

# **The SextherapyLondon interactive website for sexual difficulties: rationale, design and content**

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## **Abstract**

Sexual difficulties are common, but access to specialist services is limited. Those concerned about their sexual functioning may not seek help, or they or their health care professional might find it difficult to raise the topic.

This paper details the theoretical content and structure of an interactive website designed to provide stand alone, tailored advice and self-help for sexual difficulties. SextherapyLondon (STL) is an Interactive Digital Intervention (IDI) providing evidence-based sex therapy including psychoeducation, cognitive-behavioural and systemic therapy techniques within a social constructionist framework. An online triage module identifies those who may need a clinical assessment before proceeding with sex therapy. STL contains online self-help programmes for getting or keeping erections, early ejaculation, sexual pain, difficulties with orgasm, and lack or loss of sexual desire. In this paper we describe the content of the website, including the theoretical rationale which underpins the website design and content.

SextherapyLondon replicates key aspects of sex therapy from a range of theoretical approaches in a tailored, digital format. IDIs can address some of the barriers to accessing sexual difficulties services and provide unique opportunities for identifying those with underlying organic conditions and reach those who might never receive help.

## Background

Worldwide, a significant proportion of people report sexual difficulties, and most people do not seek professional help (Mitchell et al., 2013; Nicolosi et al., 2004; Nazareth, 2003). Sexual difficulties can have a negative impact on emotional and sexual well-being, quality of life and interpersonal relationships and are associated with depression, relationship dissatisfaction and poor physical health (Mitchell et al., 2013). Sexual difficulties are amenable to treatment (Trudel et al., 2001; Stinson, 2009; Melnik & Soares, 2004; Melnik et al., 2008; McCabe, 2001), but there can be multiple barriers to accessing face-to-face services.

Barriers to accessing clinical services include discomfort and embarrassment associated with discussing sexual difficulties with a health care professional, and stigma, fear, or hopelessness (Hobbs, 2016). Barriers also include being unable to access services due to time constraints or geographical restrictions. Health care professionals may lack the time or confidence to address sexual difficulties (Abdolrasulnia et al., 2010; Harsh et al., 2008; Moreira et al., 2004; Shepherd et al., 2010), and specialist services are scarce, especially in the context of limited funding (Robertson, Wenzel, Thompson, & Charles, 2017; White, 2017).

Accessing care via the internet can overcome some of the barriers to accessing face-to-face services (Ritterband, 2009; Portnoy et al., 2008). Interactive digital interventions (IDIs) allow private, flexible, 24 hour access, and can be designed to meet individual needs, for example by tailoring of content, the provision of feedback, and user-defined paces of learning for example (Bailey et al., 2010). IDIs also allow the user to access information and support without having to meet a professional face-to-face if they wish.

There are risks associated with failure to access appropriate care, such as problems entrenching and worsening over time, and failure to identify a causal underlying health condition. Men may self-treat erectile difficulties by buying medication such as PDE5 inhibitors online without a comprehensive assessment or the option of trying a non-pharmacological approach, and medicines sold online are frequently counterfeit (Campbell et al., 2012).

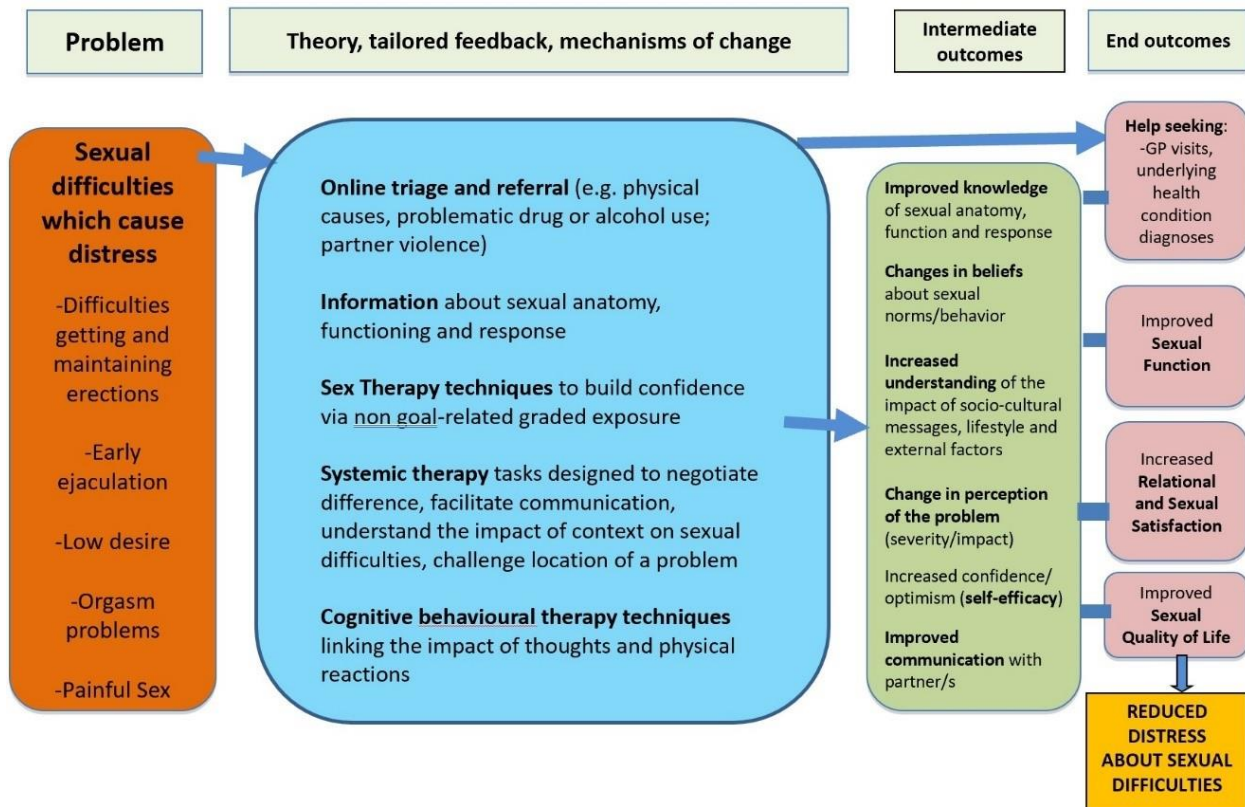
Over recent decades, there has been a rapid rise in internet use, accompanied by a dramatic increase in online help-seeking for health issues, and a proliferation of online sources of health-related information and support (Bailey et al., 2015). Digital assessment tools can collect sensitive patient information (such as alcohol or drug use) more accurately than a clinician (Muench, 2014), and IDIs are effective for wide range of health difficulties (Harris et al., 2001; Cuijpers, Straten & Andersson, 2007) including reducing alcohol intake (Kaner et al., 2017), smoking behaviour (Brown et al., 2012) depression and anxiety (Saddichha, Al-Desouki, Lamia, Linden, & Krausz, 2014), and have yielded positive outcomes in terms of symptom reduction, behaviour change and quality of life. A systematic review of IDIs for sexual difficulties found a small body of RCT evidence which showed a positive impact of IDIs on sexual function (Hobbs 2013).

SextherapyLondon is an interactive digital intervention that provides tailored advice and support for sexual difficulties to users 16 and over. The website was developed in response to several challenges: an increased demand for support with sexual difficulties within sexual health services, a gap in provision of psychoeducation about sex as a stand-alone 'lower intensity' intervention, a lack of sex therapy resources relevant for anyone regardless of gender of partner/s, and where access to face-to-face specialist sex therapy services is limited.

# Intervention Design, Content and Rationale

## Sextherapylondon Aims

The main aims of the STL website are to provide a means to disseminate to a wide audience normalising information to address a person’s perception of themselves as having a sexual difficulty; to provide information and/or guided techniques which may resolve sexual problems; to translate psychological theory into a format which was widely accessible and effective; to provide an online clinical tool to assess and signpost appropriately. The self-guided software program offers individuals or couples a structured and tailored program of therapy. This paper outlines how the design and content of STL maps on to these key objectives.



**Figure 1: Logic model demonstrating key aims and objectives of the Sextherapylondon programme**

STL features six different interactive programs for sexual difficulties; Confidence in getting and keeping erections; Controlling when you ejaculate (for men); Overcoming pain during vaginal sex; Overcoming pain during anal sex; Having orgasms (for women); and Improving sex drive. Sex Therapy London also includes the program ‘changing sexual behaviour’ (also referred to as ‘addressing sexual addiction’ for users who particularly identify with this terminology). The design and content of the Changing sexual behaviour program will not be discussed in this paper as it varies in intention, structure and content to the other sexual difficulty treatment programmes.

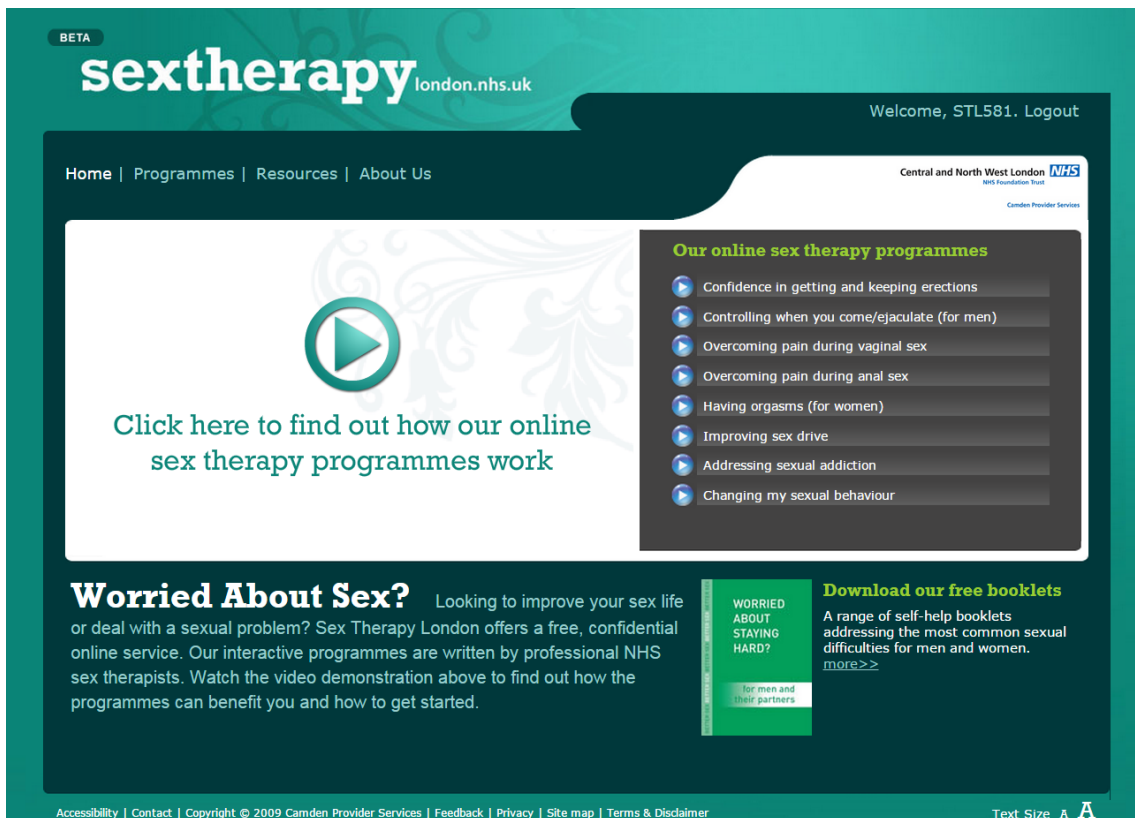


Figure 2: Sextherapylondon home page

## Pathways through the online programmes

To preserve anonymity, users are allocated a unique username and password when creating an account. Once logged in, users are prompted to choose a program which best describes their difficulty, and if there is more than one, the most pressing or the original difficulty. In the event that it is not clear to the user which to choose, STL provides guidance based on either expert opinion or national guidance (for example, if there are concerns about erectile difficulties and early ejaculation, the user should start with erectile difficulties in accordance with best practice guidelines (Richardson et al., 2006). The user must work through one programme at a time, and in linear sequence. This enables STL to tailor the intervention to the user and to quantify the impact of the problem at the beginning and at the end of the intervention. It also enables collection of data on routes through each programme, for example, an individual or a couple route.

## Tailoring and Personalisation

Tailoring can be effective for supporting health-related change, and dynamic tailoring using iterative assessment and feedback is an important intervention strategy (Krebs et al., 2010). STL provides tailored feedback by 1) referring to user names and terminology chosen by the user themselves, 2) selecting routes through the programme based on users' input and 3) eliciting user reflections about the issue which are saved and quoted in later sections of the programs to reinforce change drivers and personalise the process. For example, users might identify that anxiety is a key issue for them and be directed to some tailored content related to this. Similarly, reflections inputted by each member of a couple about what currently works in their sex life might be fed back to the other in their partners' own words.

The intervention is designed to avoid assumptions about a person's gender, sexuality or culture, whilst frequently encouraging the user to reflect on the impact of each of these social contexts and discourses on attitudes and assumptions about sex at various key stages. STL

deliberately uses terminology which does not assume the gender of the users' partner(s), to ensure that material is relevant for all sexual orientations.

STL adopts a broad structure of the step-wise PLISSET model (Annon,1974) to managing sexual difficulties with the progressively more intensive steps of Permission (P), Limited Information (LI), Specific Suggestion (SS), and Intensive Therapy (IT). This model proposes that accepting and normalising current sexual behaviour by permission giving or providing information is useful in its own right, since many sexual difficulties can be caused by an inaccurate perception of normality. 'Specific Suggestion' might include practical exercises such as sensate focus (an exercise based around gradual introduction of non goal focused mindful touch), and 'Intensive Therapy' might include conversations designed to address underlying maintaining factors such as difficulties communicating about sex.

Each program consists of 6 stages, which users work through in order, omitting the partner section if they wish. Some of the stages have parallel routes through them, with the pathway chosen dependent on the user's answers in earlier sections, but this choice can be overridden by the user if wanted. Table 1 describes the key features of each stage.

STAGE	TITLE	FEATURE	AIM
<b>Stage 1</b>	Online triage	Assessment, feedback and signposting, GP referral letter if appropriate	<ul style="list-style-type: none"> <li>Identification of people who might have a medical problem so that they may obtain the most appropriate treatment</li> <li>Provide access links to other services</li> <li>Link in with GP for physical examination</li> <li>Give confidence in the intervention</li> <li>Clinical safety and best practice</li> <li>Provide psychoeducation via feedback</li> </ul>
<b>Stage 2</b>	Evaluation of the difficulty	Users rate the difficulty in terms of frequency, distress experienced and effect on relationships	<ul style="list-style-type: none"> <li>Encourage reflection</li> <li>Identify and distinguish between difficulty, distress and partner response</li> <li>Baseline measure for assessing change</li> </ul>
<b>Stage 3</b>	Psychoeducation	Information about sexual response, anatomy and functioning	<ul style="list-style-type: none"> <li>Change in perception of the difficulty</li> <li>Assimilation of new information</li> <li>Reassurance</li> <li>Normalising</li> </ul>
<b>Stage 4</b>	Individual stage	Sex Therapy techniques designed to be completed alone, with graded difficulty. Reflective exercises related to attitudes and beliefs about sex	<ul style="list-style-type: none"> <li>Build confidence</li> <li>Challenge assumptions</li> <li>Question negative thoughts</li> <li>Attending to impact of contexts</li> </ul>

			Being aware of impact of social discourses Problem solving Modelling and practising Reducing anxiety and negative associations
<b>Stage 5</b>	Couple stage (optional)	Practical Sex Therapy techniques designed to be completed with a partner, with graded difficulty. Talking exercises related to beliefs, assumptions and meaning.	Redefining the difficulty Facilitating communication Overcoming couple challenges Negotiating difference Re-establishing sexual intimacy Reducing anxiety
<b>Stage 6</b>	Evaluation and feedback	Users re-rate the difficulty in terms of frequency, distress experienced and effect on relationships Site provides feedback on change and next steps	Comparing ratings pre and post Identifying discrepancy between user rated and programme rated change Tips to maintain progress Congratulating change Suggesting explanations if no change Signpost back to GP/other services

**Table 1. Key features and aims of each programme stage**

The key components and theoretical underpinnings of each stage are described in more detail below.

### **Stage 1- Online triage**

In Stage 1, the user completes a series of questions about the problem, their psychological and physical health, medications, lifestyle factors, relationship factors and prescribed and recreational drug use (see Figure 3). This stage is designed to provide an opportunity to identify further assessment that may be needed, screen for contraindications for sex therapy and direct people to appropriate services and support if necessary. Face-to-face sex therapy is not routinely offered in the context of significant mood disorders, recreational drug use, domestic abuse or significant psychological distress given the effect that these may have on sexual function (Regev & Schmidt, 2009) or due to concerns about efficacy or ethics (Hof, 2013). Therefore, those who take any prescribed drugs, recreational drugs or who have concerns about their mood or health are directed to seek help or advice from a medical practitioner before engaging with an online program. All users reporting pain, erectile difficulties, or reporting genital symptoms which may have an organic cause are requested to self-refer to a clinician before starting the program to exclude causes such as cardiovascular disease.

Users can print a version of the online assessment as a clinician referral letter, including a description of their answers and links to national and international best practice guidelines. The intention of this is twofold: Firstly to provide written information and suggestions for clinicians about recommended next steps, secondly to reduce embarrassment for the patient of talking with a

health care professional. Brief tailored online advice is given at the end of the initial consultation concerning factors which may be influencing sexual function, incorporating some level of psychoeducation from the outset.

Stage 1 Stage 2 Stage 3 Stage 4 Stage 5 Stage 6

**Confidence in getting and keeping erections**

About the Problem

How long have you had a problem with your erections? For a few years \*

Does the problem happen alone or with a partner? Just with a partner \*

Do you get morning erections? Yes \*

**What have you tried already to resolve your sexual problem?**  
(Pick more than one if you like)

Talking to my partner

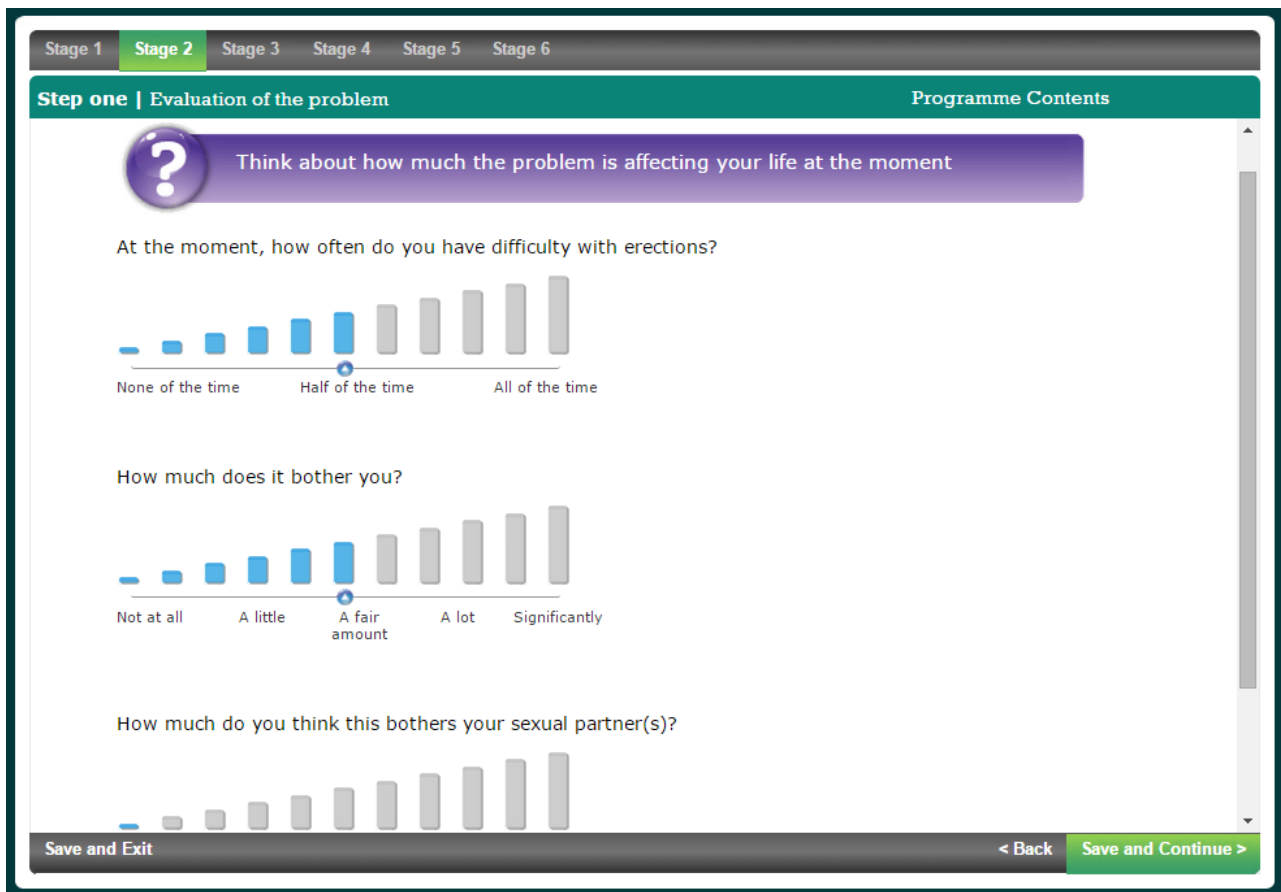
Talking to my GP

Back Next

Figure 3: Example of triage questions

## Stage 2 Evaluating the problem

In stage 2, the program takes the user through a series of questions using visual analogue scales to evaluate the impact of the sexual difficulty (see Figure 4). A distinction was made between the frequency of the difficulty, distress about it, and the impact it has on a partner, since a positive change might be in any element of these. For example, an improvement in 'low desire' might reflect a reduction in the distress experienced or a reduction in the impact of this on the relationship rather than a change in the frequency of spontaneous desire.



**Figure 4: Evaluation of the problem**

### **Stages 3-5 – Individual and couple intervention**

The content for STL is based on research evidence, best practice guidelines (Hackett et al., 2007; Richardson, Goldmeier, Green, Lamba, & Harris, 2006), and clinical practice for face-to-face sex therapy. Sex therapy (Masters & Johnson, 1966a, 1966b), Systemic therapy (Cronen, 1994; Hertlein, Weeks, & Gambescia, 2009), and Cognitive Behavioural therapy (Beck, 1995) are the theoretical approaches underpinning the intervention. A description of these theories in relation to sex therapy and examples are detailed below.

Psychoeducation is an important component of many different therapies and was named by Masters and Johnson as a key aspect of their short-term approach to sexual difficulties (1966a, 1966b). It includes providing information about genital anatomy, sexual response, addressing unrealistic expectations of the self and the sexual encounter, and addressing myths about sexuality (e.g. the inaccurate expectation that most women should orgasm from penetrative sex, the average length of time to ejaculation etc.). Psychoeducation is woven throughout all of the stages of STL but features heavily in Stage 3 with information, diagrams and detailed descriptions of anatomy and sexual response.

Traditional sex therapy techniques, based on the work of Masters and Johnson (1966a, 1966b), are underpinned by behavioural theory. For example, guided masturbation and sensate focus exercises are used as a means of reducing anxiety associated with expectations of arousal or goal orientated sex, by explicitly asking couples to engage in reciprocal touching but by avoiding intentional arousal and purposely avoiding the pursuit of orgasm. STL replicates clinical techniques of grading the difficulty of exercises as users progress in confidence. For example, couples might be introduced to an initial version of sensate focus, and once they provide feedback that they are comfortable, can choose to move on to a more advanced version.



Cognitive Behaviour Therapy as applied to sexual difficulties is focused on the impact of negative schemas related to perceptions of sexual self, negative automatic thoughts, presence of cognitive distraction, and the impact of these on autonomic arousal and consequently on sexual functioning (for example, Barlow, 1986, Nobre (2010), Nobre & Pinto-Gouveia, (2009). Psychoeducation and behavioural exercises are a key aspect of this approach and are used to challenge unhelpful beliefs or negative thoughts about sex. For example, the belief that ‘I’m no good at sex’ may have been created by experience of repeated erectile difficulties in perceived high-pressure situations, and might reduce arousal, increase attentional focus to non-sexual stimuli and lead a person to avoid sexual experiences, thereby having no opportunity to gain positive dis-confirmatory experiences. Testing the predictive value of negative automatic thoughts as part of a sensate focus or masturbatory experiment without pressure or expectation is a key part of Stages 4 (individual) and Stage 5 (with partner). There is evidence that couple work is more effective than individual work if someone is in an ongoing sexual relationship (Stephenson & Kerth, 2017), and so the programme offers modules to be worked through with partners, alongside modules to be completed alone.

Systemic Therapy sits within a social constructionist paradigm and therefore assumes that many sexual difficulties are caused by unhelpful representations in dominant cultural and social discourses, maintained by language and tacit assumptions. Social constructionist approaches explore the influence of relationships in socio-cultural context, rather than seeing sexual difficulties as located within individuals (Anderson, 1992; Anderson & Goolishian, 1988). This approach is particularly useful to address the interpersonal and socio-cultural factors that influence and maintain sexual difficulties (Hertlein et al., 2009), for example, gendered double standards around number of sexual partners; expectations of entitlement to pleasure during sex; ideas that ‘relationships need sex to survive’.

The principles of systematic therapy are present in all stages of the intervention but features heavily in Stage 5 (Couple stage) for those who wish to work through exercises with a partner. One of the aims of this stage is to bring what users have learned or practised alone into their relational context, and to provide guidance on how to make the exercises more complex as they build confidence. This stage also encourages couples to complete talking tasks, engaging in ‘problem free talk’ (de Shazer, 1982), co-creating shared goals, discussing the effect that a change in their sex life would have on each of them, and encourage the sharing and validating of multiple perspectives.

Examples of the types of exercises in each program related to these different theories can be seen in Table 2.

Program	Topic Heading	Aim of the exercise	Theory
Erectile difficulties	Negative thoughts and sex	Linking negative thoughts to sexual arousal processes	CBT
	Your brain and better sex	Impact of negative thoughts on sympathetic arousal and erections	CBT
	Losing and gaining erections	Systematic desensitisation and cognitive restructuring	CBT
Early ejaculation	How does ejaculation happen	Psychoeducation	Sex Therapy
	How soon is too soon?	Deconstructing time to ejaculation as a marker of ‘good sex’	Systemic Therapy
	Stop-Start technique	Behavioural skills – gaining control	Sex Therapy
Vaginal/anal pain	Negative thoughts and sex	Linking negative thoughts to expectations of pain and pelvic floor tension	CBT

Program	Topic Heading	Aim of the exercise	Theory
	My ladder of success	Developing a personal graded exposure plan	CBT
	Kegel exercises	More conscious awareness of muscle tension	Sex Therapy
Difficulties with orgasms	What does not having orgasms mean to your relationship?	Deconstructing dominant discourses and mapping effects	Systemic Therapy
	Understanding your attitudes towards sex	Reflecting on how contexts such as gender, age, ethnicity affect sexual expression	Systemic Therapy
	Learning to give your body pleasure	Experimenting with sexual touch, self-sensate/guided masturbation	Sex Therapy
Lack or loss of desire	What is sexual desire?	Deconstructing dominant social discourses	Systemic Therapy
	Who says your sex drive is too low?	Re-evaluating the meaning of differences in desire in the couple	Systemic Therapy
	Getting re-acquainted	Sensate focus/improving communication	Sex Therapy

**Table 2– Examples of exercises related to theory in each sexual difficulty programme**

### **Stage 6- Evaluation and feedback**

In the final stage of all the programs the difficulty is re-evaluated: users are asked the same questions they were asked at the beginning of the program regarding how the sexual difficulty interferes with their life and relationships, and are given feedback on their progress. They are also provided with a personal summary of what they have covered and what might happen next (see Figure 5). This section is designed to encourage the person to reflect on the work they have done and help them determine what might be a good next step to improve things further. This might include encouraging them to repeat aspects of the programme that they skipped, consider how they can maintain improvement, and signposting to face-to-face services.

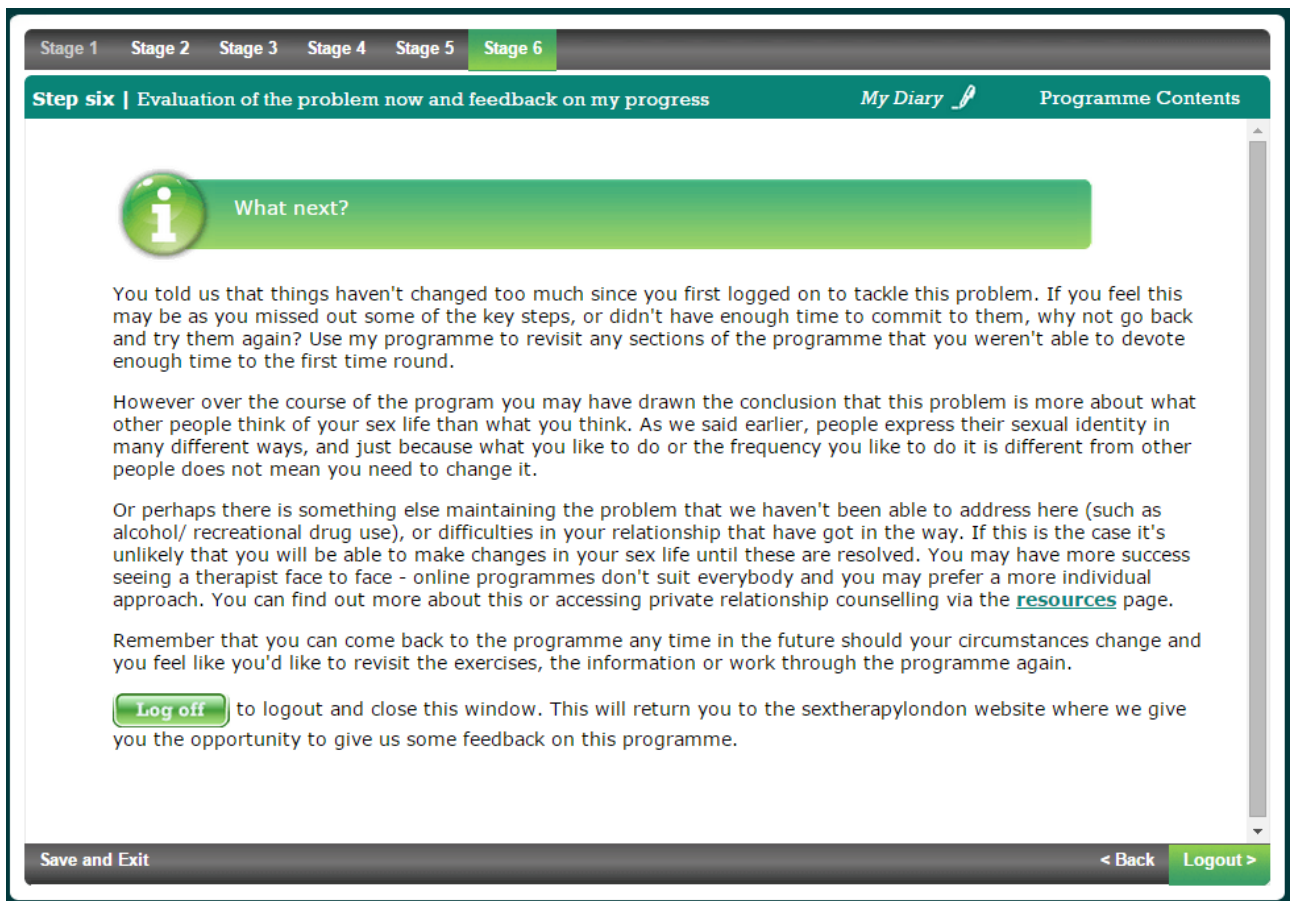


Figure 5: Personal summary at the end of the SextherapyLondon program

## Discussion

SexTherapyLondon provides assessment, signposting, reassurance, psychoeducation and sex therapy for a range of sexual difficulties in an interactive, highly convenient online format. The content allows users to work at their own pace, receive tailored feedback, and progress in incremental steps. The design of STL allows users to access help online without providing identifiable information, and at convenient times and places. The privacy allows people to address problems that might otherwise be perceived as embarrassing. STL provides tailored advice regardless of the gender of partner/s, and the online triage algorithm detects those who may need further assessment or other support, which is a unique feature of this intervention.

The STL website provides a mechanism to address some of the personal, professional and service delivery barriers to obtaining help for sexual difficulties. Sex Therapy London demonstrates that it is possible to deconstruct ideas of 'normal' sex or sexual response, provide accurate information about sex and sexual difficulties, and provide basic tailoring of sex therapy techniques or couple exercises in an online format using a range of theoretical approaches, in line with principles of the PLISSET model (Annon, 1974).

Interviews with men and women with sexual difficulties before and after using STL show that the programme met many of the users' wants and needs, providing a convenient, self-paced, private, alternative source of help (Hobbs, 2016). Participants said that they found STL relevant, accessible, and easy to use. STL helped people with a range of different sexual difficulties to understand and re-frame their difficulties, and to address emotional and behavioural dimensions of their problems. Interview participants reported increased sexual confidence, motivation, perceived ability to manage the difficulty or speak to a health professional, and better knowledge about how to find available help. Participants also reported increased hope and optimism, less

embarrassment and shame, enjoying sex more, feeling less isolated with their difficulties, feeling more relaxed during sex, and more satisfied with their sex lives.

Difficulties with erections can be an indicator for a variety of physical conditions (Gandaglia et al, 2014). IDIs offering an online symptom assessment can identify and refer on those with potential early warning signs of cardiovascular disease or diabetes for example. A triage tool can also detect issues which need to be addressed before sex therapy (for example problematic drug or alcohol use or domestic abuse), and signpost users to appropriate sources of help. Particularly since medicines for erectile difficulties are so readily available for sale online, assessment and signposting presents a valuable window of opportunity to identify and treat serious physical and mental health conditions.

IDIs for sexual difficulties could support the provision of face-to-face care by reserving clinician appointments for those with the most need. This could be implemented by using online self-help as the least intensive step in a stepped care approach to service provision (Bower & Gilbody, 2005). Those who need further care by a clinician might be expected to be those who require a more intensive approach, making more efficient use of face-to-face resources.

There are concerns that digital innovation may be used as a pretext to reduce face-to-face health services. For example, sexual health services in England have been heavily cut (White, 2017), with an expectation that a proportion of patient demand will be met through online sexually transmitted infection testing. However, the potential impacts on health, workload, inequalities or cost-effectiveness are not yet known (Estcourt 2017). Clinicians may welcome resources to supplement clinical care, but are cautious about the possibility of digital interventions replacing human input (Bailey et al., 2017). Long term funding for maintaining digital interventions (e.g. hosting, updating software and clinical content, and user support) must be in place to ensure that digital resources are sustainable.

There are limits to online sex therapy. For example, although the majority of users found STL helpful, there were some who felt that they needed advice and support from a clinician, and some who evaluated their difficulty as 'too severe' for an IDI and for whom the lack of change led to an overall erosion of hope (Hobbs, 2016).

The key messages and techniques of a psychosexual therapy intervention can be replicated within the content of an IDI, however, there are obvious differences between the capability of an online intervention and a human therapist that may influence user experiences and clinical outcomes. For example, IDIs are unable to respond to cues such as tone of voice, nuances, non-verbal communication, or couple conflict. Similarly, IDIs are unable to pick up on a lack of understanding, ambivalence, or a sudden change of circumstance or the introduction of new critical information which may change the course of therapy. The provision of human support for an initial assessment and/or to check in regularly with a user would help to minimise this limitation (Andersson & Titov, 2014).

Users must engage with any therapeutic programme for long enough to benefit, and engagement can be a particular issue with online interventions (Alkhaldi, 2015). Reasons for drop out from a 10 week programme of online CBT for erectile dysfunction (ED) included separation from a partner, partners not being interested in participating, a lack of motivation, or the time commitment being too demanding (McCabe & Price, 2009). Evidence suggests that supported use of some kind improves engagement with interventions, for example text message prompts or email, or therapist support. (e.g. Ritterband et al., 2009; Alkhaldi 2015).

Since STL was developed almost 10 years ago, technology and Internet speed has advanced, and future developments could include multimedia features such as video, animation and visual images to facilitate communication, and to make the content more accessible to those who are less literate. The evidence base has grown considerably for some therapy techniques in the last decade, for example mindfulness techniques for sexual difficulties (Stephenson & Kerth,

2017; Brotto et al., 2012; Brotto & Basson, 2014; Gunst et al., 2018), and we plan to incorporate this in the next update.

Mobile phone text message reminders can increase attendance at healthcare appointments (Gurol-Urganci et al, 2013) and this feature could be a useful opt-in addition to the STL triage section. STL would benefit from automated support for engagement (e.g. SMS or email reminders to do the sex therapy exercises), or remote support from a clinician. In line with usability studies on IDIs (Andersson, Estling, Jakobsson, Cuijpers, & Carlbring, 2011) it might be better to highlight the most important sections of the program, but allow users to self-navigate around the site.

Our qualitative work has shown that STL was helpful, feasible, and valued by users, but trial evidence is needed to evaluate effectiveness and cost-effectiveness (Goldmeier et al., 2004). It is also important to find out how different user populations can benefit, to explore different models for implementation alongside clinical services, to identify under-represented user groups, and investigate how to maximise engagement.

We have shown that key elements of face-to-face sex therapy can be replicated online for self-help for sexual difficulties. Since sexual difficulties are so common worldwide and there are many barriers to clinical care, there is a clear need for alternative sources of help. Online interventions such as SextherapyLondon can be far reaching, offering structured, evidence-based self-help to people with a range of sexual difficulties.

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