A fertility app for two? Women’s perspectives on sharing conceptive fertility work with male partners

Josie Hamper

School of Geography, Queen Mary University of London, London, UK

ABSTRACT

Smartphone apps for monitoring bodily signs of ovulation are growing in popularity and becoming increasingly important tools for facilitating or preventing pregnancy. This article explores heterosexual women’s experiences of using fertility apps in the context of trying to conceive. Specifically, it focuses on a feature of fertility apps that enables women to share information about fertility with a male partner. This feature is frequently lauded by apps as providing an opportunity for partners to be more actively involved in the work of trying to conceive. With this focus, the article makes two key contributions to the emerging literature on fertility apps. Firstly, it situates narratives in apps that promote the shared responsibility for conception as part of a pre-parenting culture that values a shared commitment to (future) parenthood. Secondly, drawing on interviews with women in the UK who had used fertility apps, it explores women’s perspectives on involving their male partners in pregnancy planning. Rather than redistributing conceptive fertility work, women’s experiences reveal how cultural assumptions about heterosexuality and ‘natural conception’ significantly curtail their ability to engage partners in fertility tracking. As a result, the gendered divisions of fertility work are reconfigured in the new sociotechnical context of fertility app use.

ARTICLE HISTORY

Received 14 September 2020
Accepted 1 November 2021

KEYWORDS

conception; fertility work; digital health; fertility awareness methods; heterosexuality

Introduction

Smartphone apps for tracking menstrual cycles are growing in popularity (Lupton 2015) and are frequently the most downloaded category of health app after activity trackers (Gambier-Ross, McLernon, and Morgan 2018). One of the most popular menstrual tracking apps, Clue, has over 12 million users (Clue 2020) and it is estimated that menstrual tracking apps as a whole have over 100 million users globally (Kresge, Khrennikov, and Ramli 2019). Fertility tracking with an app involves monitoring bodily signs of fertility, recording these observations in the app, and using the app to help identify the fertile days when conception is most likely to occur. Apps build on
long-standing approaches to fertility monitoring known as natural fertility control, natural family planning and fertility awareness-based methods, and play an important role in introducing these methods to people for the first time (Gambier-Ross, McLernon, and Morgan 2018).

Differently from non-digital methods of fertility tracking, apps are able to provide information directly to users through personalised alerts or push notifications, which can create new and compelling relationships between individual users and health advice (Lupton 2015). One of these relationships – and the focus of this article – is the apps’ ability to digitally share or ‘sync’ personal information about fertility across devices. The syncing of two apps enables information entered on one person’s app to appear on another person’s app. For heterosexual couples trying to conceive, adopting this feature means that women can use the app to share information about fertility and predictions of fertile days with a male partner. As will be shown, apps promote this sharing of information as a way to foster male interest in conception and to help male partners be more actively involved in facilitating and timing sexual intercourse to increase the couple’s chances of conceiving.

This article critically interrogates these new digital modes of including male partners in fertility tracking. Drawing on theorisations of the gendered divisions of reproductive labour (Bertotti 2013; Fennell 2011; Hochschild 2012), it examines why apps do not simply shift the distribution of conceptive fertility work to male partners. Through an analysis of the advertising material for apps, I argue that the apps’ inclusion of male partners is a response to contemporary pre-parenting cultures that value a shared commitment to conception between prospective parents (Faircloth and Gürtin 2018). However, this idealised approach to collaborative fertility tracking does not always align with women’s actual practices and experiences of trying to conceive.

A second part of the article presents findings from interviews with women in the UK who had used fertility apps, to explore their perspectives on the barriers to male partners’ involvement. In particular, interviews demonstrate how women’s app use intersects with cultural assumptions that (continue to) position women and men differently in the contemporary work of conception, which limits the potentiality for apps to redistribute this work and creates new burdens of fertility work for women.

The work of fertility tracking with an app

One of the earliest popular references to natural family planning in the UK is thought to be Marie Stopes’ publication Wise Parenthood in 1918 (Wilkinson, Roberts, and Mort 2015). Since then, medical ‘discoveries’ pertaining to female reproductive processes have played a part in medicalising methods of observation that women were already practising (DeNora 1996). The emphasis in fertility apps on data and measurement, along with descriptions of menstruation in terms of standard cycles, symptoms and regularity, reveal how apps produce particular understandings of female reproductive bodies. Far from being neutral, these articulations are connected to the historical legacy of menstrual control in medicine (Oudshoorn 1994) and a more recent valorisation of aggregated bodily data as a resource for understanding the individual (Lupton 2015). Some fertility apps invite the user to enter extensive personal information, far
beyond fertility signs, reflecting how personal data constitutes a valuable asset for app developers (Kresge, Khrennikov, and Ramli 2019).

While the most popular apps are free to download from smartphone app stores, many of them include the option to purchase upgrades or additional in-app features, and some are part of costly subscription packages. Reflecting the practices of fertility monitoring adopted by research participants, this article considers apps that are based on fertility awareness methods (Knight 2017). These methods usually involve observing or measuring menstruation dates, menstrual flow, cervical mucus consistency, basal body temperature and results from ovulation tests, and recording details of these in the app. Once a certain amount of fertility ‘data’ has been entered from multiple menstrual cycles, the app starts to visualise patterns in fertility signs that inform the prediction of future menstruation and ovulation dates. For heterosexual couples trying to conceive, these predictions can be used to plan sexual intercourse during the most fertile days prior to ovulation and thus increase the chances of conception. While this article does not specifically consider women’s use of ovulation predictor and pregnancy tests, results from these tests can often be entered into fertility apps alongside women’s other observations of fertility signs (Ali, Gürtin, and Harper 2021). Fertility awareness-based methods combine multiple bodily fertility indicators to help identify the fertile time of each menstrual cycle (Knight 2017).

Critical approaches to self-tracking and biosensing focus on people’s lived engagements with information, data and devices, while also recognising how these engagements are shaped by broader sociocultural processes (Neff and Nafus 2016; Roberts, Mackenzie, and Mort 2019). In a similar way, I situate women’s fertility app use in relation to cultural assumptions about heterosexual conception. Reproduction is a domain of life with strongly gendered divisions of responsibility and women continue to perform the majority of the ‘second shift,’ that is, unpaid domestic work and childcare on top of paid employment (Hochschild 2012). Fertility work is an important but often unnoticed aspect of this reproductive labour. In the context of preventing pregnancy, Bertotti (2013) shows how women take on the majority of fertility work on behalf of the couple, which involves managing the physical effects of contraception as well as the time and attention given to preventing pregnancy. Even when women invite men’s active engagement in contraceptive decision-making, intersecting interpersonal and structural barriers often prevent men’s participation (Kimport 2018). For example, Fennell (2011) has shown how men’s discomfort in communicating about contraception, combined with the feminisation of family planning (as well as household planning more generally), contributes to the expectation that women will assume this responsibility. Similarly, women are usually the primary planners of fertility treatment (Bell 2015; Greil, Leitko, and Porter 1988; Inhorn and Patrizio 2015). The continuous reiteration of gendered expectations legitimates an uneven distribution of fertility work that facilitates men’s ability to selectively opt in and out of reproductive decision-making (Barnes 2014; Dalessandro, James-Hawkins, and Sennott 2019). These inequalities are both reflected in and reinforced through women’s use of fertility apps.

This article focuses on the cultural assumptions around (in)fertility, relationships and heterosexual intercourse that act as barriers to women involving their male partners in fertility tracking. An important contributor to the feminisation of responsibility
for conception, which involves planning and facilitating heterosexual intercourse, is the presence of sexual scripts that shape how sexual encounters are imagined and enacted. Sexual scripts are culturally familiar references or norms that guide sexual behaviour, sexual negotiations between people and how sex is talked about (Jackson and Scott 2007). Heterosexuality in particular, is shaped by normative, gendered sexual scripts that frequently prescribe opposing roles to men and women, for instance through the positioning of men as the ones who desire sex and women as the objects of desire (Tolman 2002). At the individual level, heterosexual contraceptive intercourse is negotiated against these powerful cultural expectations about men and women’s sexual roles and preferences. Specifically, trying to conceive introduces a new motivation for sexual intercourse as well as a new imperative to time this in relation to ovulation (Grenfell et al. 2021; Wilkinson 2020). As Wilkinson, Roberts, and Mort (2015) have shown, this ‘conceptive imperative’ prioritises the potential outcome of intercourse (a conception, pregnancy and baby) over the sexual act itself, thus disrupting normative articulations of heterosexual romance and togetherness that emphasise (often, male) sexual ability, pleasure and desire.

The imperative to plan and time intercourse also disrupts ideas of ‘natural conception’ and fertility as a biologically naturalised process of the body (Earle and Letherby 2007; Franklin 1997; Mamo 2007). Ideas of naturalness are pertinent to discussing fertility apps, as well as natural family planning and natural fertility control more broadly, which are explicitly framed as natural ways of managing fertility (DeNora 1996; Hamper 2020; Lupton 2015). In this context, the ability to conceive ‘naturally’ constitutes an expected and natural part of heterosexuality and, conversely, the inability to conceive constitutes a threat to the natural order of heterosexual reproduction (Thompson 2005; Throsby 2004). Attending to the culturally available scripts that underpin women’s ideas about heterosexuality and heterosexual intercourse allows me an exploration of the subtle forces at play in sustaining gendered approaches to conception, which curtail the ability of fertility apps to redistribute the work of trying to conceive.

**Methods**

This article builds on an analysis of fertility app content and advertising, which involved collecting basic details for over 200 fertility apps across Google Play and Apple’s App Store, combined with an in-depth thematic content analysis of six popular fertility apps (where popularity was evaluated by number of downloads). The latter aimed to identify themes across imagery, text and broader discursive references, such as articulations of health and naturalness (Rose 2016). In addition, the article presents findings from 29 semi-structured interviews with 16 women1 who were familiar with fertility tracking apps, including 15 women who had used apps to assist conception and one who had chosen not to adopt an app and reflected on this decision in the interview. Participants most commonly recorded menstruation dates and cervical mucus consistency in their apps. Alongside these observations, five participants recorded basal body temperature measurements and four used ovulation tests. At the time of the first interview, two participants were trying to conceive, five were
pregnant and nine had babies. Women were aged between 30 and 44, two had used fertility apps as a precursor to medical fertility treatments, and all were in long-term relationships with men. Whereas most participants conceived after two to six months of trying, the two participants who had fertility treatment had been fertility monitoring for over two years.

Interview participants were recruited through online advertisements, recruitment postcards in local cafés and community notice boards, and in person at baby groups in east and north London. All participants were invited to take part in two interviews in order to cover a range of topics. The majority of participants were highly educated (to degree level), with some disposable income, and they readily traversed diverse sources of health and medical advice to inform their decision-making. Moreover, participants adopted family planning aspirations that are typically perceived to be middle class, such as the imperative to adopt an informed and reflexive approach to (future) parenthood (Faircloth and Gürtin 2018; Waggoner 2015). Participants often talked about planning pregnancies and children around career progression and their financial situation, as well as their preferred birth month or spacing between siblings. Discourses around race, class and age shape social imaginaries of who should be ‘helped’ to reproduce and whose fertility should be curtailed (Russell 2015). The women in this study aligned with heteronormative ideals of feminine reproductive citizens who are able and willing to invest in their reproductive bodies and futures through fertility tracking (Doshi 2018; Lupton 2015).

As I will discuss in the empirical sections, when talking about their experiences of trying to conceive women often exaggerated gender stereotypes and imaginations that relied on an assumed mutual understanding between women of ‘what men are like.’ Participants frequently joked and laughed, using humour to facilitate the potentially awkward nature of talking about intimate lives (Browne 2016). While interviews are not straightforwardly reflective of unmediated experience or thought, the situations and relationships described in interviews, including jokes, offer important insights into the ambiguities of social life beyond the interview encounter (Gabb 2019). This does not assume, however, that the stereotypes attributed to men and partners in interviews reflected their actual behaviours (Thompson 2005). Men’s practices of pregnancy planning were beyond the scope of this study.

Findings

Syncing apps: discourses of pre-parenting and togetherness

The empirical analysis is divided into two main sections. The first of these explores why many fertility apps have adopted a narrative of collaboration in trying to conceive and the second turns to women’s actual experiences of sharing fertility apps.

At the time of data collection (2016–17), many popular fertility tracking apps had recently introduced a new feature that allowed fertility information and the prediction of future fertile days to be shared or synced with a partner’s app on a separate device. By advertising this feature, apps explicitly acknowledged the unequal burden of contraceptive fertility work and were positioned as part of the solution to this gap. Sharing fertility apps would, according to the apps’ narrative, encourage male partners to be
active participants in fertility work and refocus attention from the woman to ‘your fertility as a couple’ (Willets 2018), thus recentring men as half of the ‘reproductive equation’ (Almeling and Waggoner 2013, 824). Here, I consider why apps adopted this narrative of collaboration, which offers an important context for my analysis of women’s perspectives on involving male partners in this way.

Advertisements for this collaborative feature appeared widely in the app stores and on the apps’ own websites. For example, the Cycles app announced that ‘We’ve made it fun to invite your partner to connect and keep up with your cycle,’ enabling an (assumed male) partner to be involved ‘more intimately in pregnancy plans.’ The app offered ‘a cycle built for two’ and the possibility to ‘plan time together on special days,’ suggesting that an additional degree of closeness is achieved by planning pregnancy together. Conception is presented here as a collaborative effort, which apps can make more fun, intimate and efficient. This reflects similar portrayals of ‘reproductive heterosex’ in the marketing material for ovulation biosensing devices (Wilkinson, Roberts, and Mort 2015). Promotional material for the Glow fertility tracker highlighted the possibility for the user to ‘add your partner – it’s a team sport!’ Two profile photos of a man and woman appear below this tagline with the quote: ‘I hope we will be able to have a happy family ourselves.’ Trying to conceive together is tied to the hope for a pregnancy and ‘happy family,’ thus embroiling apps in the making of potential parents (Thompson 2005).

Involving male partners through apps is not only about ‘inviting’ partners to participate in planning sexual intercourse, but also draws on broader narratives of togetherness in future parenthood. Faircloth and Gürtin (2018) have argued that dominant (Euro-American) cultures of ‘intensive parenting’ have been extended backwards in time to pre-conception stages. The notion of intensive parenting as a central characteristic of dominant parenting cultures has been widely established (Lee et al. 2014) and elaborates previous conceptualisations of intensive mothering as ‘child-centered, expert-guided, emotionally absorbing, labour intensive, and financially expensive’ (Hays 1996, 8). Focusing on couples undergoing fertility treatment, Faircloth and Gürtin (2018) argue that women and men are expected to ‘account for (and embody) an intensive commitment to parenting before becoming parents’ (2018, 990). While women emerge as the central figures in intensive (pre-)parenting discourses, men have also been enrolled into new ideals of ‘involved’ fatherhood (Wall and Arnold 2007) and shared parenting (Faircloth 2021). The apps’ shift to including men in pregnancy planning is – I suggest – part of how they acknowledge these contemporary models and ideals of co-parenting during the pre-conception stage. Syncing apps in this sense, is about more than sharing fertility data, it is also about adopting a ‘synchronised’ approach and commitment to future parenting.

However, while fertility apps promise new and digitally mediated opportunities for involving partners in efforts to conceive, adopting an app does not escape the situated and lived experiences of fertility work (Bertotti 2013). App users are active agents who can align with, respond to and subvert the intended uses and meanings that are written into technologies (Mamo 2007). Participants’ accounts showed how disruptions often emerged in the idea of using apps to share the burden of fertility work. Women in this study did not involve their partners in fertility tracking. This differed
significantly from their willingness to share information from pregnancy apps (Hamper and Nash 2021), which suggests, as I will go on to explore, that there are particular barriers to sharing conceptive fertility work that are negated in the advertising of fertility apps as sharing devices.

**Women’s perceptions of male disinterest in conception**

In interviews, women often humorously described how their partners ‘only’ needed to be physically present in conception efforts, reflecting the ‘ejaculatory role’ frequently assigned to men in fertility treatment (Thompson 2005, 121). At the same time, participants spoke about how they wished their partners were more actively involved in some aspects of the process. Women generally wanted to share the excitement of trying to conceive with their partners, as well as the potential disappointment and upset if conception did not occur. Yet they largely refrained from involving partners in this way.

The recommendation in the UK when trying to conceive is to have sexual intercourse every two or three days throughout the month (National Health Service 2020). But women often did not find this frequency realistic and identified the need to target occasional intercourse at the ‘right days.’ Leanne was 30 at the time of the interview and on maternity leave from her job in the civil service. She had been tracking her menstrual cycle for over a year after coming off the contraceptive pill and she had used the same app to track ovulation for a couple of months prior to conceiving. She described the supportive role of her partner:

> You know, he was fully supportive of me doing it, obviously. But it wasn’t a sort of… no. You know, I would sort of say […] ‘oh it says I’ve got a spike here’ or you know, kind of, out of interest maybe I would tell him stuff just as a statement. But it wasn’t kind of an involved thing.

The ‘spike’ referred to by Leanne describes a rise in her app’s chart of daily temperature measurements, which she recorded in her app in addition to menstruation dates and changes in cervical mucus. In this context, increased or ‘stretchy’ cervical mucus is indicative of ovulation approaching, whereas a detectable increase in basal body temperature occurs due to rising progesterone levels after ovulation has occurred (Knight 2017). The relaying of ‘statements’ about fertility to partners via the app’s graphical representation of menstrual cycles, rather than sharing bodily sensations or observations, was typical of participants’ sharing of information (see also Grenfell et al. 2021). The prioritisation of temperature measurements reflects a perception of numerical values as more relatable, reliable and accurate than subjective description (Sandelowski 2000). Disembodied measurements also remove some of the stigma and shame attached to menstrual blood and other female bodily secretions, which are usually treated as strictly private (Koutroulis 2001). Particularly for women trying to conceive, uterine blood bears associations with ‘failed’ conception or pregnancy loss. Participants sometimes described how sharing graphs was less difficult or embarrassing than talking about bodily experience.

Other participants emphasised that their partners had no interest in the details of conception. In these cases, when asked about their partner’s involvement, women
often responded with mild laughter and a joking statement about their partner’s practical role:

Since we’ve been trying to conceive, I have shown him kind of [pause] what the, what next month is looking like, yeah. So he knows he’s got to show up that week [laughs]. But other than that, he doesn’t have access, I just show him occasionally. (Karen, aged 31, recently made redundant from an administrative role, trying to conceive a second child)

But see, blokes don’t take any interest in it [trying to conceive]. That’s a whole other thesis for you! Like absolutely zero interest. (Ella, aged 44, consultant, having IVF)

I maybe told him ‘I’m fertile, take a night off work this week’ [laughs]. But no, not at all. He wouldn’t be interested. (Susan, aged 33, taking a career break, pregnant with second child)

Participants were generally accepting of their partner’s disinterest, yet research on couples undergoing fertility treatment has shown that this acceptance may later shift to a frustration with men’s perceived unwillingness to ‘immerse themselves fully in the problem of infertility’ (Greil, Leitko, and Porter 1988, 188). The gendered socialisation of interest is central to constituting fertility work as ‘women’s work’ and enables the continued distancing of men from this ‘feminine’ sphere (Bertotti 2013; Bodin and Käll 2020; Fennell 2011). The marginalisation of men also enables them to distance themselves from the gendered risk associated with an infertile identity (Bell 2015). Women on the other hand, are often ‘blamed’ for a couple’s infertility regardless of the real cause, thus ‘infertility remains a woman’s social burden’ (Inhorn and Patrizio 2015, 411).

In what follows I consider the experiences of three participants – Clara, Nancy and Trish – to further explore the situated barriers to engaging partners in pregnancy planning. In these cases, silence and secrecy emerged as embodied and relational strategies for negotiating fertility tracking within relationships (Hardon and Posel 2012). Silence offers ways to manage cultural ideas of sexual inadequacy attached to male infertility especially (Allison 2011), and it can offer a strategy for men to ‘opt out’ of reproductive decision-making (Dalessandro, James-Hawkins, and Sennott 2019). My analysis of silence and secrecy here also draws on conceptualisations of reproductive secrets as closely tied to the lack of established social scripts for talking about reproductive events or practices (Nordqvist 2021). This lack of social scripts is rooted in the shame attached to matters of sex and reproduction, especially women’s bodies (Koutroulis 2001) and sexual desire (Tolman 2002). The next three sub-sections detail how three women navigated attempts to conceive given these tensions.

‘Without telling him I got on this tracker’
Clara had recently given birth to her first baby and was on maternity leave from a job in the creative industry. She was 36 when she started trying to conceive. She explained that prior to this, her partner had not wanted children and she was ‘resigned to the fact’ that they would not be having a family. The change of plans prompted a range of concerns for Clara about whether they would be able to conceive, mainly due to her age, and she downloaded an app to assist in their conception efforts:
I’d ran out of my pill, and I was going back up to [my parents’ house] and I said to my partner ‘I haven’t got time to go to the doctor’s and get it’ and he said, ‘well let’s just not worry about it, we’ve been together for three years, let’s just see what happens.’ And I was like ‘oh my god’ this seems like a decision we should have made a bit more properly! […] Then a few months went by, and I started to think nothing’s happening, nothing’s happening, what if I can’t have kids. You know, I’m just too old and have lost my chance. And I didn’t say anything to [my partner] but I was starting to think ‘oh god.’ […] So, without telling him I got on this tracker. As much as anything to just sort of see whether we were kind of doing it at the right time, whether it was more likely to be a problem with me, and just to see how it went.

Clara’s portrayal of their decision to have a child as not made ‘properly’ signals the sudden nature of this decision, which goes against ideas of preparedness and planning as key to ‘responsible’ reproduction (Faircloth and Gürtin 2018). Moreover, this sudden shift in intentions possibly indicates that the foundation of their agreement was felt to be tenuous, and Clara therefore avoided extending any additional concerns to her partner. This did not, however, resolve her own worries about age and the biological limits to fertility, which prompted her to start tracking fertility signs. For many participants, conceptive fertility work involved pre-emptive worry and risk calculations through which women anticipated potential infertility (Martin 2017). Fertility work is therefore closely tied to gendered imperatives to ‘actively try,’ where effort becomes evidence of the desire for a child and thus ‘trying’ takes on moral value (Throsby 2004). Crucially, the pressure to ‘try’ falls most heavily to women and is intensified when women feel that their effort needs to compensate for advancing age.

Later in our conversation, Clara expressed some uneasiness about her decision not to disclose her use of a fertility app to her partner:

Clara: I just encouraged him to make his own decision [about starting a family]. But I was in charge of it. He didn’t know, he still doesn’t know. I don’t know what I was doing actually. It’s like a proper man-trap isn’t it! But to be fair he was the one who said back at Christmas ‘let’s just see what happens’ so I don’t feel I was … [pause].

Interviewer: So, the initial discussion was between you both.

Clara: I was just using his time effectively.

The metaphor of a ‘man-trap’ contradicts the idea that starting a family is something that a couple approaches together and indicates how Clara’s representation of herself in a position of authority is shaped by negative stereotypes. Moreover, Clara’s reference to using her partner’s time effectively and repeated citation of ‘let’s just see what happens,’ also speaks to the gendered embodiment of time pressure and differential valuation of his and her time in relation to fertility (Martin 2017). Men are perceived as able to afford taking time to conceive in ways that women are not. These different alignments with the temporalities of trying to conceive become arenas for constructing and demonstrating gender identities. They also reflect broader tendencies for men to disregard health risk and thus delay their access to healthcare (Courtenay 2000), including infertility and pre-conception care (Bodin and Käll 2020), with potentially harmful consequences.
Pre-empting the gendered risk of infertility

While Clara chose not to disclose her fertility tracking, Nancy described the potential consequences of doing so to her husband, which reveals how ideas about masculinity contribute to the feminisation of fertility work by enabling male partners’ disengagement. Nancy was 33, worked in the administration of a small organisation and she was pregnant with a second child at the time of the first interview. She had engaged in ovulation monitoring prior to both pregnancies, which included trials of fertility apps before choosing to use ovulation tests instead. Although Nancy could see a need for ‘stuff that gets men more engaged’ in starting a family, which apps could be part of, she also emphasised a perceived sensitivity for men about having a constant reminder of non-pregnancy on a personal phone. She explained how a fertility app could constitute a visual record of missed fertile windows, which would be suggestive of a ‘failure’ to conceive despite the precise planning of intercourse:

I think from what I’ve observed it’s definitely tied to men feeling like they need to be the one to get their wife pregnant, get their girlfriend pregnant. And if that’s not happening it’s their fault. Who knows, maybe it is, maybe it isn’t, and maybe it’s nobody’s fault. But any visual recognition of that on your phone as a male… I think many men would find hard to take – that there was a suggestion that they weren’t fertile. It’s men isn’t it, they’re very sensitive about those parts.

Nancy’s narrative relies on an association between masculinity and procreative capacity, and her reference to ‘those parts’ indicates how the threat of infertility is attached, in a figurative sense, to male reproductive body parts (Throsby and Gill 2004). The separation of heterosexual intercourse from conception in IVF may reduce the threat or even enhance men’s sense of masculinity through the separation of subjective sexual performance from the objective bodily function of producing a sperm sample (Bell 2015; Thompson 2005). Conversely, Nancy’s observations explicitly connect men’s sense of self to procreative ability.

Nancy also explained how her husband would emphasise the ‘natural conception’ of their two children: ‘He would say “oh it was totally naturally, [our baby] was just conceived all fine.” No, that’s not true. I knew what I was doing.’ This preference for natural conception is connected to a dominant version of masculinity that assigns pride to sexual performance, virility and heterosexual procreative success (Throsby and Gill 2004; Thompson 2005). Not being able to conceive ‘naturally’ is thus seen as particularly hurtful to men as infertility ‘destabilizes the presumed fundamental basis of masculinity’ (Barnes 2014, 5). But more than this, centring on ovulation and its timing as key to conception challenges the naturalisation of (healthy) sperm as the active force in ‘getting’ a woman pregnant (Almeling and Waggoner 2013; Moore 2007) and emphasises women’s active role in facilitating conception through planning sexual intercourse.

Rather than abandoning her fertility tracking, Nancy concealed the full extent of this work in a way that was sensitive to her husband. She explained how she had mentioned the need to plan occasional sexual intercourse, but he did not want to engage in these conversations:

I didn’t tell, well I did talk to my husband about it [fertility tracking], and he was like ‘I can’t… don’t talk to me about it because it’ll just put me off my game, we’ll just do it
and not worry about it and see what happens.’ So I didn’t tell him when I was most fertile.

Nancy’s reference to a ‘game’ lends itself to a discussion of sexual encounters as staged and defined by sexual scripts that shape the meanings attached to certain behaviours. It describes an approach to heterosexual intercourse as, ideally, a playful and worry-free event that prioritises male sexual desire (Tolman 2002), but it also hints to a pressure, for men in particular, to perform (Bell 2015). This was supported by participants more broadly, where women’s reluctance to share information about fertile days reflected the possibility that routinised sex could pose additional stress on male sexual function that can be problematic for conception. Nancy maintained the impression of natural conception while privately acknowledging her concerted work to conceive.

The partnership ideal
Trish worked in education but was on maternity leave at the time of the interviews. She was in her mid-thirties and had used an app to learn about fertility and predict ovulation prior to two pregnancies. Echoing other participants’ comments about prioritising male sexual enjoyment, Trish reflected on a similar dynamic in relation to sharing apps:

I guess it’s this idea that the woman is calculating when she can have the sex, you know, but you don’t want to let the man know that it’s for procreation because he might not enjoy it as much? I feel like that’s the interpretation of it.

The prioritisation of male sexual desire can significantly influence practices of fertility tracking. Grenfell et al. (2021) found that women adjusted how they engaged with fertility apps, such as going to another room to take temperature measurements, in ways that they felt were sensitive towards their partner’s ‘needs and feelings’ (2021, 123). These subtle acts reproduce divisions of reproductive labour that allow men and women to remain in their gendered ‘comfort zones’ (Fennell 2011, 517). Trish was not aware of apps that offered the option to share information with a partner, but reflected on how this sharing could potentially reposition men as active partners in conception efforts:

Maybe there is some sort of way you could do a shared app that is focused on men, a partnership and conception. So instead of it being the woman saying, ‘I’m fertile now.’ You know that he is thinking about it as well, and that he is very much an active partner in this choice to make a child.

Trish indicated that the shared decision to have a child was different from being an ‘active partner,’ which involves ‘thinking about’ conception. She imagined a more equal relationship in which men are actively engaged in pregnancy planning as a result of the mutual choice to have a child, and she envisioned how apps could be part of facilitating this partnership.

Notably, while Trish acknowledged the value of sharing conceptive fertility work, she immediately explained why this sharing would not happen in practice. She reiterated the gendered threat of infertility: ‘if you’re not conceiving it affects men as well because it’s about their virility and stuff.’ Then she explained that based on her
experience the ‘idea of conception’ usually comes from women and men ‘are more passive in it in that kind of way; they know they’re trying for a baby, but they don’t know the logistics of it.’ Fertility apps are precisely part of the planning, knowledge and ‘logistics’ involved in trying to conceive, which places them firmly within a feminised domain of fertility work. Similar to how men’s general lack of contraceptive education contributes to assigning contraceptive decision-making to women (Bertotti 2013; Fennell 2011), men’s perceived lack of knowledge and interest in conception deters women from engaging them in fertility tracking. A crucial difference, however, is that women’s successful use of contraception does not necessarily require her partner’s involvement, whereas conception relies on the partner’s collaboration and participation in sexual intercourse.

Discussion: performing natural conception

In combination, the experiences of Clara, Nancy and Trish present a picture of conceptional fertility work that goes beyond a simple narrative of male disinterest and reveals more complex, intersecting barriers to participation. A certain version of collaborative pregnancy planning is coded into fertility apps through the possibility to sync fertility data. Apps may indeed offer novel and exciting ways of involving partners in the process of conception, yet I have shown how this engagement is curtailed by participants’ perspectives on men and women’s differentiated roles in reproduction. Participants’ reflections on their partners’ preference for spontaneity are particularly powerful in this regard, where the planning and routine involved in fertility tracking oppose a more casual approach that is captured through references to ‘let’s just see what happens’ (Nancy) and ‘let’s just not worry about it’ (Clara). These are gendered statements that facilitate men’s disengagement. By keeping the work of fertility tracking hidden, women maintain the impression of heterosexual romance and natural conception, which effectively enables them to subtly curate men’s participation in facilitating conception. On the surface, women enable the disengagement of male partners, prioritise male sexual desires and accept responsibility for conception on behalf of the couple. But by making sex seem spontaneous, women also actively encourage their partner’s (even minimal) involvement. Participants’ strategies for performing spontaneity despite their timing of intercourse also reveal how they manage their intimate relationships while simultaneously enacting responsible pregnancy planning (Faircloth and Gürtin 2018).

The promotion of shared pregnancy planning in fertility apps offers the potential to redistribute responsibility by enabling male partners to be involved in both the practical and emotional pursuit of conception. This includes planning and facilitating sexual intercourse to coincide with a woman’s most fertile days as well as providing support through the successes and failures of trying to conceive. However, strongly gendered and naturalised ideas about heterosexual conception place limits on this redistribution. Women’s experiences of what men do, and do not want to know about fertility and women’s bodies, demonstrate how the gendered division of fertility work is reproduced in new sociotechnical contexts. Notably, barriers to talking about fertility reflect the pervasive erasure of female bodily processes from the public domain. The
shame attached to female bodily fluids (Koutroulis 2001) offers a stark contrast to the ‘hypervisibility’ and celebration of semen (Moore 2007, 8).

The reductive portrayal of men’s role in conception is a common strategy for managing the potentially awkward situation of planned and purposeful sexual contact. This resonates with observations from fertility treatment, where Thompson (2005) notes that ‘virility is talked about in an explicitly parodic, joking manner, not because men and women in these sites are more crass or more sexist than others elsewhere but because of the functionality of this strategy’ (2005, 126). The performance of exaggerated gender roles at the fertility clinic enables the re-naturalisation of a highly medicalised approach to reproduction. Underpinning this is a powerful cultural understanding of heterosexual intercourse as the natural route to pregnancy (Franklin 1997; Throsby 2004). Categories of what is natural are both mobilised and unsettled in women’s accounts of fertility tracking, in which heterosexual conception figures as both natural and worked towards through a staged orchestration of events. Fertility apps too mobilise ideas of naturalness at the same time as constituting conception as an achievement that relies on ‘scientific’ methods and the intensive work of the user. Women’s experiences of fertility apps reveal how articulations of natural conception are not neutral but mask an intensified burden of pre-conception fertility work.

Notes
1. This article specifically considers participants who had used fertility apps in the context of trying to conceive. Outside of this participant group, one participant had used fertility tracking apps as a contraceptive method. All participants have been given pseudonyms.
2. This material was documented by the author on 17.10.2016 from the Cycles website.
3. This material was documented by the author on 17.10.2016 from the Glow page in Google Play.

Acknowledgements
I thank the journal editors and three anonymous referees for their valuable comments on this article. I am also grateful to Emily Harris for her thoughtful feedback on an early draft and to the research participants for sharing their personal stories with me.

Disclosure statement
No potential conflict of interest was reported by the author.

Funding
This work was supported by the UK Economic and Social Research Council [grant number ES/J500124/1].

References
Ali, R., Z. B. Gürtin, and J. C. Harper. 2021. “Do Fertility Tracking Applications Offer Women Useful Information about Their Fertile Window?” Reproductive BioMedicine Online 42 (1):273–281.
Allison, J. 2011. “Conceiving Silence: Infertility as Discursive Contradiction in Ireland.” *Medical Anthropology Quarterly* 25 (1):1–21.

Almeling, R., and M. R. Waggoner. 2013. “More and Less Than Equal: How Men Factor in the Reproductive Equation.” *Gender & Society* 27 (6):821–842.

Barnes, L. W. 2014. *Conceiving Masculinity: Male Infertility, Medicine and Identity*. Philadelphia: Temple University Press.

Bell, A. V. 2015. “I don’t Consider a Cup Performance; I Consider it a Test’: Masculinity and the Medicalisation of Infertility.” *Sociology of Health & Illness* 38 (5):706–720.

Bertotti, A., and M. 2013. “Gendered Divisions of Fertility Work: Socioeconomic Predictors of Female Versus Male Sterilization.” *Journal of Marriage and Family* 75 (1):13–25.

Bodin, M., and L. Käll. 2020. “Is it an Issue Before it’s a Problem? Investigating Men’s Talk about Fertility.” *Sociology of Health & Illness* 42 (7):1611–1625.

Browne, A. J. 2016. “Can People Talk Together about their Practices? Focus Groups, Humour and the Sensitive Dynamics of Everyday Life.” *Area* 48 (2):198–205.

Clue. 2020. “12 Million People Trust us with their Data.” *Hello Clue* Accessed 5 January, 2021. https://helloclue.com/period-tracker-app.

Courtenay, W. H. 2000. “Constructions of Masculinity and their Influence on Men’s Eell-being: A Theory of Gender and Health.” *Social Science & Medicine* 50 (10):1385–1401.

Dalessandro, C., L. James-Hawkins, and C. Sennott. 2019. “Strategic Silence: College Men and Hegemonic Masculinity in Contraceptive Decision Making.” *Gender & Society* 33 (5):772–794.

DeNora, T. 1996. “From Physiology to Feminism. Reconfiguring Body, Gender and Expertise in Natural Fertility Control.” *International Sociology* 11 (3):359–383.

Doshi, M. J. 2018. “Barbies, Goddesses, and Entrepreneurs: Discourses of Gendered Digital Embodiment in Women’s Health Apps.” *Women’s Studies in Communication* 41 (2):183–203.

Earle, S., and G. Letherby. 2007. “Conceiving Time? Women Who Do or Do Not Conceive.” *Sociology of Health & Illness* 29 (2):233–250.

Faircloth, C. 2021. “When Equal Partners become Unequal Parents: Couple Relationships and Intensive Parenting Culture.” *Families, Relationships and Societies* 10 (2):231–248.

Faircloth, C., and Z. Gürtin. 2018. “Fertile Connections: Thinking Across Assisted Reproductive Technologies and Parenting Culture Studies.” *Sociology* 52 (5):983–1000.

Fennell, J. L. 2011. “Men Bring Condoms, Women Take Pills: Men’s and Women’s Roles in Contraceptive Decision Making.” *Gender & Society* 25 (4):496–521.

Franklin, S. 1997. *Embodied Progress: A Cultural Account of Assisted Conception*. London: Routledge.

Gabb, J. 2019. “The Relationship Work of Sexual Intimacy in Long-Term Heterosexual and LGBTQ Partnerships.” *Current Sociology*. Advance online publication. doi:10.1177/001392119826619

Gambier-Ross, K., D. J. McLernon, and H. M. Morgan. 2018. “A Mixed Methods Exploratory Study of Women’s Relationships with and Uses of Fertility Tracking Apps.” *Digital Health* 4:1–15. doi:10.1177/2055207618785077

Greil, A. L., T. A. Leitko, and K. L. Porter. 1988. “Infertility: His and Hers.” *Gender & Society* 2 (2):172–199.

Grenfell, P., N. Tilouche, J. Shawe, and R. S. French. 2021. “Fertility and Digital Technology: Narratives of Using Smartphone App ‘Natural Cycles’ while Trying to Conceive.” *Sociology of Health & Illness* 43 (1):116–132.

Hamper, J. 2020. “Catching Ovulation’: Exploring Women’s Use of Fertility Tracking Apps as a Reproductive Technology.” *Body & Society* 26 (3):3–30.

Hamper, J., and C. Nash. 2021. “Bonding Work: Spacing Relations through Pregnancy Apps.” *Transactions of the Institute of British Geographers* 46 (3):584–597.

Hays, S. 1996. *The Cultural Contradictions of Motherhood*. New Haven: Yale University Press.
Hochschild, A. (1989) 2012. *The Second Shift: Working Families and the Revolution at Home*. New York: Penguin Books.

Inhorn, M. C., and P. Patrizio. 2015. “Infertility around the Globe: New Thinking on Gender, Reproductive Technologies and Global Movements in the 21st Century.” *Human Reproduction Update* 21 (4):411–426.

Jackson, S., and S. Scott. 2007. “Faking Like a Woman? Towards an Interpretive Theorization of Sexual Pleasure.” *Body & Society* 13 (2):95–116.

Kimport, K. 2018. “Talking about Male Body-Based Contraceptives: The Counseling Visit and the Feminization of Contraception.” *Social Science & Medicine* 201:44–50. doi:10.1016/j.socscimed.2018.01.040

Knight, J. 2017. *The Complete Guide to Fertility Awareness*. Oxon: Routledge.

Koutroulis, G. 2001. “Soiled Identity: Memory-Work Narratives of Menstruation.” *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine* 5 (2):187–205.

Kresge, N., I. Khrennikov, and D. Ramli. 2019. “How Period Tracking Apps are Monetizing Women’s Extremely Personal Data.” *Bloomberg Businessweek*, January 1. https://www.bloomberg.com/news/articles/2019-01-24/how-period-tracking-apps-are-monetizing-women-s-extremely-personal-data.

Lee, E., J. Bristow, C. Faircloth, and J. Macvarish. 2014. *Parenting Culture Studies*. London: Palgrave Macmillan.

Lupton, D. 2015. “Quantified Sex: A Critical Analysis of Sexual and Reproductive Self-Tracking using apps.” *Culture, Health & Sexuality* 17 (4):440–453.

Mamo, L. 2007. “Negotiating Conception: Lesbians’ Hybrid-Technological Practices.” *Science, Technology and Human Values* 32 (3):369–393.

Martin, L. J. 2017. “Pushing for the Perfect Time: Social and Biological Fertility.” *Women’s Studies International Forum* 62:91–98. doi:10.1016/j.wsif.2017.04.004

Moore, L. J. 2015. *Sperm Counts: Overcome by Man’s Most Precious Fluid*. New York: New York University Press.

National Health Service. 2020. “Trying to Get Pregnant, December 2.” https://www.nhs.uk/common-health-questions/pregnancy/how-can-i-increase-my-chances-of-getting-pregnant/

Neff, G., and D. Nafus. 2016. *Self-Tracking*. Cambridge: MIT Press.

Nordqvist, P. 2021. “Telling Reproductive Stories: Social Scripts, Relationality and Donor Conception.” *Sociology*. Advance Online Publication. doi:10.1177/0038038520981860

Oudshoorn, N. 1994. *Beyond the Natural Body: An Archeology of Sex Hormones*. New York: Routledge.

Roberts, C., A. Mackenzie, and M. Mort. 2019. *Living Data: Making Sense of Health Biosensing*. Bristol: Bristol University Press.

Rose, G. 2016. *Visual Methodologies: An Introduction to Researching with Visual Materials*, 4th ed. London: SAGE.

Russell, C. 2015. “The Race Idea in Reproductive Technologies: Beyond Epistemic Scientism and Technological Mastery.” *Journal of Bioethical Inquiry* 12 (4):601–612.

Sandellowski, M. 2000. *Devices & Desires: Gender, Technology and American Nursing*. Chapel Hill: The University of North Carolina Press.

Thompson, C. 2005. *Making Parents: The Ontological Choreography of Reproductive Technologies*. Cambridge: MIT Press.

Throsby, K. 2004. *When IVF Fails: Feminism, Infertility and the Negotiation of Normality*. New York: Palgrave Macmillan.

Throsby, K., and R. Gill. 2004. “It’s Different for Men.” *Men and Masculinities* 6 (4):330–348.

Tolman, D. L. 2002. *Dilemmas of Desire: Teenage Girls Talk about Sexuality*. Cambridge: Harvard University Press.

Waggoner, M. R. 2015. “Cultivating the Maternal Future: Public Health and the Prepregnant Self.” *Signs: Journal of Women in Culture and Society* 40 (4):939–962.

Wall, G., and S. Arnold. 2007. “How Involved is Involved Fathering? An Exploration of the Contemporary Culture of Fatherhood.” *Gender & Society* 21 (4):508–527.
Wilkinson, J. 2020. “Technologies of Time: Women’s Practices of Trying to Conceive with Ovulation Biosensing.” Sociology of Health & Illness 42 (7):1597–1610.
Wilkinson, J., C. Roberts, and M. Mort. 2015. “Ovulation Monitoring and Reproductive Heterosex: Living the Conceptive Imperative?” Culture, Health & Sexuality 17 (4):454–469.
Willets, M. 2018. “The 8 Best Period and Ovulation Tracker Apps for Getting Pregnant.” Parents.com, September 10. https://www.parents.com/getting-pregnant/ovulation/fertile-days/the-10-best-period-and-ovulation-tracker-apps/