- Women seek GP advice prompted by fertility concerns
- Feeling the need to balance risks between their health and the health of the baby

**F**

### Recommended BCTs

BCT	Definition	Examples
<b>Goal setting (outcome)</b>	Set or agree on a goal defined in terms of a positive outcome of wanted behaviour	<ul style="list-style-type: none"> <li>• Encourage women to set a goal with regards to an outcome they want to achieve for their sexual and reproductive health (e.g. not needing to use emergency contraception for a year, for someone who has repeated contraception failures).</li> </ul>
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>• During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>• In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Self-talk</b>	Prompt positive self-talk (aloud or silently) before and during the behaviour	<ul style="list-style-type: none"> <li>• Suggest that women use positive self-talk to reassure themselves when going into an appointment that they are nervous about – perhaps they could write a letter to themselves ahead of time to take along and look back over in the waiting room.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>• Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Self-incentive</b>	Plan to reward self in future if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Encourage women to plan to treat themselves (e.g. go for dinner) or other valued objects if and only if they discuss their reproductive symptoms at the doctors.</li> </ul>
<b>Identity associated with changed behaviour</b>	Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behaviour'	<ul style="list-style-type: none"> <li>• Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>• Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>
<b>Mental rehearsal of successful performance</b>	Advise to practice imagining performing the behaviour successfully in relevant contexts	<ul style="list-style-type: none"> <li>• Advise women to imagine a successful GP appointment, or successful discussion with friends regarding heavy menstruation – consider rehearsing what they might say depending on different responses from the GP or friends.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
<b>Needs</b>	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Needs

A person's thoughts and feelings towards the behaviour, which can be positive or negative

### Behavioural influences

**B** Barrier

- Perceived lack of control over when to become pregnant as it relies on various factors; right relationship, financial stability, health, and fertility
- Desire to have a child overriding all else (not wanting to wait)
- Perceived side-effects of taking folic acid

**B**

### Other BCTs to consider

BCT	Definition	Examples
<b>Focus on past success</b>	Advise to think about or list previous successes in performing the behaviour (or parts of it)	<ul style="list-style-type: none"> <li>• Ask the woman to focus on the previous occasions where she had successfully sought medical advice for reproductive symptoms or had a positive experience when seeking medical advice for another condition or symptom.</li> <li>• Ask the woman to remember the occasions on which she successfully navigated situations that could have led to risky behaviour (e.g. monitoring alcohol intake on a night out).</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	<b>Values</b>	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Values

One's judgement on what is important in life (including moral, social, aesthetic principles)

### Behavioural influences

**F**

Facilitator

**B**

Barrier

<ul style="list-style-type: none"> <li>Feeling of responsibility for baby's health (due to potentially damaging effects of poor diabetic management during pregnancy, epilepsy medication and general health)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>The belief that a positive pregnancy experience is one that doesn't involve healthcare</li> <li>Other priorities before having a baby, not health related, such as having a career, enjoying oneself, travelling, finding the right partner</li> </ul> <p style="text-align: right;"><b>B</b></p>
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### Other BCTs to consider

BCT	Definition	Examples
<b>Commitment</b>	Ask the person to affirm or reaffirm statements indicating commitment to change the behaviour	<ul style="list-style-type: none"> <li>Where a woman has decided upon a goal, suggest that she write an "I will" statement to affirm or reaffirm a strong commitment to the goal (i.e. using the words "strongly", "committed" or "high priority").</li> </ul>
<b>Identity associated with changed behaviour</b>	Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behaviour'	<ul style="list-style-type: none"> <li>Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>
<b>Mental rehearsal of successful performance</b>	Advise to practice imagining performing the behaviour successfully in relevant contexts	<ul style="list-style-type: none"> <li>Advise women to imagine a successful GP appointment, or successful discussion with friends regarding heavy menstruation – consider rehearsing what they might say depending on different responses from the GP or friends.</li> </ul>



Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	<b>General attitudes/beliefs</b>	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## General attitudes/beliefs

What a person thinks and feels about a person, object, group, issue or idea related to the behaviour; this can be negative or positive

### Behavioural influences



Facilitator



Barrier

<ul style="list-style-type: none"> <li>Healthy behaviours and lifestyle prior to pregnancy, such as limited drinking, low caffeine intake and taking vitamins</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Lack of awareness that one needs to plan/prepare for pregnancy</li> </ul> <p style="text-align: right;"><b>B</b></p>
<ul style="list-style-type: none"> <li>Trust or lack of trust in health advice from informal sources (friends and family) and formal sources (healthcare professionals)</li> </ul> <p style="text-align: right;"><b>F B</b></p>	

### Recommended BCTs

BCT	Definition	Examples
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	<b>Memory, attention, decision process</b>	Subjective norms	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Memory, attention and decision process

The cognitive abilities needed be able to remember things, focus on specific details and make choices between alternative options

### Behavioural influences

**B** Barrier

- Administrative barriers with receiving free folic acid (hard to navigate benefits system)
- Forgetting to take folic acid

**B**

### Recommended BCTs

BCT	Definition	Examples
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>• Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day.</li> <li>• Create visible campaign materials that encourage women to seek support from their doctor or a local service (e.g. adverts on social media to prompt women to explore help-seeking options, or in doctors' surgery waiting rooms to encourage women to bring up these issues during appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise on strategies such as setting alarms/putting visible prompts in home to remind to take contraceptive pills, or vitamin supplements.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Commitment</b>	Ask the person to affirm or reaffirm statements indicating commitment to change the behaviour	<ul style="list-style-type: none"> <li>• Where a woman has decided upon a goal, suggest that she write an "I will" statement to affirm or reaffirm a strong commitment to the goal (i.e. using the words "strongly", "committed" or "high priority").</li> </ul>
<b>Associative learning</b>	Present a neutral stimulus jointly with a stimulus that already elicits the behaviour repeatedly until the neutral stimulus elicits that behaviour	<ul style="list-style-type: none"> <li>• Encourage women to take their contraceptive pill just before brushing their teeth, so that the act of brushing teeth becomes a cue to take medication.</li> </ul>
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	<b>Subjective norms</b>	Beliefs about capabilities	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Subjective norms

A person's perceptions of how other people behave, or what other people think is acceptable

### Behavioural influences

**B** Barrier

- Belief that a positive pregnancy experience is one that doesn't involve healthcare
- Discussion of pregnancy prior to conception perceived as not socially acceptable

**B**

### Recommended BCTs

BCT	Definition	Examples
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	<b>Beliefs about capabilities</b>	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Beliefs about capabilities

Beliefs about one's ability to successfully carry out a behaviour

### Behavioural influences

**F** Facilitator

- Confidence in dealing with healthcare professionals and managing one's health **F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these if they would otherwise be interested in the method (e.g. smartphone alarms for forgetting pills). In non-interactive settings such as websites, consider listing common issues/barriers reported by women, and potential ways of working around these.</li> </ul>
<b>Instruction on how to perform behaviour</b>	Advise or agree on how to perform the behaviour (includes 'Skills training')	<ul style="list-style-type: none"> <li>Provide information on what pre-pregnancy care is, and all of the different ways that women can choose to prepare for conception, with specific instructions on how these goals can be achieved.</li> <li>Provide women with accessible information on where and how they can access sexual and reproductive health services in the UK, including information on eligibility for NHS treatment and how to register with a GP.</li> </ul>
<b>Demonstration of the behaviour</b>	Provide an observable sample of the performance of the behaviour, directly in person or indirectly e.g. via film, pictures, for the person to aspire to or imitate	<ul style="list-style-type: none"> <li>Provide a video (online, television adverts and campaigns) that demonstrates how to access healthcare services in the local area.</li> <li>Provide a video that demonstrates where to find the best online resources to help planning with pregnancy, highlighting the different languages available.</li> <li>Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences (e.g. having difficult or embarrassing conversations with healthcare professionals) to facilitate social learning.</li> </ul>
<b>Behavioural practice/rehearsal</b>	Prompt practice or rehearsal of the performance of the behaviour one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill	<ul style="list-style-type: none"> <li>Encourage women to practice having conversations with potential partners about the use of condoms with their friends so that they are better able to negotiate this with new sexual partners.</li> <li>Encourage women to start having conversations about their sexual and reproductive health with trusted others such as friends so that they can get used to discussing potentially embarrassing topics with healthcare professionals.</li> </ul>
<b>Graded tasks</b>	Set easy-to-perform tasks, making them increasingly difficult, but achievable, until behaviour is performed	<ul style="list-style-type: none"> <li>Advise women to confide in a trusted friend to overcome embarrassment of talking about their symptoms before going to healthcare services.</li> </ul>
<b>Verbal persuasion about capability</b>	Tell the person that they can successfully perform the wanted behaviour, arguing against self-doubts and asserting that they can and will succeed	<ul style="list-style-type: none"> <li>Encourage women to form belief that they are someone who can assert themselves to insist on use of barrier contraception.</li> <li>Run a media campaign encouraging women with reproductive symptoms to book a GP appointment. Use role models who argue through their self-doubts and concerns of seeking help with a focus on the fact that "you can do it".</li> </ul>
<b>Focus on past success</b>	Advise to think about or list previous successes in performing the behaviour (or parts of it)	<ul style="list-style-type: none"> <li>Ask the woman to focus on the previous occasions where she had successfully sought medical advice for reproductive symptoms or had a positive experience when seeking medical advice for another condition or symptom.</li> <li>Ask the woman to remember the occasions on which she successfully navigated situations that could have led to risky behaviour (e.g. monitoring alcohol intake on a night out).</li> </ul>
<b>Self-talk</b>	Prompt positive self-talk (aloud or silently) before and during the behaviour	<ul style="list-style-type: none"> <li>Suggest that women use positive self-talk to reassure themselves when going into an appointment that they are nervous about – perhaps they could write a letter to themselves ahead of time to take along and look back over in the waiting room.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	<b>Beliefs about capabilities</b>	Optimism	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Beliefs about capabilities

Confidence in dealing with healthcare professionals and managing one's health

### Behavioural influences

**F** Facilitator

- Confidence in dealing with healthcare professionals and managing one's health **F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>• Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Social reward</b>	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour.	<ul style="list-style-type: none"> <li>• Ensure that healthcare professionals use positive and encouraging language when women are nervous about discussing their needs (e.g. "I'm glad you have talked to me about this today...").</li> </ul>
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>• For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>• Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>



Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	<b>Optimism</b>	Intention	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Optimism

Belief that things will be better in the future, or goals will be reached

### Behavioural influences

**B** Barrier

<ul style="list-style-type: none"> <li>• Hopefulness and uncertainty around trialling new medications or the side-effects on fertility/pregnancy</li> </ul>	<b>B</b>
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#### Other BCTs to consider

BCT	Definition	Examples
<b>Review outcome goals</b>	Review outcome goal(s) jointly with the person and consider modifying goal(s) in light of achievement. This may lead to resetting the same goal, a small change in that goal or setting a new goal instead of, or in addition to the first	<ul style="list-style-type: none"> <li>• To be used with 'Goal setting (outcome)', review the goals that women want to achieve when trying not to become pregnant – i.e. not needing emergency contraception or not having an unintended pregnancy.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	<b>Intention</b>	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Intention

A conscious decision to do something or perform a behaviour

### Behavioural influences

**F** Facilitator

- Making a conscious decision to try to get pregnant

**F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>• Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	<b>Intention</b>	Behavioural regulation	Norms	Self-image	Behavioural cueing

## Intention

A conscious decision to do something or perform a behaviour

### Behavioural influences

**F** Facilitator

- Making a conscious decision to try to get pregnant

**F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Commitment</b>	Ask the person to affirm or reaffirm statements indicating commitment to change the behaviour	<ul style="list-style-type: none"> <li>• Where a woman has decided upon a goal, suggest that she write an “I will” statement to affirm or reaffirm a strong commitment to the goal (i.e. using the words “strongly”, “committed” or “high priority”).</li> </ul>
<b>Information about others’ approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn’t feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy</li> </ul>
<b>Valued self-identity</b>	Advise the person to write or complete rating scales about a cherished value or personal strength as a means of affirming the person’s identity as part of a behaviour change strategy	<ul style="list-style-type: none"> <li>• Encourage women to focus on values of taking care of their health and achieving improvements in their daily wellbeing in order to refocus on the benefits of seeking support for issues that may be seen as embarrassing.</li> <li>• Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>• Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	<b>Behavioural regulation</b>	Norms	Self-image	Behavioural cueing

## Behavioural regulation

The behavioural, cognitive and/or emotional skills required for managing or changing behaviour

### Behavioural influences

**B** Barrier

<ul style="list-style-type: none"> <li>• Depression as a barrier to communicate with healthcare professionals</li> </ul>	<b>B</b>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>• Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these if they would otherwise be interested in the method (e.g. smartphone alarms for forgetting pills). In non-interactive settings such as websites, consider listing common issues/barriers reported by women, and potential ways of working around these.</li> </ul>
<b>Self-monitoring of behaviour</b>	Establish a method for the person to monitor and record their behaviour(s) as part of a behaviour change strategy	<ul style="list-style-type: none"> <li>• Encourage women to keep a record of any slip-ups (e.g. not using a condom, forgetting to take a pill).</li> </ul>
<b>Information about antecedents</b>	Provide information about antecedents (e.g. social and environmental situations and events, emotions, cognitions) that reliably predict performance of the behaviour	<ul style="list-style-type: none"> <li>• Advise women to keep a record of the situations or events that occur prior to forgetting to use a contraceptive method, such as the pill or condoms.</li> </ul>
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>• For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>• Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise on strategies such as setting alarms/putting visible prompts in home to remind to take contraceptive pills, or vitamin supplements.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
Needs	Values	General attitudes/beliefs	Memory, attention, decision process	Subjective norms	Beliefs about capabilities	Optimism	Intention	<b>Behavioural regulation</b>	Norms	Self-image	Behavioural cueing

## Behavioural regulation

The behavioural, cognitive and/or emotional skills required for managing or changing behaviour

### Behavioural influences

**B** Barrier

<ul style="list-style-type: none"> <li>Depression as a barrier to communicate with healthcare professionals</li> </ul>	<b>B</b>
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Action planning</b>	Prompt detailed planning of performance of the behaviour (must include the what, when and for how long). Context may be environmental (physical or social) or internal (physical, emotional or cognitive)	<ul style="list-style-type: none"> <li>Support women to make specific plans to achieve their goals, that include the what, when and how long for (e.g. a plan to carry condoms when going out socially at weekends, or to take folic acid for at least three months before trying for a second child). Can be used in conjunction with problem solving.</li> </ul>
<b>Discrepancy between current behaviour and goal</b>	Draw attention to discrepancies between a person's current behaviour (in terms of the form, frequency, duration, or intensity of that behaviour) and the person's previously set outcome goals, behavioural goals or action plans (goes beyond self-monitoring of behaviour)	<ul style="list-style-type: none"> <li>Invite women to review their levels of contraceptive pill taking behaviour and ask them to reflect on whether they are taking it reliably enough to prevent their desired outcome to not become pregnant</li> </ul>
<b>Behavioural contract</b>	Create a written specification of the behaviour to be performed, agreed on by the person, and witnessed by another	<ul style="list-style-type: none"> <li>Encourage women to make a pledge to take care of their sexual health and to seek support for reproductive symptoms and continue going back until they receive the support they need (e.g. in an online community of peers)</li> </ul>
<b>Self-monitoring outcomes of behaviour</b>	Establish a method for the person to monitor and record the outcome(s) of their behaviour as part of a behaviour change strategy	<ul style="list-style-type: none"> <li>Ask the person to keep a diary of their premenstrual dysphoric disorder symptoms for 2 to 3 menstrual cycles and record emotional and physical signs.</li> </ul>
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
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## Norms

The normal behaviours and attitudes of a social group (e.g. what other people are doing, or what other people approve of)

### Behavioural influences

**B** Barrier

<ul style="list-style-type: none"> <li>Discussion of pregnancy prior to conception perceived as not socially acceptable</li> </ul>	<b>B</b>
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Recommended BCTs		
BCT	Definition	Examples
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy</li> </ul>



Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
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## Self-image

How a person thinks and feels about themselves, (including physical and psychological characteristics, qualities and skills)

### Behavioural influences

**F** Facilitator

- Feeling of responsibility for baby's health, particularly for women living with chronic diseases such as epilepsy and diabetes

**F**

### Recommended BCTs

BCT	Definition	Examples
<b>Identification of self as role model</b>	Inform that one's own behaviour may be an example to others	<ul style="list-style-type: none"> <li>• Insert a message of "help yourself, help others" into campaigns for women's reproductive and sexual health, emphasising that as women learn more about their bodies and which choices work for them, they can help to spread information and support others (sisters, friends, etc.) who may need help.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>• Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>• Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
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## Behavioural cueing

Situations in which behaviour is triggered automatically, e.g. by cues in the person's environment, other behaviours the person has performed, or ideas

## Behavioural influences

**F** Facilitator

- Discussion of pregnancy prior to conception perceived as not socially acceptable

**F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Action planning</b>	Prompt detailed planning of performance of the behaviour (must include the what, when and for how long). Context may be environmental (physical or social) or internal (physical, emotional or cognitive)	<ul style="list-style-type: none"> <li>• Support women to make specific plans to achieve their goals, that include the what, when and how long for (e.g. a plan to carry condoms when going out socially at weekends, or to take folic acid for at least three months before trying for a second child). Can be used in conjunction with problem solving.</li> </ul>
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>• Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day</li> <li>• Create visible campaign materials that encourage women to seek support from their doctor or a local service (e.g. adverts on social media to prompt women to explore help-seeking options, or in doctors' surgery waiting rooms to encourage women to bring up these issues during appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>• Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Restructuring the physical environment</b>	Change, or advise to change the physical environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>• Ensure services are accessible and available to women (e.g. consider opening times and locations and how easy it is to sign up to the service or access their offer, ensure that resources are available in different languages).</li> </ul>
<b>Avoidance/reducing exposure to cues for the behaviour</b>	Advise on how to avoid exposure to specific social and contextual/physical cues for the behaviour, including changing daily or weekly routines	<ul style="list-style-type: none"> <li>• If a woman has a goal to reduce unprotected sex/need for emergency contraception, work with her to identify situations that may lead to these incidents and find ways that these situations can be avoided.</li> </ul>
<b>Adding objects to the environment</b>	Add objects to the environment in order to facilitate performance of the behaviour <i>Note: Provision of information (e.g. written, verbal, visual) in a booklet or leaflet is insufficient.</i>	<ul style="list-style-type: none"> <li>• Ensure availability of a range of contraceptive methods at different services and locations where possible/appropriate (e.g. surgeries, clinics, pharmacies, schools, etc.)</li> <li>• Provide online services (e.g. webinars, moderated forums) where women can receive information from trusted healthcare professionals and ask questions anonymously.</li> <li>• Ensure availability of female healthcare professionals for booking appointments to discuss sexual and reproductive health issues.</li> <li>• Ensure availability of information resources that use accessible language (e.g. plain language resources to increase accessibility for different levels of literacy; resources translated into different languages for women who may not speak English fluently).</li> </ul>

Environmental context and resources	Knowledge	Social influences	Emotion	Beliefs about consequences	Perceived susceptibility/vulnerability	Reinforcement	Goals	Attitude towards the behaviour	Motivation		
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## Behavioural cueing

Situations in which behaviour is triggered automatically, e.g. by cues in the person's environment, other behaviours the person has performed, or ideas

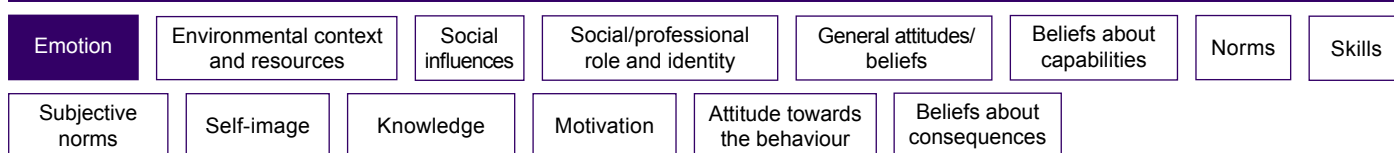
### Behavioural influences

**F** Facilitator

- Discussion of pregnancy prior to conception perceived as not socially acceptable

**F**

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Associative learning</b>	Present a neutral stimulus jointly with a stimulus that already elicits the behaviour repeatedly until the neutral stimulus elicits that behaviour	<ul style="list-style-type: none"> <li>• Encourage women to take their contraceptive pill just before brushing their teeth, so that the act of brushing teeth becomes a cue to take medication.</li> </ul>
<b>Behavioural practice/rehearsal</b>	Prompt practice or rehearsal of the performance of the behaviour one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill	<ul style="list-style-type: none"> <li>• Encourage women to practice having conversations with potential partners about the use of condoms with their friends so that they are better able to negotiate this with new sexual partners</li> <li>• Encourage women to start having conversations about their sexual and reproductive health with trusted others such as friends so that they can get used to discussing potentially embarrassing topics with healthcare professionals.</li> </ul>
<b>Behaviour substitution</b>	Prompt substitution of the unwanted behaviour with a wanted or neutral behaviour	<ul style="list-style-type: none"> <li>• Suggest that women access recommended sources of information (such as speaking to her healthcare practitioner or visiting authorised online resources) rather than going to resources that may present misinformation.</li> </ul>
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>



## Emotion

An individual's feelings towards a behaviour/potential outcome

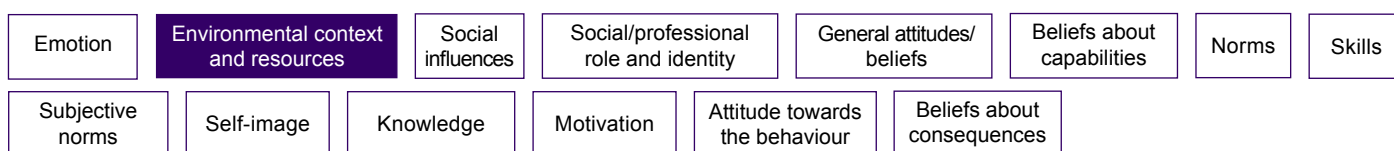
### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Feeling comfortable approaching source of information (e.g. friends, family, internet)</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Cliquishness, hostile behaviour and unhelpful or judgemental replies in online settings (e.g. forums)</li> <li>Reading about negative experiences in online settings</li> <li>Sense of alienation, feelings of jealousy and social comparisons when others fall pregnant or reading about other people's pregnancies in online support settings (e.g. forums)</li> <li>Embarrassment of discussing reproductive symptoms with family, healthcare professionals and in workplace settings</li> <li>Fear of stigmatisation of premenstrual dysphoric disorder in the workplace</li> <li>Perception of GP as too old, or too young to understand symptoms, or not sympathetic, and perception that friends would give unsympathetic responses</li> </ul> <p style="text-align: right;"><b>B</b></p>
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Recommended BCTs		
BCT	Definition	Examples
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>

Other BCTs to consider		
BCT	Definition	Examples
<b>Anticipated regret</b>	Induce or raise awareness of expectations of future regret about performance of the unwanted behaviour	<ul style="list-style-type: none"> <li>Highlight the potential for future feelings of regret if women do not seek support for reproductive symptoms.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



## Environmental context and resources

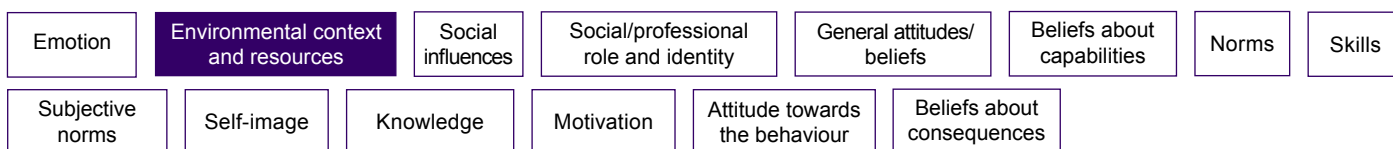
Factors in one's environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc)

### Behavioural influences

**F** Facilitator **B** Barrier

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Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples
<b>Social support (practical)</b>	Advise on, arrange, or provide practical help (e.g. from friends, relatives, colleagues, 'buddies' or staff) for performance of the behaviour	<ul style="list-style-type: none"> <li>• Ensure female support workers can assist women with learning differences to attend sexual health clinic appointments and facilitate their involvement in decision-making.</li> <li>• Suggest that women bring somebody along (e.g. a friend, partner or relative) to appointments that they might feel nervous about attending.</li> </ul>
<b>Prompts/cues</b>	Introduce or define environmental or social stimulus with the purpose of prompting or cueing the behaviour. The prompt or cue would normally occur at the time or place of performance	<ul style="list-style-type: none"> <li>• Provide women with stickers to place on the bathroom mirror to remind them to take the contraceptive pill or folic acid every day.</li> <li>• Create visible campaign materials that encourage women to seek support from their doctor/local service (e.g. adverts on social media to prompt women to explore help-seeking options, in doctors' surgery waiting rooms to encourage women to bring up these issues at appointments). Consider placing these materials in clinics that focus on specific conditions e.g. Type 2 diabetes, to set a precedent for discussing contraception or pre-pregnancy care as part of routine care.</li> </ul>
<b>Remove aversive stimulus</b>	Advise or arrange for the removal of an aversive stimulus to facilitate behaviour change (includes 'Escape learning')	<ul style="list-style-type: none"> <li>• Aim to reduce negative pressure from male partners by targeting interventions towards men that increase acceptance of contraceptive methods such as condoms.</li> <li>• Ensure female healthcare professionals are available if women prefer not to have an appointment with male practitioners.</li> <li>• Remove the perceived financial cost of some methods (e.g. condoms) by signposting women to services where they can be obtained for free.</li> <li>• Facilitate interactions between healthcare professionals and communities where women can remain anonymous if they wish to ask questions that they might find embarrassing (e.g. online forums or livestream drop-in Q&amp;A sessions).</li> </ul>



## Environmental context and resources

Factors in one’s environment that discourage or encourage behaviour (availability of resources, financial issues, time pressures, etc)

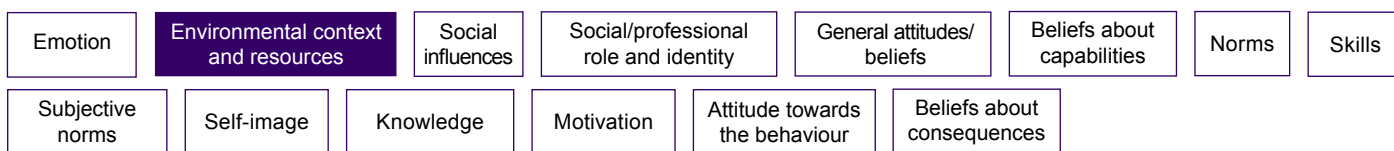
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Recommended BCTs (1/2)	Recommended BCTs (2/2)	Other BCTs to consider												
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## Environmental context and resources

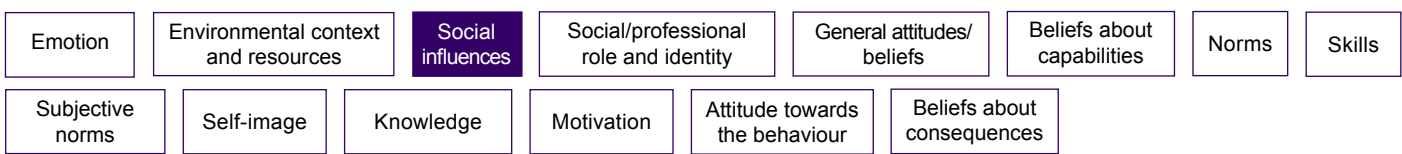
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### Behavioural influences

**F** Facilitator **B** Barrier

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Recommended BCTs (1/2)		Recommended BCTs (2/2)	Other BCTs to consider
BCT	Definition	Examples	
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>• Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these (e.g. smartphone alarms for forgetting pills). In non-interactive settings, consider listing common issues and ways of working around these.</li> </ul>	
<b>Conserving mental resources</b>	Advise on ways of minimising demands on mental resources to facilitate behaviour change	<ul style="list-style-type: none"> <li>• Advise to carry food calorie content information to reduce the burden on memory in making food choices.</li> </ul>	



## Social influences

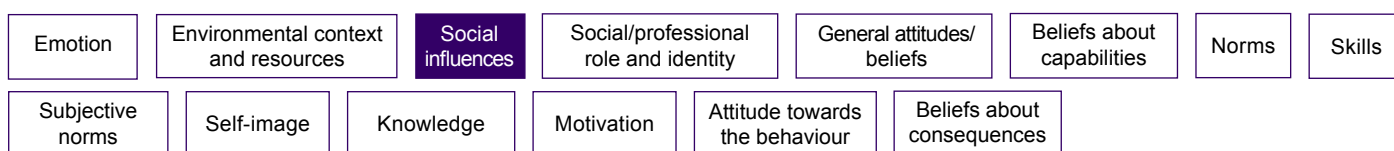
Social relationships and/or interactions that can change one’s behaviour, thoughts or feelings

### Behavioural influences

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BCT	Definition	Examples
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<b>Social comparison</b>	Draw attention to others’ performance to allow comparison with the person’s own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people’s behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others’ approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn’t feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>
<b>Social reward</b>	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Ensure that healthcare professionals use positive and encouraging language when women are nervous about discussing their needs (e.g. “I’m glad you have talked to me about this today...”).</li> </ul>



## Social influences

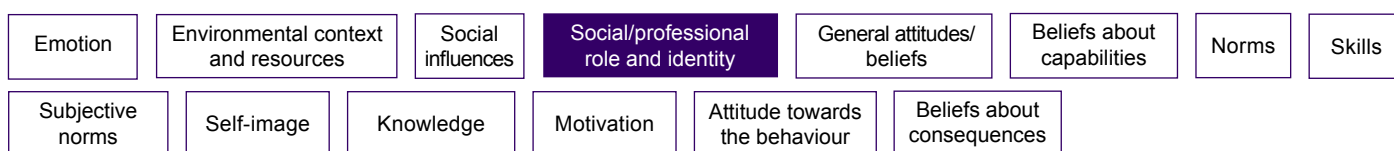
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Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Restructuring the social environment</b>	Change, or advise to change the social environment in order to facilitate performance of the wanted behaviour or create barriers to the unwanted behaviour (other than prompts/cues, rewards and punishments)	<ul style="list-style-type: none"> <li>• Ensure that workplaces receive training to raise awareness of the requirements of women undergoing menopause and premenstrual dysphoric disorder, and to remove the taboo associated with reproductive symptoms.</li> <li>• Encourage workplaces to appoint health champions who can support employees with conversations with management that they might find embarrassing.</li> <li>• Provide training for healthcare professionals to sensitively handle conversations with women around their sexual and reproductive health that focuses on empowering women to make choices that work for them, for example:                         <ul style="list-style-type: none"> <li>• Ensure that healthcare professionals are aware of the positive and negative influences that they can have on women's healthcare experiences (e.g. see the specific barriers and facilitators reported in the tables above).</li> <li>• Upskill the workforce in delivering behaviour change (e.g. through using motivational interviewing techniques that help to identify the woman's own goals, priorities and self-generated solutions as a path to empowered behaviour change. Professionals can also be trained to deliver some of the techniques described here in their appointments e.g. goal setting and problem solving).</li> <li>• Ensure that women's preferences are prioritised in guidance for healthcare professionals (e.g. preferred contraception is held over and above more "cost-effective" methods) and that professionals will not be penalised for delivering on women's preferences (e.g. by missing out on incentive schemes for prescribing/fitting certain methods of contraception).</li> <li>• Support healthcare professionals to deliver up-to-date information about women's options, ensuring that information is appropriate for their health conditions and life circumstances, and sensitively balances risks (e.g. through training or the provision of information resources/ digital tools that can be taken away by women or used together in consultations).</li> </ul> </li> <li>• Develop media and education campaigns that break down taboos around women's reproductive and sexual health, encourage it as a topic for discussion regardless of a woman's life stage, and place equal responsibility on the genders for taking care of contraception.</li> <li>• Collaborate with services that support homeless women and those with drug-use issues to facilitate women's access to trusted sexual and reproductive health advisers (e.g. visiting healthcare professionals or trained champions within the services).</li> <li>• Ensure that workplace policies include supportive practical approaches for women experiencing menopausal symptoms.</li> <li>• Enable and encourage greater sharing of women's personal experiences of different contraceptive options/treatments for reproductive symptoms/outcomes from pre-conception care in a clinically moderated forum (e.g. such as the NHS SH:24 forum).</li> <li>• Work with religious and community leaders/representatives to develop information materials and campaigns that are culturally sensitive and acceptable to different communities of women; ensure that these materials help women to identify their available options and identify support resources. Consider targeting interventions at other members of communities in order to alleviate the pressures on women.</li> <li>• Create a media campaign that emphasise the positive and supportive role of healthcare services during pregnancy, showing that involvement can be supportive and reassuring rather than just reactive during an emergency.</li> </ul>



## Social/professional role and identity

A person's perception of the behaviours and qualities that are appropriate in a social or work role or setting

### Behavioural influences

**F**

Facilitator

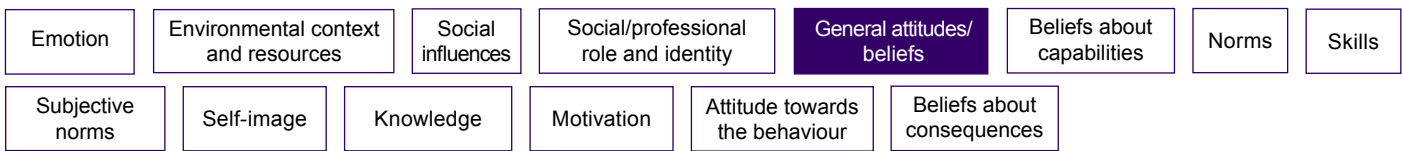
**B**

Barrier

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### Other BCTs to consider

BCT	Definition	Examples
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<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning.</li> </ul>
<b>Identity associated with changed behaviour</b>	Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behaviour'	<ul style="list-style-type: none"> <li>Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>



## General attitudes/beliefs

What a person thinks and feels about a person, object, group, issue or idea related to the behaviour; this can be negative or positive

### Behavioural influences

**F** Facilitator **B** Barrier

<ul style="list-style-type: none"> <li>Perceived experience and trustworthiness of information source</li> </ul> <p style="text-align: right;"><b>F</b></p>	<ul style="list-style-type: none"> <li>Inaccurate information received from online support groups</li> <li>Non-disclosure at work regarding menopausal symptoms due to age or gender of line manager</li> <li>Non-disclosure at work regarding menopausal symptoms due to relationship with line manager</li> <li>Perception that symptoms such as urogenital atrophy and vaginal atrophy is part of aging and does not need further support</li> <li>Taboos surrounding menstruation prevents women from seeking help and they employ coping strategies to minimise or hide menstrual symptoms</li> <li>Perception of GP as too old, or too young to understand symptoms, or not sympathetic, and perception that friends would give unsympathetic responses</li> <li>Cliquishness, hostile behaviour and unhelpful or judgmental replies in online settings (e.g. forums)</li> <li>Sense of alienation, feelings of jealousy and social comparisons when others fall pregnant or reading about other people’s pregnancies in online support settings (e.g. forums)</li> <li>Lack of privacy in messages in online support settings</li> <li>Embarrassment of discussing reproductive symptoms with family, healthcare professionals and in workplace settings</li> <li>Fear of stigmatisation of premenstrual dysphoric disorder in the workplace</li> </ul> <p style="text-align: right;"><b>B</b></p>
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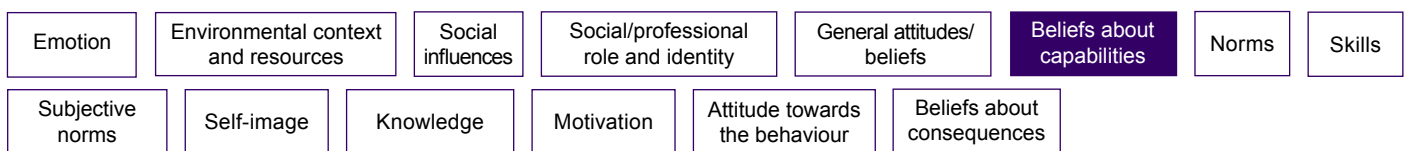
### Recommended BCTs

BCT	Definition	Examples
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>Provide women with information (e.g. case studies, interviews, videos) about a range of other women’s experiences to facilitate social learning.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman’s condition or circumstances.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>Where women assume that a symptom is normal or just part of ageing, provide information on what is considered “normal” and when something might need attention from healthcare professionals, pointing out that they wouldn’t ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>





## Beliefs about capabilities

Beliefs about one's ability to successfully carry out a behaviour

### Behavioural influences



Facilitator



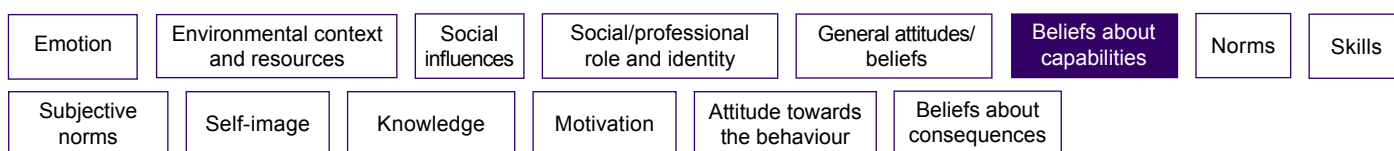
Barrier

- Difficulty explaining symptoms to others (social network, healthcare professionals and in the workplace) and belief that they (i.e. the individual) will not be able to explain things properly
- Difficulty reading or dislike of reading healthcare materials
- Religious beliefs hindering women from seeking formal counselling for infertility
- Perception that friends had limited relevant experience preventing women from speaking to friends

B

Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Problem solving</b>	Analyse, or prompt the person to analyse, factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators	<ul style="list-style-type: none"> <li>• Work with women to identify specific factors that prevent them from using a specific type of contraception and see if there are opportunities to work around these if they would otherwise be interested in the method (e.g. smartphone alarms for forgetting pills). In non-interactive settings such as websites, consider listing common issues/barriers reported by women, and potential ways of working around these.</li> </ul>
<b>Instruction on how to perform behaviour</b>	Advise or agree on how to perform the behaviour (includes 'Skills training')	<ul style="list-style-type: none"> <li>• Provide information on what pre-pregnancy care is, and all of the different ways that women can choose to prepare for conception, with specific instructions on how these goals can be achieved.</li> <li>• Provide women with accessible information on where and how they can access sexual and reproductive health services in the UK, including information on eligibility for NHS treatment and how to register with a GP.</li> </ul>
<b>Demonstration of the behaviour</b>	Provide an observable sample of the performance of the behaviour, directly in person or indirectly e.g. via film, pictures, for the person to aspire to or imitate	<ul style="list-style-type: none"> <li>• Provide a video (online, television adverts and campaigns) that demonstrates how to access healthcare services in the local area.</li> <li>• Provide a video that demonstrates where to find the best online resources to help planning with pregnancy, highlighting the different languages available.</li> <li>• Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences (e.g. having difficult or embarrassing conversations with healthcare professionals) to facilitate social learning.</li> </ul>
<b>Behavioural practice/rehearsal</b>	Prompt practice or rehearsal of the performance of the behaviour one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill	<ul style="list-style-type: none"> <li>• Encourage women to practice having conversations with potential partners about the use of condoms with their friends so that they are better able to negotiate this with new sexual partners.</li> <li>• Encourage women to start having conversations about their sexual and reproductive health with trusted others such as friends so that they can get used to discussing potentially embarrassing topics with healthcare professionals.</li> </ul>
<b>Graded tasks</b>	Set easy-to-perform tasks, making them increasingly difficult, but achievable, until behaviour is performed	<ul style="list-style-type: none"> <li>• Advise women to confide in a trusted friend to overcome embarrassment of talking about their symptoms before going to healthcare services.</li> </ul>
<b>Verbal persuasion about capability</b>	Tell the person that they can successfully perform the wanted behaviour, arguing against self-doubts and asserting that they can and will succeed	<ul style="list-style-type: none"> <li>• Encourage women to form belief that they are someone who can assert themselves to insist on use of barrier contraception.</li> <li>• Run a media campaign encouraging women with reproductive symptoms to book a GP appointment. Use role models who argue through their self-doubts and concerns of seeking help with a focus on the fact that "you can do it".</li> </ul>
<b>Focus on past success</b>	Advise to think about or list previous successes in performing the behaviour (or parts of it)	<ul style="list-style-type: none"> <li>• Ask the woman to focus on the previous occasions where she had successfully sought medical advice for reproductive symptoms or had a positive experience when seeking medical advice for another condition or symptom.</li> <li>• Ask the woman to remember the occasions on which she successfully navigated situations that could have led to risky behaviour (e.g. monitoring alcohol intake on a night out).</li> </ul>
<b>Self-talk</b>	Prompt positive self-talk (aloud or silently) before and during the behaviour	<ul style="list-style-type: none"> <li>• Suggest that women use positive self-talk to reassure themselves when going into an appointment that they are nervous about – perhaps they could write a letter to themselves ahead of time to take along and look back over in the waiting room.</li> </ul>





## Beliefs about capabilities

Beliefs about one's ability to successfully carry out a behaviour

### Behavioural influences



Facilitator

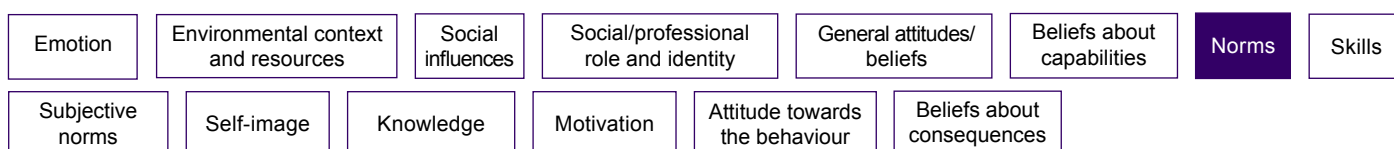


Barrier

- Difficulty explaining symptoms to others (social network, healthcare professionals and in the workplace) and belief that they (i.e. the individual) will not be able to explain things properly
- Difficulty reading or dislike of reading healthcare materials
- Religious beliefs hindering women from seeking formal counselling for infertility
- Perception that friends had limited relevant experience preventing women from speaking to friends



Recommended BCTs		Other BCTs to consider
BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>• Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Social reward</b>	Arrange verbal or non-verbal reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Ensure that healthcare professionals use positive and encouraging language when women are nervous about discussing their needs (e.g. "I'm glad you have talked to me about this today...").</li> </ul>
<b>Reduce negative emotions</b>	Advise on ways of reducing negative emotions to facilitate performance of the behaviour	<ul style="list-style-type: none"> <li>• For those women who are worried that engaging in pre-pregnancy care will amplify disappointment if conception does not occur, highlight the benefits of those pre-pregnancy care behaviours that can enhance the likelihood of conception (thus refocusing on the behaviours' potential for positive outcomes rather than the potential for amplifying disappointment).</li> <li>• Advise women of reasons they should not be embarrassed discussing their sexual and reproductive health with their healthcare provider in order to reduce anxiety.</li> </ul>



## Norms

The normal behaviours and attitudes of a social group (e.g. what other people are doing, or what other people approve of)

### Behavioural influences

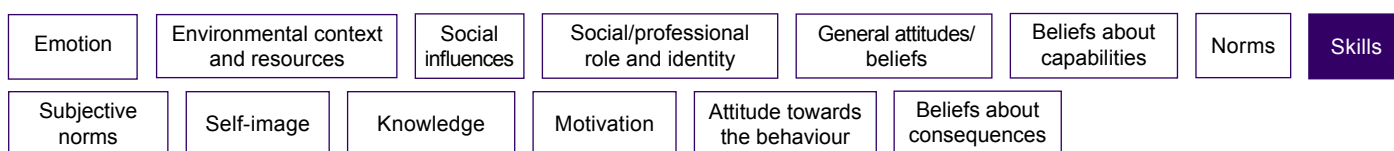
**B** Barrier

- Cliquishness, hostile behaviour and judgmental replies in online settings (e.g. forums)
- Taboos surrounding menstruation prevents women from seeking help and they employ coping strategies to minimise or hide menstrual symptoms

**B**

### Recommended BCTs

BCT	Definition	Examples
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>



## Skills

An ability to do a specific task that arises through practice

### Behavioural influences

**B** Barrier

- Difficulty reading or dislike of reading healthcare materials

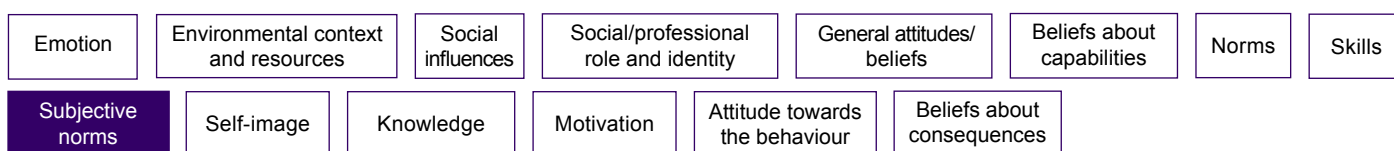
**B**

#### Recommended BCTs

BCT	Definition	Examples
<b>Instruction on how to perform behaviour</b>	Advise or agree on how to perform the behaviour (includes 'Skills training')	<ul style="list-style-type: none"> <li>• Provide information on what pre-pregnancy care is, and all of the different ways that women can choose to prepare for conception, with specific instructions on how these goals can be achieved.</li> <li>• Provide women with accessible information on where and how they can access sexual and reproductive health services in the UK, including information on eligibility for NHS treatment and how to register with a GP.</li> </ul>
<b>Behavioural practice/rehearsal</b>	Prompt practice or rehearsal of the performance of the behaviour one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill	<ul style="list-style-type: none"> <li>• Encourage women to practice having conversations with potential partners about the use of condoms with their friends so that they are better able to negotiate this with new sexual partners.</li> <li>• Encourage women to start having conversations about their sexual and reproductive health with trusted others such as friends so that they can get used to discussing potentially embarrassing topics with healthcare professionals.</li> </ul>
<b>Graded tasks</b>	Set easy-to-perform tasks, making them increasingly difficult, but achievable, until behaviour is performed	<ul style="list-style-type: none"> <li>• Advise women to confide in a trusted friend to overcome embarrassment of talking about their symptoms before going to healthcare services.</li> </ul>

#### Other BCTs to consider

BCT	Definition	Examples
<b>Goal setting (behaviour)</b>	Set or agree on a goal defined in terms of the behaviour to be achieved	<ul style="list-style-type: none"> <li>• Where women have made a choice about what they would like to do but are not sure how to achieve it, support them to set a specific, achievable goal with regards to a behaviour they will perform (e.g. to take 400µg of folic acid a day pre pregnancy and up to 12 weeks of pregnancy, or to make an appointment to discuss contraception with their GP by the end of the month).</li> </ul>
<b>Demonstration of behaviour</b>	Provide an observable sample of the performance of the behaviour, directly in person or indirectly e.g. via film, pictures, for the person to aspire to or imitate	<ul style="list-style-type: none"> <li>• Provide a video (online, television adverts and campaigns) that demonstrates how to access healthcare services in the local area.</li> <li>• Provide a video that demonstrates where to find the best online resources to help planning with pregnancy, highlighting the different languages available.</li> <li>• Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences (e.g. having difficult or embarrassing conversations with healthcare professionals) to facilitate social learning.</li> </ul>
<b>Generalisation of target behaviour</b>	Advise to perform the wanted behaviour, which is already performed in a particular situation, in another situation	<ul style="list-style-type: none"> <li>• Advise women to take the same approach for reproductive symptoms as they do when seeking help for non-reproductive issues, such as booking a GP appointment or talking to a partner.</li> </ul>
<b>Self-reward</b>	Prompt self-praise or self-reward if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Encourage women to reward self with material (e.g. new clothes) or other valued objects after attending an appointment to discuss their reproductive symptoms with their doctor.</li> </ul>



## Subjective norms

A person's perceptions of how other people behave, or what other people think is acceptable

### Behavioural influences

**B** Barrier

- Perception that reproductive symptoms are private
- Wariness of talking about premenstrual dysphoric disorder at work for not wanting to be seen as unprofessional
- Taboos surrounding menstruation prevents women from seeking help and they employ coping strategies to minimize or hide menstrual symptoms

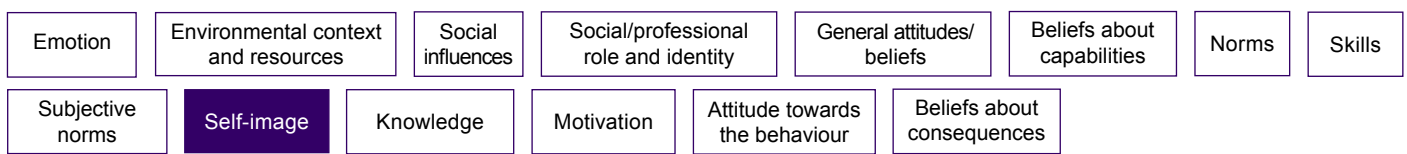
**B**

### Recommended BCTs

BTC	Definition	Examples
<b>Social comparison</b>	Draw attention to others' performance to allow comparison with the person's own performance	<ul style="list-style-type: none"> <li>• Highlight positive norms around other people's behaviour or approval – e.g. thousands of women speak to their doctors about their periods every month. Ensure that statements are true and suggest that the behaviour is both common and approved of. Aim to tailor statements to specific target groups where possible.</li> </ul>
<b>Information about others' approval</b>	Provide information about what other people think about the behaviour. The information clarifies whether others will like, approve or disapprove of what the person is doing or will do	<ul style="list-style-type: none"> <li>• Create information resources (e.g. campaigns, websites, posters in healthcare settings) emphasising that all healthcare professionals are used to discussing, approve of, and support women who want to discuss planning for pregnancy/conception/contraception/reproductive symptoms, and that women shouldn't feel embarrassed discussing these issues.</li> <li>• Work with religious and community leaders/representatives to explore how information resources and campaigns can share information that is appropriate and acceptable to different communities of women and ensure that such involvement from leaders/representatives is visible in order to communicate their endorsement.</li> <li>• Put posters up in chronic disease outpatient wards stating that healthcare professionals in that ward approve of and welcome discussions about planning for pregnancy.</li> </ul>

### Other BCTs to consider

BTC	Definition	Examples
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>



## Self-image

How a person thinks and feels about themselves, (including physical and psychological characteristics, qualities and skills)

### Behavioural influences

**B** Barrier

- Difficulty explaining symptoms to others (social network, healthcare professionals and in the workplace) and belief that they (i.e. the individual) will not be able to explain things properly
- Embarrassment of discussing reproductive symptoms with family, healthcare professionals and in workplace settings

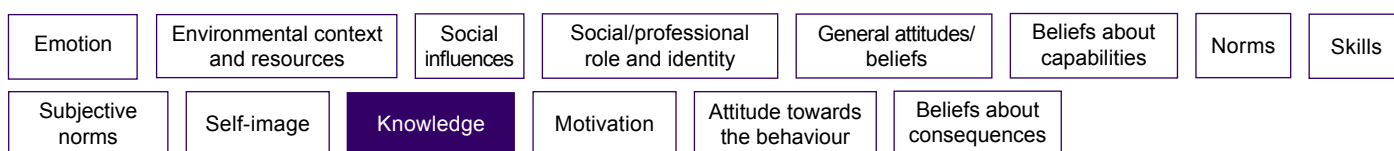
**B**

### Recommended BCTs

BCT	Definition	Examples
<b>Identification of self as role model</b>	Inform that one's own behaviour may be an example to others	<ul style="list-style-type: none"> <li>• Insert a message of "help yourself, help others" into campaigns for women's reproductive and sexual health, emphasising that as women learn more about their bodies and which choices work for them, they can help to spread information and support others (sisters, friends, etc.) who may need help.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Habit reversal</b>	Prompt rehearsal and repetition of an alternative behaviour to replace an unwanted habitual behaviour	<ul style="list-style-type: none"> <li>• Train healthcare professionals to ask what the female patients would like to achieve during the consultation before taking their medical history.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>• Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>• Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



## Knowledge

An understanding of something (e.g. awareness of its existence, awareness of its importance, awareness of how to do it, etc.)

### Behavioural influences

**B** Barrier

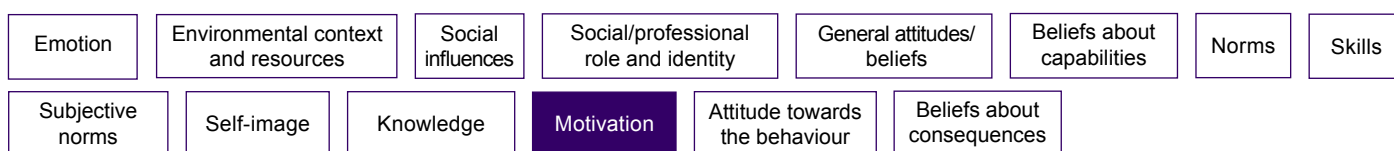
- Lack of information, misinformation about treatments or information being too complex for users

**B**

Recommended BCTs		
BCT	Definition	Examples
<b>Instruction on how to perform behaviour</b>	Advise or agree on how to perform the behaviour (includes 'Skills training')	<ul style="list-style-type: none"> <li>• Provide information on what pre-pregnancy care is, and all of the different ways that women can choose to prepare for conception, with specific instructions on how these goals can be achieved.</li> <li>• Provide women with accessible information on where and how they can access sexual and reproductive health services in the UK, including information on eligibility for NHS treatment and how to register with a GP.</li> </ul>
<b>Information about antecedents</b>	Provide information about antecedents (e.g. social and environmental situations and events, emotions, cognitions) that reliably predict performance of the behaviour	<ul style="list-style-type: none"> <li>• Advise women to keep a record of the situations or events that occur prior to forgetting to use a contraceptive method, such as the pill or condoms.</li> </ul>
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>

Other BCTs to consider		
BCT	Definition	Examples
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>• During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy.</li> </ul>





## Motivation

Internal processes and thoughts that drive people and give them purpose, making them want to do a specific behaviour (these can be conscious or unconscious)

### Behavioural influences

**F** Facilitator **B** Barrier

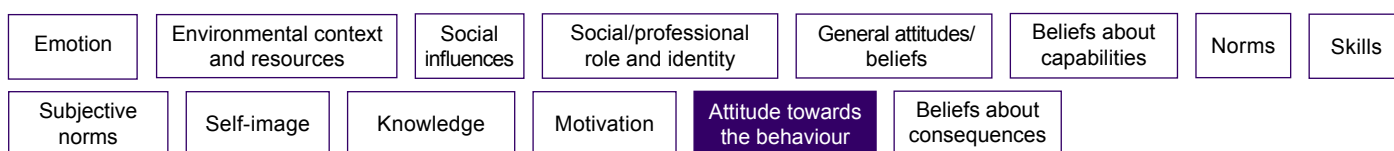
- Preference to deal with things themselves and not wanting to bother health professionals **F B**

### Recommended BCTs

BCT	Definition	Examples
<b>Goal setting (outcome)</b>	Set or agree on a goal defined in terms of a positive outcome of wanted behaviour	<ul style="list-style-type: none"> <li>• Encourage women to set a goal with regards to an outcome they want to achieve for their sexual and reproductive health (e.g. not needing to use emergency contraception for a year, for someone who has repeated contraception failures).</li> </ul>
<b>Feedback on behaviour</b>	Monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)	<ul style="list-style-type: none"> <li>• During appointments, ask women how they are getting on with the contraceptive pill and provide feedback about whether the woman is taking the pill reliably enough to offer protection against pregnancy.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>• In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Self-talk</b>	Prompt positive self-talk (aloud or silently) before and during the behaviour	<ul style="list-style-type: none"> <li>• Suggest that women use positive self-talk to reassure themselves when going into an appointment that they are nervous about – perhaps they could write a letter to themselves ahead of time to take along and look back over in the waiting room.</li> </ul>

### Other BCTs to consider

BCT	Definition	Examples
<b>Habit formation</b>	Prompt rehearsal and repetition of the behaviour in the same context repeatedly so that the context elicits the behaviour	<ul style="list-style-type: none"> <li>• Prompt patients to associate the behaviour with another routine e.g. to take their contraceptive pill before brushing their teeth every evening.</li> </ul>
<b>Self-incentive</b>	Plan to reward self in future if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Encourage women to plan to treat themselves (e.g. go for dinner) or other valued objects if and only if they discuss their reproductive symptoms at the doctors.</li> </ul>
<b>Identity associated with changed behaviour</b>	Advise the person to construct a new self-identity as someone who 'used to engage with the unwanted behaviour'	<ul style="list-style-type: none"> <li>• Ask the person to articulate their new identity as a person who plans their pregnancy.</li> <li>• Prompt the individual to imagine seeing themselves as someone who takes responsibility for their sexual health and owns which contraception she uses rather than someone who lets other people (i.e. sexual partners) control their body.</li> </ul>
<b>Mental rehearsal of successful performance</b>	Advise to practice imagining performing the behaviour successfully in relevant contexts	<ul style="list-style-type: none"> <li>• Advise women to imagine a successful GP appointment, or successful discussion with friends regarding heavy menstruation – consider rehearsing what they might say depending on different responses from the GP or friends.</li> </ul>



## Attitude towards the behaviour

A person's thoughts and feelings towards the behaviour, which can be positive or negative

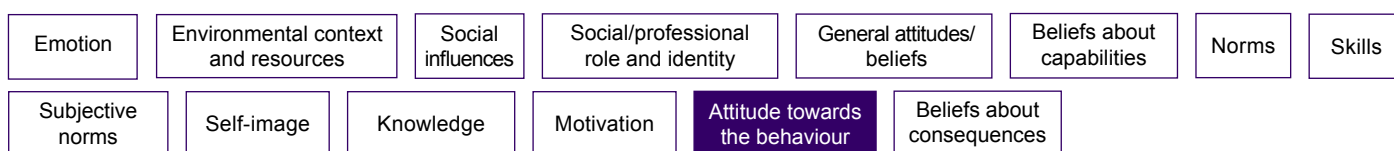
### Behavioural influences

**B** Barrier

- Non-disclosure at work due to perception that menopausal symptoms are private

**B**

Recommended BCTs		Other recommended BCTs
BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Information about social and environmental consequences</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Credible source</b>	Present verbal or visual communication from a credible source in favour of or against the behaviour	<ul style="list-style-type: none"> <li>• Ensure information comes from a well-respected and trusted source, such as the NHS website. Also consider working with messengers who will be seen to be relevant and trusted to the target group e.g. adolescent women, women from different ethnic groups.</li> <li>• Provide women with information (e.g. case studies, interviews, videos) about a range of other women's experiences to facilitate social learning.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>• In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Framing/reframing</b>	Suggest the deliberate adoption of a perspective or new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour	<ul style="list-style-type: none"> <li>• Where a contraceptive/supplement may be seen as unnatural and containing chemicals, point out that their contents would be found naturally in the body/food anyway.</li> <li>• Where women assume that a symptom is normal or just part of ageing, provide information on what is considered "normal" and when something might need attention from healthcare professionals, pointing out that they wouldn't ignore other potentially distressing/painful symptoms in other parts of their bodies in order to encourage help-seeking.</li> </ul>



## Attitude towards the behaviour

A person's thoughts and feelings towards the behaviour, which can be positive or negative

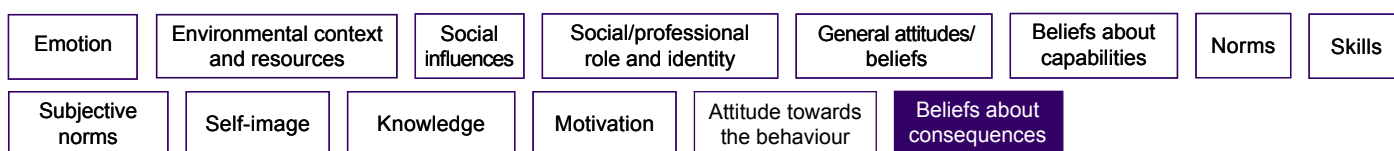
### Behavioural influences

**B** Barrier

- Non-disclosure at work due to perception that menopausal symptoms are private

**B**

Recommended BCTs		Other recommended BCTs
BCT	Definition	Examples
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>• Develop an online media campaign which highlights the positive and negative outcomes associated with preconception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>
<b>Incompatible beliefs</b>	Draw attention to discrepancies between current or past behaviour and self-image, in order to create discomfort	<ul style="list-style-type: none"> <li>• Create campaign materials that highlight the discrepancy between a woman's self-image of being in charge of her life and creating positive change when things are not to her satisfaction, and the current behaviour of not seeking help for reproductive symptoms.</li> </ul>



## Beliefs about consequences

Beliefs about the consequences of a behaviour (e.g. what will be gained or lost, and the probability of those consequences)

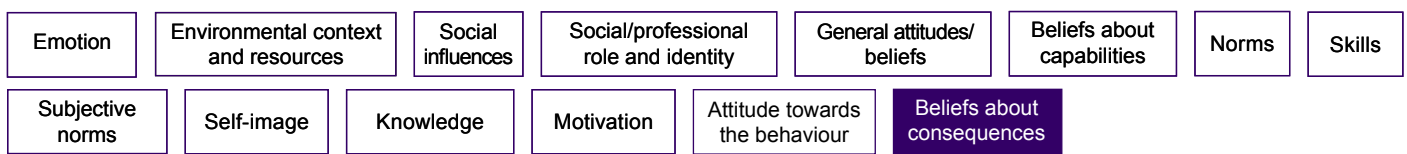
### Behavioural influences

**B** Barrier

- Fear of stigmatisation of premenstrual dysphoric disorder in the workplace
- Wariness of talking about premenstrual dysphoric disorder at work for not wanting to be seen as unprofessional
- Employing coping strategies for menstrual symptoms to avoid appearing unreliable

**B**

Recommended BCTs 1/2		Recommended BCTs 2/2
BCT	Definition	Examples
<b>Information about health consequences</b>	Provide information (e.g. written, verbal, visual) about health consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Provide information on the efficacy of different contraceptive methods for reducing STI risk.</li> <li>• Provide visual and written information that using hormonal contraception is a safe and effective way to prevent unintended pregnancy.</li> <li>• Provide information on why pre-pregnancy care is important, and how engaging in pre-pregnancy care can reduce risk factors.</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of methods relevant to a woman's condition.</li> <li>• Provide accurate and up-to-date information about the pros and cons of different contraception methods, taking into consideration some of the priorities women hold when making choices listed in the tables above (e.g. concerns about taking hormones, side-effects, impacts on menstrual cycle, mode of delivery, etc.). Consider conducting user testing to evaluate new materials – relying on information from clinical trials may result in information that conflicts with women's own experiences.</li> <li>• Provide information on the health benefits of seeking support for reproductive symptoms and managing symptoms.</li> </ul>
<b>Salience of consequences</b>	Use methods specifically designed to emphasise the consequences of performing the behaviour with the aim of making them more memorable (goes beyond informing about consequences)	<ul style="list-style-type: none"> <li>• Develop an online media campaign which highlights the positive and negative outcomes associated with pre-conception planning, particularly for women with chronic diseases. Use visual storytelling to highlight personal stories and experiences with and without planning a pregnancy.</li> </ul>
<b>Information about social and environmental consequence</b>	Provide information (e.g. written, verbal, visual) about social and environmental consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Reassure women that healthcare professionals are used to discussing reproductive and sexual health with their patients and that their questions will have been heard from others many times before.</li> </ul>
<b>Anticipated regret</b>	Induce or raise awareness of expectations of future regret about performance of the unwanted behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential for future feelings of regret if women do not seek support for reproductive symptoms.</li> </ul>



## Beliefs about consequences

Beliefs about the consequences of a behaviour (e.g. what will be gained or lost, and the probability of those consequences)

### Behavioural influences

**B** Barrier

- Fear of stigmatisation of premenstrual dysphoric disorder in the workplace
- Wariness of talking about premenstrual dysphoric disorder at work for not wanting to be seen as unprofessional
- Employing coping strategies for menstrual symptoms to avoid appearing unreliable

**B**

Recommended BCTs 1/2		Recommended BCTs 2/2
BCT	Definition	Examples
<b>Information about emotional consequences</b>	Provide information (e.g. written, verbal, visual) about emotional consequences of performing the behaviour	<ul style="list-style-type: none"> <li>• Highlight the potential relief and reassurance women will feel when they have spoken to their doctor about their needs and have started down the path to finding a solution that works for them.</li> </ul>
<b>Pros and cons</b>	Advise the person to identify and compare reasons for wanting (pros) and not wanting to (cons) change the behaviour	<ul style="list-style-type: none"> <li>• In an online setting, advise the person to list and compare the advantages and disadvantages of seeking support for their symptoms from healthcare professionals (can also provide some ideas for advantages and disadvantages, with workarounds for the disadvantages).</li> <li>• Provide information on the different types of contraception that are available for women with different health conditions and needs (e.g. type 2 diabetes, heart disease, high blood pressure) and provide balanced and sensitive information on the advantages and risks of different methods (e.g. hormonal versus non-hormonal) relevant to a woman's condition or circumstances.</li> </ul>
<b>Comparative imagining of future outcomes</b>	Prompt or advise the imagining and comparing of future outcomes of changed versus unchanged behaviour	<ul style="list-style-type: none"> <li>• Prompt the person to imagine and compare likely or possible outcomes following seeking healthcare professional advice for contraception versus what could happen if they do not seek support (e.g. having to use a method that does not suit them, or having an unintended pregnancy).</li> </ul>
<b>Material incentive (behaviour)</b>	Inform that money, vouchers or other valued objects will be delivered if and only if there has been effort and/or progress in performing the behaviour	<ul style="list-style-type: none"> <li>• Inform women that they can receive free contraception (including condoms) when they attend services.</li> </ul>