It's That Time Of The Month Again: Adjusting Period Tracking Apps To Include Partner Users

Shania Jane Martijn[1], Marit Bentvelzen[1] and Hanna Hauptmann[1,*]

[1]Utrecht University, Utrecht, The Netherlands

Abstract

Period tracking applications have traditionally been designed for women as the primary users, while reproductive health is often seen as a shared responsibility in a relationship. This work investigates how these apps can facilitate partner usage without undermining the primary users. Using an exploratory, multi-method approach, we conducted a survey (N = 37) and semi-structured interviews in pairs (N = 8) to explore the motivations, attitudes, and design preferences for partner access to reproductive health data. Survey results indicated that a majority of participants viewed menstrual tracking as a shared responsibility. However, barriers such as privacy concerns and lower confidence in reproductive health knowledge of partners remained. Qualitative analysis revealed key themes, including the importance of user-controlled data sharing, prioritisation of primary users in the design, and preferences for tailored features to improve the secondary users' information intake. Participants emphasised that partner involvement should enhance communication rather than replace it.

Keywords

Partner period-tracking, Period-tracking applications, User Experience (UX), Application Co-Usage

1. Introduction

Mobile applications often strive to make the lives of users more convenient by allowing the support of mundane tasks [1]. One such application category is reproductive health tracking. The primary focus of these apps is to collect and track data on menstruation, the overall period cycle, symptoms, fertility and to offer other valuable insights into reproductive health [2, 3]. Upon examining the key features of many reproductive health apps [2, 3], it could be argued that they could be equally relevant for partners who wish to support their significant others in managing their reproductive health. For example, tracking cycle-related symptoms could help partners to better understand the physical discomfort that frequently occurs, thereby fostering better communication and support in their relationship.

One notable example in the world of cycle apps is the app Flo. Though previously aimed exclusively at women, the app has undergone redesigns to cater to a more inclusive and neutral target group [4]. This has been achieved by developing a feature for partners, that allows them to support the period-having partners. Next to Flo, other applications have implemented similar features for partners [5, 6]. Traditionally, the primary users have been assumed to be female, as visibly reflected in the design choices of these apps, such as the predominance of stereotypical feminine colours and design elements in many of the popular period-tracking apps available in app stores [7]. Besides changing just the visual appearance, partner features could also provide a helpful experience for partners who seek to support their partners and learn more about reproductive health [8].

However, including secondary users in the design leads to new challenges. Even though this shift of focus is already in motion, little is known about users' actual desires and expectations and how to ensure efficacy for partner users. It is not yet clear whether moving focus from the primary users could potentially have negative effects on their user experience. Further, depending on several sociological, economic and geographical factors, non-menstruating partners tend to have less knowledge about female reproductive health [9]. This could result in metrics being misunderstood or misinterpreted. This difference in knowledge and needs of the primary and secondary users requires more research.

Joint Proceedings of the ACM Intelligent User Interfaces (IUI) Workshops 2026, March 23-26, 2026, Paphos, Cyprus

s.j.martijn@uu.nl (S. J. Martijn); m.bentvelzen@uu.nl (M. Bentvelzen); h.j.hauptmann@uu.nl (H. Hauptmann)

0009-0006-5528-9413 (S. J. Martijn); 0000-0002-0146-8444 (M. Bentvelzen); 0000-0002-6840-5341 (H. Hauptmann)

This work will therefore aim to answer the following research question: *"How can period-tracking apps be designed to facilitate partners as users without undermining the primary users?"*. To answer this research question, a multi-method approach was used, utilising both a survey and semi-structured interviews. Within this paper, menstruating partners are often referred to (by participants) in feminine terms while the non-menstruating partner in masculine terms. However, this is acknowledged as an imperfect generalisation and is not intended to exclude or marginalise any relationships or individuals.

2. Related Work

2.1. Gendered Technology and Co-usage of Health Tracking Apps

Period tracking apps are a prominent category within the broader field of Femtech, which is a term described by Jacobs and Evers as digital applications, "that focus on the reproductive health of women"[10]. Femtech plays an important role in digital health because the emergence of Femtech has shifted the focus from a historically male-focused health perspective towards women's health [11]. However, this shift introduces new risks. Period apps could potentially reinforce harmful stereotypes, binary gender norms and essentialist views of the menstrual experience, often visible in the design, language choices and assumptions made about its users [12]. Many Femtech applications and technologies frame menstruation as solely a biological function of cisgender women, and linking it to their function in reproduction excludes a range of users from the conversation, including transgender, non-binary people and possibly even partners, by assuming they do need to be involved [13, 14].

Moreover, the implication of menstruation with the goal of conception further marginalises users who may track their cycles for other health reasons, such as endometriosis, PCOS (Polycystic Ovary Syndrome) or hormone therapy. This not only restricts those who these technologies might be initially intended for but also deems individuals who do not fall into the regular categories as "outsiders"[15]. These "outsiders" often encounter barriers in the existing apps, as many do not offer enough functionality and support for tracking irregular cycles and atypical symptoms. When even primary users struggle to gain value from these tools, it highlights the broader issues in current Femtech solutions.

This critique can be interpreted through the double bind in digital health tracking, where innovation and regulations are closely tied to forms of control [16]. Period tracking apps are often marketed as tools for empowering users to better understand and manage their bodies, yet they opposingly enable strict forms of self-surveillance [17]. In line with the concept biopower, which refers to ways institutions exert power over biological aspects of our life [18], these apps encourage constant self-monitoring rather than offering neutral tools for self-care. This enforces a form of social control and promotes the idea that one's body must be continuously optimised and scrutinised [19, 20]. Other work emphasizes that period-trackers promote a relationship between a user and their body that reinforces their responsibility as reproductive individuals thus fortifying societal hierarchies through technology [21].

Despite these limitations, the growing diversity of users' needs also opens up new possibilities. Although most period-tracking apps are designed with women's needs as the priority, other health technology has highlighted the value of designing for multiple users. In some cases, apps have been developed or adapted to support shared use between partners or caregivers. Dyadic health technologies for example, are apps used by couples or care partners which have been developed to aid them with monitoring, motivating and communicating about health [22]. These applications facilitate information sharing between partners and helps reduce misunderstandings. Additionally, Cornelius et al. examined how couples used an app for tracking weight-loss and found that the mutual goal setting and coordinated tracking encouraged healthier behaviours and strengthened the sense of accountability between partners [23]. While these results may seem less applicable for period-tracking apps due to a lack in mutual goal setting, there are cases where the goals for period tracking also directly impact and regard the partner, such as pregnancy planning and conception-management.

2.2. Partner Involvement Regarding Reproductive Health

We have discussed Femtech and its contemporary applications and limitations for women. However, in this context it is necessary to also look at partners as secondary users. Because this user group also presents its own complexities, they might conflict with the needs and expectations of primary users and create barriers to partner engagement with period trackers.

Research suggests that men during their childhood receive significantly less sexual education than women [24, 25], and mostly receive their knowledge from peers or from the media [26]. In the few cases where formal schooling about menstruation is available to young men, it tends to be limited and contain negative and confusing messages, which often reinforces existing taboos and secrecy around the topic [14]. As an unsurprising result, research on male attitudes towards menstruation reveals them to be often stereotypical, debilitating and negative in nature [27]. In some cultures, men even tend to view menstruation as unclean, which is reflected and reinforced in their traditional customs [28]. This notion might discourage men from partaking in tasks related to menstruation.

On the contrary, some men are beginning to challenge these narratives and develop a more willing attitude towards learning about menstrual health. In one study by Peranovic and Bentley, several men were asked to reflect on the stigma around periods during their upbringing [29]. From the findings of that study, it was clear that respondents felt dissatisfied with the education they received about the topic, partially because of the secrecy from their mothers and sisters. As adults, men showed a wide range of comfort levels when discussing menstruation. Even though some maintained discomfort and distance themselves from the topic, some had an open and empathetic attitude, describing menstruation as normal and natural. Some even "challenged the idea that men have nothing to do with menstruation" and mentioned taking a more involved and active role in menstruation within their important relationships [29]. A more recent study discovered that men agreed that period communication and education are important for all genders [30]. This shift can be seen as part of a broader cultural trend of "caring masculinities", where emotional sensitivity and shared responsibility in reproductive matters are increasingly valued within modern relationships [31]. Such partners could be more open to participating in period tracking activities, especially when it regards an important relationship.

Aside from previously mentioned application-design issues and misaligned assumptions around gender-roles, the concern of privacy remains an issue. Throughout history we have seen that menstruation information has been subject to systematic breaching, stigmatisation and even exploitation by institutional, social and political entities. For example, workplaces and educational institutions have demanded disclosures about menstruation to justify absences or accommodations, which reinforce the period stigma and undermine individual autonomy [32]. More recently, menstrual data collected by period trackers have become a topic of similar discussion in political debates surrounding reproductive rights, which resulted in many women being worried and wanting to delete their trackers [33].

These worries are further materialised by the recurring privacy violations of digital data. A study of menstrual trackers found that many deficiencies are present in their privacy policies , which result in not properly protecting users and their intimate data [12]. In the context of digital health design, privacy violations are often reinforced by app design practices. By design, it is in the functional nature of health tracking applications to track, collect, store and even share sensitive information on its user. However, this is most often without clear consent, meaning that users might not always know how their data is used [34]. That data is extensive and intimate in nature, with examples such as fertility status, sexual activity, medication usage and health issues, mood fluctuations, and even users' precise geolocation [35]. Some apps prompt users to input even more personal data with rewarding access to special application features [36]. Some applications might try to hide their behind-the-scenes activities by burying the consent and service terms in lengthy paragraphs using complicated legal jargon, by using small print or by making it difficult to access the location in the application where this information is disclosed, which reduces transparency and undermines user control over their data [37]. Users are not only exposed to privacy breaches but also to commercial exploitation and misuse by third-party entities, such as insurance companies, employers or within the legal system.

The introduction of partners as secondary users further complicates these issues and could have

negative implications for the primary user. The shared access to data requires careful negotiating and consideration of privacy. While co-use tracking is often designed to promote mutual understanding and support [23, 22], it may also unintentionally normalise surveillance and cross boundaries if not clearly established. For instance, if a partner retains access to a user's reproductive data after a relationship ends, this not only infringes on the user's personal autonomy, but also becomes a significant privacy risk [38]. The feeling of surveillance could lead to negative psychological consequences and power imbalances in the relationship [39]. These interpersonal risks, from both individual and shared app usage, adds additional facets to the larger systematic privacy risks regarding reproductive data.

2.3. Overview of Contemporary Period-Tracking Apps

The core of period trackers generally contains period tracking, ovulation tracking and symptom logging, with some also serving advanced goals, such as fertility planning and pregnancy prevention [2, 3, 40]. Technological advancement in AI and machine learning have made these applications increasingly sophisticated in comparison to the traditional manual methods for period tracking [41]. Now, algorithms are able to analyse large datasets to provide personalised, predictive insights [42]. While these advancements primarily target women, men's awareness about premenstrual syndrome (PMS) and cycle symptoms has proven to lead to better support of menstruating partners [43]. The following market analysis popular period-tracking apps [44] highlights common features and how partner-oriented functionalities are incorporated. While this review draws from the most downloaded and globally recognised apps, it does not encompass all the available period trackers.

Central to nearly all period-tracking apps are features like period tracking, fertility and ovulation prediction, and personalized cycle overviews, which are often implemented using countdown widgets and calendars combined with predictive insights based on previously tracked periods. Although some apps are minimal in their design and functionality by only offering those core features, such as with the popular app Period Tracker and Calendar [45], other apps, such as Flo [46] and Clue [47], additionally incorporate more advanced symptom and mood management features, alongside educational content and recommendations on reproductive health. For example, Flo offers a dynamic cycle overview, symptom tracking, and an AI health assistant, while Clue provides a highly personalisable interface, which allows users to track different reproductive health goals, including conception and perimenopause. These features are complemented by a range of insightful knowledge resources such as articles.

In terms of design, most apps share a common aesthetic, often using traditionally "feminine" colour schemes like pink and red. However, *Clue* stands out with a neutral design, using a colour palette of blue, red, and white, which could signal an increased awareness of diverse user identities and preferences [47]. Additionally, the inclusion of partner functionalities in many apps reflects a growing recognition of shared responsibility in reproductive matters. They all allow users to share an amount of their cycle data with a partner, but with the ability to control what information is visible, ensuring the autonomy of the primary user. *Period Tracker Period Calendar* for instance offers more limited partner functionality, simply displaying period days without any interactive features [48]. Clover on the other hand [49], focuses more on personalised symptom tracking and includes advanced features, but no specific partner functionalities. Partner access is only available through linking personal codes and can be revoked by the primary user demonstrating consideration for their privacy and autonomy.

The main functionalities can be summarised as: period tracking, fertility and ovulation prediction, pregnancy prevention, symptom or mood management, supporting a partner or educational learning.

3. Survey on User Motives and Requirements

To answer our research question, a set of different methods was used. Inspired by previously executed usability and design-research studies for tracking apps [50, 51, 52], an exploratory multi-method approach was implemented of distributing a survey and conducting interviews. Both the survey and interview were held anonymous and voluntary, and no personally identifiable information was collected. Ethical approval was obtained from the Utrecht University's institutional ethics assessment before start

of the research. No rewards were given for participation in either the survey or interviews. The survey served to identify the key areas of interest to better guide the in-depth interviews, which allowed for broad insights into attitudes and concerns. The survey focused on how motivation and attitudes differ between primary users and partners and what existing design features are engaging and relevant.

3.1. Procedure and Participants

The survey was distributed and conducted digitally through the platform Qualtrics after pilot-testing for its clarity and relevance. Informed consent was obtained before the start of the survey by requiring participants to read the consent form and select a checkbox before proceeding. No personally identifying information was collected and the data was stored securely and only accessible to the researcher. For the survey the participants were recruited by convenience sampling. This was done by recruiting through social media and through the researchers personal and professional networks. From a total of 39 form submissions, a number of 37 valid responses (N = 37) were collected. The only exclusion criterion that was maintained was participants being over the age of 18, since all opinions regardless of demographic were deemed relevant. All participants provided informed consent prior to participation. For the initial responses (N = 39), participants' ages were grouped into four categories: 3% was under 18 and was therefore excluded, the majority of 86% fell in the 18–24 age group, 8% were aged 25–34, and 3% was aged 35–44. Around half of the sample group self-identified as male (51%) and half as female (49%) and no participants identified as non-binary or other. 14% of the participants reported being in a relationship, 8% reported as being married, 3% reported a relationship status as "other" with no further disclosure, while the majority of 76% reported being single.

3.2. Questions

The survey was constructed to collect data and explore different user perspectives about the research topic. The questions were aimed to capture insights into current user experiences, perceived usefulness of a partner's features, and potential barriers that could discourage partner engagement within cycle-tracking apps through the use of 16 closed-ended (i.e. multiple choice, Likert scale), and an open-ended question (see Appendix A). Questions about usage experience, motivations, and attitudes explored the differences between primary users and partners. Design preferences and engaging features were examined to answer what existing interface elements of period tracking apps are relevant to partners and how design features that are not yet engaging and relevant to partners can be adjusted. This was done through questions on different types of interface styles, the relevance and perceived helpfulness of features, and partner access. For questions about existing apps and features findings from the market overview were used. To answer what needs and concerns primary users have regarding sharing menstrual information with partners, questions on gender inclusiveness and app improvements addressed how less-engaging elements might be redesigned to fit users needs, while concerns around sharing menstrual information were covered through questions on themes like comfort, awareness, and control. The questions in the survey were divided into the following sections: Introduction & Background Information (Q1-Q4); Personal Experience (Q5-Q7), shown only if the response to Q4 indicated prior app use; Perception about Partner Engagement (Q8-Q12); Design Preferences (Q13-Q15); Final Thoughts (Q16). Together, these questions ensured that both design needs and user attitudes were meaningfully explored. The survey served both as a basis for the interview structure and to gain an understanding of the general attitude towards period tracking apps of both primary users and partners.

3.3. Results

After data collection, analysis was done on both the survey and interview results. For the survey, data analysis was done using R-studio. Descriptive statistics and visualisations of data were created for all choice-questions to give an initial insight in the results. Given that the survey items were ordinal or categorical, non-parametric tests were chosen to perform comparisons between attitudes of men and women. Mann-Whitney U tests, in R referenced as Wilcoxon rank sum tests, were used to compare the

responses between male and female for ordinal questions since no other genders were self-reported for the survey. For nominal questions, a Chi-square test of independence was done. An alpha level of 0.05 was used to determine statistical significance for all inferential tests.

3.3.1. Descriptive Statistics

In terms of familiarity with period trackers (Q4), 46% reported to have personally used one, 14% indicated that their partner has used one, 38% had no familiarity with period trackers whatsoever, and only 3% indicated to have both used one in a relationship. Of the participants that had some type of experience with period trackers (Q5), the majority reported using Flo (56%), followed by Clue (28%) and Stardust (17%). Additionally, 39% reported using another app or method not listed in the options. Of the latter participants, 22% reported using the integrated period-tracking functionality of the Apple Health application, 11% using the calendar applications in their mobile devices and the 6% using the app Maya.

When asked to indicate their reasons for being interested in period-tracking apps (Q6) all participant reported period-tracking as their main motivation (100%). Other chosen reasons were symptom management (44%), curiosity or learning (33%), fertility and ovulation prediction (17%), pregnancy prevention or planning (11%) and finally supporting a partner (6%). Awareness of partner features was mixed (Q7), but the majority (61%) selected not being aware of partner features, others (22%) have heard of it but have not used the feature and some (17%) have heard of it and also used said feature before.

Q8 asked how confident participant were in their knowledge about reproductive health. 54% felt at least somewhat confident, 32% were not confident, and 14% were unsure. To the question how comfortable they would be with having to share said information with a partner if they menstruated and were in a relationship (Q9), 81% said they would be at least somewhat comfortable, 16% were neutral, and 3% would be uncomfortable.

For the question Q10 of whether menstrual cycle tracking should be seen as a shared responsibility or not, 62% agreed, 16% were neutral, and 22% disagreed. Then the participants were asked how much they agree with the statement: "Period-tracking apps should offer features that allow partners to access cycle-related information." (Q11). In response to the statement 81% agreed, 14% neither agreed nor disagreed, and 5% somewhat disagreed. When asked how likely participants were to use an app that allows partners to track their partners (Q12), 72% reported likely, 14% were neutral and 14% unlikely.

Lastly three design-related questions were asked. For Q13, regarding levels of access of the partner, the majority of participants (73%) found that the access that should be available to partners must be personalisable by the primary user and that they must be able to choose what the partner is able to see, 19% found that partners should be able to have full access to all information that is also available to the menstruating partner, 3% reported that partners should only have access to key highlights like the period days, 3% reported only showing non-personal period information like general knowledge about reproductive health and 3% found that partners should not have any access to cycle-related information. The preferred styles of delivery of that information was mixed (Q14): almost all respondents preferred visual app features like calendar, timelines and icons (94%), bite-size textual informational content was preferred second (67%), 56% found out-of-app notifications to be helpful, 50% of selection was for infographics and charts, 14 % for videos and animations, 11% for gamified learning (e.g. quizzes, scores, points and awards) and only 6% filled for walkthroughs and larger amounts of text like articles, blogs and wiki's. Two other suggestions were given in the text-entry: one mentioned estimated hormone levels in graph form, which can be categorised under "infographics and charts". Information or tips about patterns and activities would also be valued, however this could also be categorised under the category "bite-size textual content". Lastly, encouragement or a method of communication between partners was also reported as a useful way of information exchange. For the question whether participants found it important whether period trackers maintained a gender-neutral design, either in design or language, the majority of 49% found it not important at all, 19% found it slightly important, 16% found it moderately important, 14% found it very important and just 3% found it extremely important.

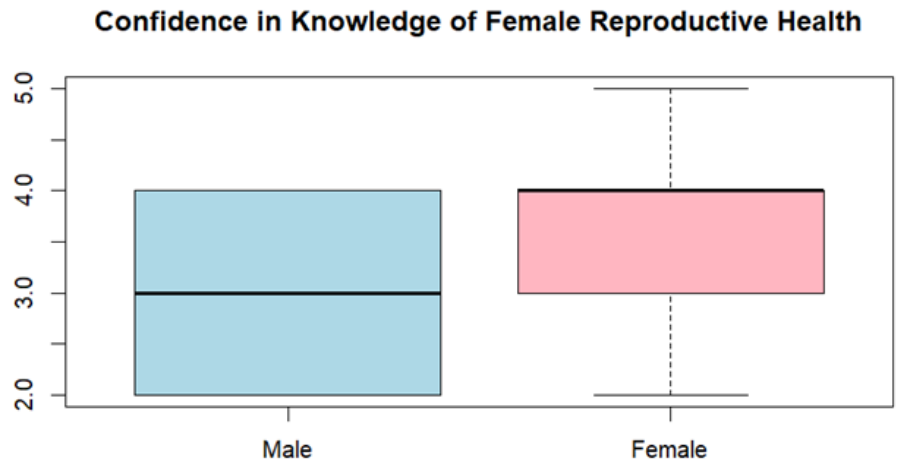

Figure 1: Boxplot for Q8 - Confidence - Level 1 = Definitely not, Level 5 = Definitely yes.

3.3.2. Open Question

The survey concluded with an open question (Q16) where participants had the opportunity to share their final thoughts. Five themes emerged from the responses: communication, responsibility, privacy and user control, design suggestions and other. For the communication theme, participants expressed the importance of open dialogue between partners. Some highlighted that encouraging conversations and education about cycles can be of importance with fostering mutual understanding and for support. One respondent emphasised the shared responsibility in a relationship, suggesting that this kind of information should be indeed visible and even tracked by both partners. The theme of privacy and user control was the most frequently mentioned theme. Multiple participants stressed that the person who menstruates should retain full control over what information is and is not shared and to what extend. Some even referenced more broad socio-political concerns, such as the growing concerns about data privacy, to highlight the importance of user control.

3.3.3. Inferential Survey Results

For the inferential statistical analysis, the Mann-Whitney U test and Chi-square test were used. Out of all tests, one statistically results came forward. For Q8 regarding confidence of period knowledge, results showed a significant difference between male and female respondents ($W = 243$, $p = .018$, $Z = 2.19$, $r = .36$), with moderate effect size. Other performed tests gave no significant results. Regarding the question whether attitudes toward menstrual cycle tracking as a shared responsibility differed by gender (Q10), the results indicated that gender did not significantly influence whether respondents believed period tracking should be a shared responsibility in relationships ($W = 158$, $p = .693$). Another Mann-Whitney U test was conducted for Q11 and the results indicated that male and female respondents expressed comparable levels of agreement to the statement that partner-access features should be included into period trackers ($W = 193$, $p = .459$). For Q12, no significant gender difference was present in participants' reported likelihood of using a partner-oriented period-tracking app ($W = 210$, $p = .200$). For Q15, a Mann-Whitney U test indicated there was no significant difference between male and female respondents regarding how important they consider a gender-neutral design in period-tracking apps ($W = 192.5$, $p = .494$), indicating similar levels of importance for men and women. Lastly, for Q13 a Chi-square test of independence indicated no significant association between gender and respondents' preferences regarding the level of access partners should have in a period tracker ($\chi^2(4) = 4.30$, $p = .367$).

Table 1
Interview participants and respective information.

Participant	Duo	Relationship Type	Age	Gender	Experience with Period-Tracker
F1	1	Romantic Partners	56	Female	No
M1	1	Romantic Partners	70	Male	No
F2	2	Romantic Partners	20	Female	Yes
M2	2	Romantic Partners	20	Male	No
F3	3	Romantic Partners	24	Female	Yes
M3	3	Romantic Partners	27	Male	Yes
F4	4	Platonic Friends	21	Female	Yes
F5	4	Platonic Friends	23	Female	No

4. Interviews on Design Principles

Because the topic of partner involvement in period-tracking apps is under-researched, qualitative insights were needed to explore the novel themes. Based on the survey results, the in-depth interviews were aimed at answering the core research question of how design features can be adjusted to be engaging and relevant to both partners and what needs and concerns both users have regarding sharing information with partners.

4.1. Procedure and Participants

The semi-structured interviews with the participants were conducted in duo's, which lasted approximately 30-35 minutes per duo. The interviews were conducted in-person, as otherwise the design-exercises would have been challenging to perform. The sessions were audio-recorded, and participants were asked to read and sign informed consent forms beforehand. For the interviews, the sessions were held with 4 pairs, resulting in 8 participants in total (see Table 1). The participants were recruited through purposive convenience sampling through the researchers personal and professional network. It was a preferred attribute that the duo's were in a romantic relationship, however due to the lack of available and willing interviewees one duo consisted of two female platonic friends. Besides being partners, another inclusion criteria was at least one person currently or previously having had a period. The interviewees had variable experience with period tracking apps, including neither of them having experience, the menstruating individual having experience or currently using a tracking app and both partners using one. The interview participants were aged between 20 and 70 (M = 32.6, Mdn = 23.5).

4.2. Questions

In-person interviews were conducted for the second part of the research. After obtaining written consent, the interviewees were reassured about the voluntary and low-risk nature of participation to ensure they were in a comfortable headspace to potentially discuss about sensitive topics. The conversations were audio-recorded on a mobile device for later transcription. The interview itself was guided by an interview guide containing set introductory and exploratory open questions to let the interviewees get familiar with the research subject and share their own perspectives and experiences, which were then followed by a predetermined set of design questions and exercises (see Appendix B). A semi-structured method was used, so that after each unclear, incomplete or relevant answer a follow-up question could be asked.

To address differences in motivation and attitudes and finding possible concerns and barriers to period trackers, participants were asked about their motivations and hesitations (IQ5), app preferences (IQ6), and real-life scenarios where menstrual awareness might be useful (IQ7) in the introductory questions of the interview. One question was designed as an experience mapping exercise (IQ7) by prompting the participants to walk through a typical day when knowledge about the partners menstrual cycle would be useful. Such scenario-based prompts are common in UX and HCI research because it allows the participants to hypothesise about or recall experiences, they have had which might have been missed

with general questioning [53, 54]. This question contributed partially to revealing context-dependent motivations and engagements possibilities. To gather user input on actual potential app features and interface elements, participants were asked to reflect on features from other apps they had used and suggest relevant features for a partner-oriented period tracking functionality. The features were then sorted, alongside a list of common features in female-oriented period-tracking apps [2, 3, 40], into three categories: 'Must Have', 'Nice to Have', and 'Not Useful.'. Participants also sorted the features based on visibility to users. This exercise was inspired by the customary practice of card sorting exercises used in UX research [55]. Lastly, participants were asked to brainstorm and reflect about their preferred design elements and layouts and sketch a lo-fi prototype on paper to better visualise what they might have missed before or what might change based on seeing the feature in practise (IQ11) [56]. Because the exercises required the participants to think aloud, this combination of classic interview questions and design exercises allowed for the interview to explore a deeper level of insights but also allowed for better visualisation and interaction for the interviewees. As a closing question the interviewees had the opportunity to further distil their opinions and concerns, touching back on research question 4. The questions for the interview were sorted by theme and exercise for clearer overview, similar to the survey: Introductory & background information (IQ1-IQ6); User-mapping exercise (IQ7); Co-designing exercise (IQ8-IQ11); Closing question (IQ12).

4.3. Results

The interview answers have been analysed with qualitative thematic analysis. In contrast to the survey, the interviews go in depth about the perceived experience of recurring features within existing partner tracking apps. The interviews were firstly transcribed and then coded. Open inductive coding was initially used to segment the needs, frustrations and suggestions of the secondary users of period tracking apps since research about these topics have been seen to be rare. Additionally, any mentions of interaction between partners, concerns (e.g. privacy, data, abuse), usefulness and exclusion were also categorized. The superficial codes were manually assigned to each relevant quote. Then, the initial codes were thoroughly examined and sorted based on similarity into sub-themes. This ensured that duplicate and similar codes were eliminated. Lastly, all sub-themes were categorised into major themes. The codes from the interview resulted in the emergence of several key themes: Firstly, 'Attitudes regarding Partner Understanding and Support', reflected a desire for desire for opportunities that facilitate empathy and emotional understanding rather than just passive data consumption by the partner; The second theme, 'Data Sharing and Privacy', indicated that users value the ability to regulate what menstrual data is shared with their partner and the importance privacy plays in this dynamic; The theme 'Feature Utility and Relevance' summarises the attitudes and perceived usefulness of certain app features and lastly, 'Design and Accessibility' discussed similarly the participants' attitudes but towards design and accessibility needs. These themes later served as part of the foundation for the adjustment requirements.

4.3.1. Theme 1: Attitudes regarding Partner Understanding and Support

The theme 'Partner Understanding & Support' captures the way participants conceptualised the way some might experience a partner supporting their cycle, both emotionally and practically. The theme occurred in all the interviews, with in total 19 occurrences spread across a variety of contexts. From the transcripts, it appeared that participants found both emotional and practical support regarding periods a valuable aspect in relationships.

Participants described their partner's awareness of period-related information and willingness to learn as a sign of care and emotional intelligence, and regarded it as an important topic: *"I think to gain insight into menstruation, to understand a bit how it works... That you know what phases a woman is in. So that he gets more understanding. I think that's one of the most important reasons."* (F2). For some, that awareness was framed as a moral responsibility: *"I don't know why a man wouldn't want to know. If you love your wife, you should want to know."* (F1), *"It's good for them to learn. Like, how many guys even know what a luteal phase is?"* (F4). One participant noted that, because a cycle is something that affects

one partner significantly, it would be wise for the other partner to know about it: *"So he'd understand how my cycle works. You've got all these phases that affect your emotions and your relationship. It just seemed smart for him to be aware of that."* (F3).

In general, open communication was considered as valued in relationships but was simultaneously seen as a given. Participants noted that menstruation is regularly discussed in relationships. As one participant put it: *"You assume that if you have a partner, you talk about intimate things."* (M1). Additionally, they described it as a re-occurring and automatically discussed topic: *"You often find yourself in situations with your partner, like the monthly cycle or menstruation. And then you automatically talk about it."* (M1). This participant emphasised that knowledge about the period should be taken into account and acted on by the partners: *"Then you know, okay, she has a headache or doesn't feel like being intimate, or whatever. And you take that into account with your wishes."* (M1). However, some female participants expressed their fatigue around having to initiate these repetitive conversations: *"Sometimes it just feels... stupid to have to talk about my period all the time. It'd be nice if they could just take a look."* (F4). On the contrary, participants noted that, in some long-term relationships, partners gradually and automatically developed an intuitive awareness for the subject: *"And if you've known each other for so long, you naturally experience those emotional cycles together."* (F1), *"Eventually, you don't even need to talk about it, you just notice."* (M1).

Appreciation was given when participants experienced partners offering help or adjusting behaviour by tracking periods: *"I think it's really sweet how he reacts when the app sends notifications. I feel more appreciated, like he understands what's going on with my body."* (F3). Another participant dittoed this opinion: *"Yes, if I feel tired because of it [menstruation], I like it when my husband is considerate. Then he helps me extra during that time."* (F1).

When asked about any possible demotivating factors for partners being involved in digital period tracking, one of the participants explained that a lack of proactiveness could be because of disinterest or perhaps a lack of awareness: *"The only demotivator I can think of is just that the partner doesn't care about it. Which I kind of maybe understand... I'm not sure actually. Maybe they just didn't think about it? I think the partner would only do it if the woman asked her partner to do it. Not from their own initiative."* (F5). This quote also highlighted the participant believed that involvement with a cycle-tracking app by partners would namely be initiated by the menstruating partners and not something that would be pursued independently.

In addition, one participant questioned whether period-tracker would even be necessary: *"What's in it for the partner? If something's going on, you'll tell them anyway, right?"* (M2). Others had similar sentiments of real-life communication being more important and relevant: *"If I had a partner, maybe I'd track more. But I don't want him checking that stuff without asking. Like, just ask me how I'm doing. Don't go look it up in an app."* (F4).

4.3.2. Theme 2: Data Sharing & Privacy

A reoccurring theme among participants was the emphasis of the importance of user control over what menstrual and health data is shared with a partner through a period-tracking app. This theme was expressed in all interviews, with all transcripts containing at least one mention regarding the theme and with a total of 19 references. While many did acknowledge the potential value of partner involvement regarding reproductive health, they continuously stressed that any form of data sharing must remain in full control of the menstruating partner.

This viewpoint was reflected across multiple of the transcripts and was articulated with strong language about choice and control. One participant summarised: *"[It is] Important that the woman decides what the man can see. She's in control."* (M2). Another participant added: *"She can kick him out of the app anytime. Like if they break up he shouldn't still have access."* (F4). This demonstrates that access to the apps' information must not only be on an opt-in basis but also be revocable at any moment.

Some participants explicitly linked the issue of period data sharing to intimacy and bodily autonomy. They framed cycles as something personal and intimate, and since it is your body which undergoes these processes, it is up to you to regulate the information sharing. *"If a woman has trouble discussing*

certain intimate things with her male partner it's up to her to decide whether or not to share." (M1). Another participant added: *"Like, even if a guy is using it it's all still about her body. So they should always be visible to the woman and then she decides what the man can see."* (F5).

Another reoccurring topic was the concern about potential misuse of period information. A participant warned: *"Some women might feel it's too intimate and the man might not fully understand it anyway. Or worse, he could misuse the information."* (F3). It occurred to the participants that there could be instances that this data could be used to make wrong assumptions: *"He might start making assumptions based on the app like, 'the app says she's feeling this way,' and he acts on that even if it's not accurate."* (M3). These assumptions occur even outside the context of period-tracking apps. One participant mentioned their personal experience with their colleagues, where they noticed they tended to make assumptions about them based on their symptoms and mood: *"Sometimes they immediately assume [from my how I act]: "Oh, you must be on your period now.""* (F1). There was also reflection on the broader experience of the primary user and the concern and risk of loss of control: *"Maybe if the woman feels like she's being monitored by her partner. Like if it starts feeling controlling. That might make her uncomfortable."* (M3).

Throughout the conversations, participants clarified that in the end period-tracking apps are initially not created for data-sharing, but as a tool. Hence, the apps should not shift away its focus from the primary users, even if it does introduce partner-oriented functionality. One participant (F3) stated: *"The app is not made for men. Men can learn from it but it should never lose sight of the fact that it's primarily for women."* Their partner (M3) mentioned: *"For me, it's just helpful to know things, but she's the one the app is actually meant to support"*.

4.3.3. Theme 3: Feature Utility and Relevance

The transcripts reflected that not every feature of period-tracking apps was deemed equally as relevant or appropriate for partner users. As part of the interview, several design exercises were performed by the respondents. One of which, was a sorting exercise to categorise the necessity of features in partner period-trackers into 'must-have', 'nice-to-have', and 'not necessary' (see Table 2).

Table 2
Features categorised into 'Must-have', 'Nice-to-have' or 'Not necessary' by interview participants.

Feature	'Must-have'	'Nice-to-have'	'Not necessary'
Countdown	F1-5, M1-3	-	-
Fertility window	F1-5, M1-3	-	-
Mood tracker	-	F1-5, M1, M3	M2
Symptom tracker	F1, F3-5, M1	F2, M2, M3	-
Notes & communication	-	F1-3, M1-3	F4, F5
Recommendations & notifications	F1, F2, F4, F5, M1, M2	F3, M3	-

Participants reported consistently that the countdown feature indicating the number of days until the next phase, was seen as important and a necessity in the application. One male participant (M3) who happens to use the partner feature in an existing period-tracking app reported: *"Being able to see where she is in the cycle… that overview is what I use most."* The fertility-window feature, was seen by all participants as a must-have. As one participant put it: *"Even if you're not planning for kids, it's useful like, you know when you need to be more careful."* (F3). Features regarding notes and in-app communication were regarded as a nice-to-have, except by two who thought it was unnecessary, as people should not have a say in things they have no experience in: *"If you don't have a period, what are you doing in that chat?"* (F4). Recommendations and notifications, such as tips around health and symptom-relief where mostly seen as a necessity, except for two participants who reported it as nice-to-have. One participant reported: *"The daily messages where it says how she might be feeling, those are actually really helpful. Even if it's not 100% accurate, it gives you some idea of what's going on."* (M3).

The mood tracker was seen as a nice-to-have feature, except for one participant who found that it was not necessary at all. One participant for instance explained that they would appreciate the feature as an indirect communication tool: *"If you notice someone feels a certain way, you can respond and*

communicate." (M1). This is in line with a sentiment expressed regarding theme 1, where a participant (F4) expressed to feel tired having to communicate about their period all the time and that they would appreciate if aspects of it were visible for their partners to see. The symptom tracker was mostly deemed as a must-have, except for 3 participants who thought it would be optionally nice-to-have. Symptom tracking was perceived as more meaningful for partners due to their direct impact on behaviour and relational dynamics. One male participant noted: *"That might be even more important than the countdown, for me. That's where your partner can actually do something."* (M3). When asked for the difference in incorporating a symptom or a mood tracker and why they categorised them differently, participants noted that it was mainly because moods are too personal and weaponizable for others to see. For instance, one respondent reported the following: *"Because moods are so easy to weaponize. Like, I hate how men will say, "You're acting this way because your period's coming." That's such a common thing. And with a mood tracker, they could abuse it. But symptoms? That's just facts. You can have back pain and still be in a good mood. But men always focus on the mood. "You're sad, you're angry, you're emotional." They ignore the physical pain."* (F4). Participants related this to the autonomy of the primary user in theme 2, that states that they get to decide what information is shown if they are comfortable with it.

In addition to the categorised features, participants also suggested their own features they deemed useful. One participant proposed: *"Insight into the phases she's in. With an explanation of the phase and how she might be feeling. Then recommendations, like what can he do to support her?"* (M2). Another feature was proposed: *"Yeah, or a chatbot that gives tips, like "She's now in this phase, so this is what you can do best.""* (M2). Another participant agreed to its usefulness: *"I use AI sometimes when I'm searching stuff online. It doesn't matter how you word your question, it just gives you a clear answer. That's really convenient. ... I could ask [a chatbot] something like: "She's feeling this way, what should I do?" Or "What should I expect?" It would help me a lot, since this is all new to me."* (M3). In the theme of knowledge acquisition, another participant noted that a search function with encyclopaedia-style information would be useful: *"But also a search function, if you see something you don't recognize, you should be able to look it up. A built-in encyclopedia."* (M1). For more passive users, features like home screen widgets were seen as an effective style of information disclosure. *"A widget on the home screen could work, just a quick glance."*, one participant mentioned (F5).

For the second exercise respondents were asked to sort the previously mentioned features into different amounts of accessibility, asking them who of the partners inherently should have access; 'Woman only', 'Shared view', or 'Not necessary for either'. The results are summarised in Table 3, which visualises how the different features were perceived.

Table 3
Features categorised based on accessibility by different users per interview participant.

Feature	Woman Only	Shared View	Not necessary for either partner
Countdown	M1, M3	F1-5, M2	-
Fertility window	-	F1-5, M1-3	-
Mood tracker	-	F1-5, M1, M3	M2
Symptom tracker	F3-5, M1	F1, F2, M2, M3	-
Notes & communication	-	F1-3, M1-3	F4, F5
Recommendations & notifications	-	F1-5, M1-3	-

Firstly, the countdown feature was mostly regarded as important and necessary for both partners. Most participants preferred it as a shared feature, while two felt it should be woman-only. One participant suggested how this feature could be dynamically implemented to change depending on the period phases: *"So maybe when she's not on her period, the countdown is the main thing. But when she is, the screen switches to something like symptoms."* (F4). The fertility window and recommendations & notifications were unanimously considered as a shared feature and therefore relevant for both partners. The mood tracker was mostly seen as relevant for both partners, except for one participant, reflecting their concerns about misuse and privacy in the first exercise. Symptom trackers provoked contrasting opinions, with equal number of respondents viewing it as woman-only as shared. No participants

rejected it, suggesting strong overall perceived value in general, similar to the first exercise. Duo 2 and 4 emphasised that even though they thought most of these features would be useful to partners, it should all be disclosed on the primary user's terms. Finally, notes and communication features were seen as a shared feature, since two users are needed for communication features, and two people found it unnecessary for either partner.

As an addition to the sorting exercises, participants were asked if they wanted to sketch out how they visualised the mentioned features and layout of features in a partner view (see Figure 2 and 3). They were encouraged to use the features they had previously categorised as 'Must-have' or 'Nice-to-have' and under 'Shared view'. The features drawn for by duo 1 were: colour-indicated cycle phases (top-left), emoji-indicator for mood (top-right), calendar with colour indicators (mid-centre), and search function (bottom). Duo 3 drew the following: phase indicator and countdown (top), hormone graph (middle), symptom-tracker, a *"Today"* summary (bottom), and a navigation menu (bottom).

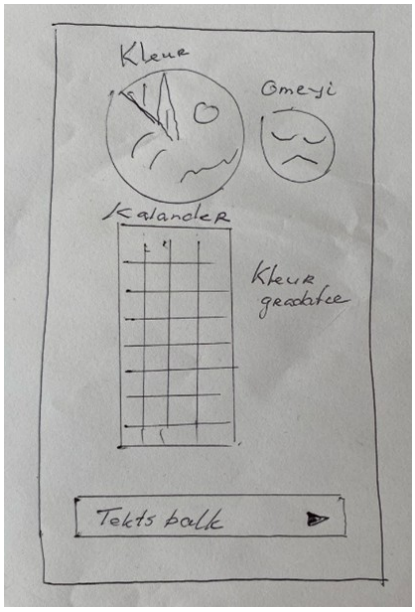

Figure 2: Interview sketch duo 1

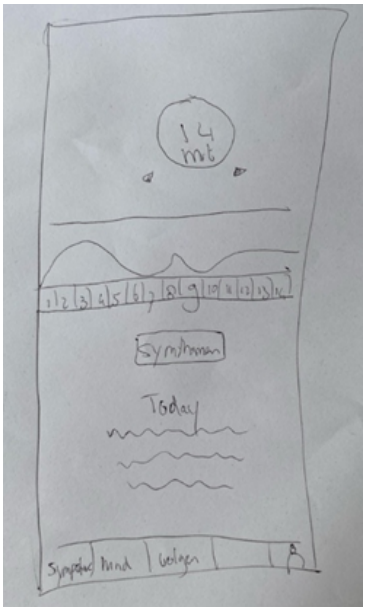

Figure 3: Interview sketch duo 3

4.3.4. Design Preferences

The following theme captured the respondents' concerns and preferences regarding application design and their needs for accessibility and intuitiveness.

Participants highlighted that for a partner feature to be effective and inclusive, the app's interface must be universally accessible: *"Yes, it should be usable and downloadable for everyone."* (M1). User-friendliness was considered a baseline requirement. The app should not only be simple to use but also offer guidance and clarity through its design: *"By pressing a button on the app, you immediately get to a menu… Like a guide from A to B and that everything is simple and information is easy to find"* (M1). Simplicity was frequently mentioned, especially in relation to data presentation and layout: *"I think most apps have way too much information. Sometimes it's so hard to find what you're looking for like settings, for example."* (F3). Graph specifically, were seen as potentially inaccessible or overwhelming for some users: *"Because not everyone knows how to read graphs. It should be friendly and logical. Easily recognisable."* (M1). One participant proposed a simplified view specifically for partners, stripping away any irrelevant elements: *"Unlike some other apps where it shows all kinds of graphics and baby stuff, I don't need that. I want to see the hormone chart, the daily info, the countdown, and be able to track symptoms easily."* (F3).

The use of visual elements like colours and icons were also seen as helpful. Participants suggested the usage of coloured bars to indicate the period length, gradients to indicate the different stages of the

cycle. One participant mentioned: *"At the start of the cycle it's green, then it shifts to yellow or orange, and during menstruation it turns red… Green is the 'safe' period"* (F1). About the emoji's they said: *"During that period, an emoji pops up, like a grumpy face so you know it's starting"* (F1).

Finally, language use also mattered: participants pointed out the difference between how people might communicate about these topics and how this could be reflected in the interface: *"Women like to explain more, are more emotional. I prefer short signals… Women want to share more than men and have more to say"* (M1). Some suggested incorporating playful and indirect language, such as *"using cute nicknames. Like how in English they say 'the Red Princess is coming'"* (F3). Text-based prompts with similar tone of language were also recommended: *"Or with sentences, like 'Be nice' or something like that. Or warnings that the man should be considerate of the woman"* (F1).

5. Discussion

This study explored attitudes and needs related to partner involvement in period-tracking apps

5.1. Data and Responsibility Sharing

Attitudes regarding shared responsibility were shown to be generally positive. 62% of the survey participants believed cycle tracking should be a shared responsibility. Interview transcripts revealed that shared tracking was only acceptable when built on clear communication and consent. In line with similar work [33], the fear of real-world consequences due to data misuse re-occurred as a concern in the interviews. Survey data also confirmed strong support for personalisable access, with 73% of respondents believing that the menstruating users should choose what their partner can see, while only 19% supported full access for the non-menstruating partner. Interview themes strongly supported these results. The concerns about user control were a re-occurring topic and were not limited to the feature preferences but also extended to the design ethos behind application development. For most of the features, participants clarified that even though useful and important, the visibility should be personalisable to the primary users' preference. The sorting interview exercises showed that opinions on the accessibility differed drastically per person. However, personalisability of access allows for full autonomy over personal data while, regardless of whether attitudes and comfort levels change over time. Taking these perspectives together, they suggest that partner involvement should never come at the cost of the autonomy of the primary user and that data sharing should be conceptualised as a controlled extension of the primary user's experience.

5.2. Educating Partners to Enable Active Engagement

Survey responses revealed a significant difference in self-reported confidence about reproductive health between genders ($W = 243$, $p = .018$, $r = .36$), with female respondents expressing notably higher confidence. This disparity echoed throughout interviews, where female participants described often having to educate their partners. Respondents consistently emphasised the importance of addressing this gap through educational features, strong communication and contextualised insights. Only 6% of all survey respondents cited "supporting a partner" as a reason for using such apps, and only 3% had used one jointly in a relationship. Interviewees perceived this limited involvement to stem from lack of initiative, with engagement only occurring when explicitly invited. This passivity contrasts with the desire for emotional and practical support surrounding the cycle. Literature shows similar and even more extreme attitudes of partners [28]. Most respondents were unaware of partner-support features, reinforcing that partner participation is not yet normalised. These findings point to the importance of partners being positioned as active learners and supporters by incorporating educational elements and relational framing into app content. Participants proposed educational components such as encyclopaedias and search functions for non-menstruating partners to learn independently. Additionally, some users requested home screen widgets or partner-specific dashboards that display only essential highlights, offering a low-effort mode of tracking.

5.3. Features for Partner Support

Several features that are often present in regular menstrual trackers were repeatedly identified as relevant and helpful for partners. Countdown features and fertility showcasing were classified as a "must-have" by all interviewees and were noted for their practical use in planning, intimate activities and symptom anticipation. Symptom tracking on its own was also seen as valuable, especially for partners who seek to better understand the menstrual cycle and its' discomforts. However, opinions diverged regarding other features, such as mood tracking, notes & communication, and recommendations. These diverging opinions highlights the need for personalisable feature support. When implemented correctly, research showed such co-usage to have positive effect [23, 22]. Still, a recurring sentiment was that the menstruating partner should remain priority and central in the app. While some praised partners who offer such support during cycles, others noted that this shared aspect of period tracking should not replace interpersonal communication but rather enhance it. Others described their experiences where the assumptions about one's behaviour were incorrectly linked to menstruation, adding to the emotional nuisance of constantly having to explain themselves. Some participants were not as guarded and appreciated the concept of shared data with their partner and even saw it as self-evident. Overall, to adjust menstrual tracking applications to include partners in a non-invasive manner, the findings highlight the importance of offering features that support understanding, education and relational care. Furthermore, the study highlighted the diverging and sometimes contrasting opinions and needs regarding features, design aspects and communication, which in turn emphasised the need for personalisation options to facilitate as many users in the period-tracker user groups as possible.

5.4. Visual Design

In terms of design and communication style preferences varied, but participants overall favoured clarity and intuitiveness. In the survey participants reported preferences towards visual and minimalist data delivery, such as using timelines, bite-size textual content, and infographics and charts. Interview participants supported this, noting that overly detailed or technical design could be overwhelming or too complex. Several respondents advocated for interface design that is simple and logical or that enables quick and understandable overviews of presented data. Some had specific contrasting suggestions, such as using playful cues, metaphors and nicknames, and icons such as emoji's. Survey statistics showed no significant gender difference in valuing gender-neutral language and design, however more than half of participants reported it as at least somewhat important. In interviews inclusivity was interpreted in broader terms than gender, as mentioned with the suggestions for accessible and minimal design. From these differentiating preferences could be derived that, in terms of design and communication, implementing personalisation options could accommodate those diverse needs and preferences to ensure maximum user satisfaction. Participants also gave their own suggestions for features that they saw as useful for partners. These included AI-assistants, such as a chatbot offering tips and answers.

5.5. Proposed Requirements

Based on the main findings of this work, the following adjustment requirements are proposed to ensure inclusion of both primary and secondary users' needs and goals for digital period tracking, while maintaining minimal conflict of the differences between the users. These adjustments are informed by both the survey and interview results and aim to guide application designers about both users. The five key domains are: privacy and autonomy, motivation and education, communication and boundaries, feature relevance, and interface personalisation.

1. Period-tracker should prioritise user's autonomy by providing transparent and revocable access: Consent and autonomy over personal data were central concerns across the research results. Participants described possible discomfort with ongoing and unmonitored access to period data, particularly in specific or changing relationship dynamics.

2. Partner education should be facilitated through accessible information: Several participants, expressed low confidence in their knowledge on reproductive health. Some also expressed curiosity

and willingness to learn and support their partners. Period trackers should include short and accessible content tailored and understandable to all potential users.

3. Period trackers should encourage partner involvement: Period-trackers should adopt conventions that actively normalise reproductive education and involvement in relationships. By framing partner involvement as a form of active support, period trackers could encourage more intentional and empathetic attitudes and help shift the perception to a positive shared experience.

4. Features should be personalizable based on partner preferences: Not all features we equally seen as relevant to partners. To accommodate this diversity, period-trackers should allow both users to be able to tailor features to what they think is relevant for them.

5. Period-trackers should offer personalisation of design and communication styles: The study highlighted the preference differences in both app design and communication. These differing preferences re-suggests the importance of personalisability in a broader definition, which highlights that the applications' design should accommodate multiple engagement and information-processing styles in order to satisfy multiple different user groups, rather than imposing a one-size-fits-all interface.

5.6. Limitations and Future Work

The interview study involved only a small sample of 8 participants with one due being platonic friends working as a hypothetical couple. Additionally, the sample of both the interview and survey lacked diversity in terms of gender identity and relationship dynamics. The absence of participants who identify as non-binary and individuals in queer relationships, limit the generalizability of the findings. Another limitation lies in the hypothetical nature of partner involvement for some participants. Also several interviewees or survey respondents reported to have no prior knowledge or experience with partner features or even period-trackers in general. Future studies should include recruit a larger number and spectrum of participants to better understand the entirety of attitudes and needs. Finally, although this study touched on the importance of personalisation in application design, it did not manage to explore in depth how personalisation can be technically and ethically implemented in the context of period-trackers.

6. Conclusion

This work aimed to investigate how period-tracking applications can be adjusted to facilitate secondary users, without undermining the primary users. The study used a multi-method approach, drawing results from both a survey and interviews, in order to explore how attitudes between user groups differ, what needs and goals they have and what concerns needs to be addressed during the design process.

The findings revealed that a generally positive attitude towards partner involvement was present among the participants, especially to improve relational communication about reproductive health and to share the responsibility. However, some doubts and reservations persisted, with participants stressing the importance of privacy and maintaining the primary user's autonomy over personal data.

From this research, five concrete adjustment requirements for the design of co-using tracking apps emerged: ensuring revocable partner access, tailoring feature visibility, allowing design personalisation, integrating educational content, and normalising partner involvement. These requirements offer actionable guidance for designers aiming to expand the inclusivity of period-tracking applications. While partner involvement in period tracking shows the potential to offer support and improve communication, it must be implemented carefully to maintain the autonomy of the primary users.

Declaration on Generative AI

During the preparation of this work, the authors used Grammarly in order to: Grammar and spelling check. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the publication's content.

References

[1] J. W. Morris, S. Murray, Appified: Culture in the age of apps, University of Michigan Press, 2018.

[2] D. A. Epstein, N. B. Lee, J. H. Kang, E. Agapie, J. Schroeder, L. R. Pina, J. Fogarty, J. A. Kientz, S. Munson, Examining menstrual tracking to inform the design of personal informatics tools, in: Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, ACM, New York, NY, USA, 2017, pp. 6876–6888.

[3] M. Hong, V. Rajaguru, K. Kim, S.-Y. Jang, S. G. Lee, Menstrual cycle management and period tracker app use in millennial and generation Z individuals: Mixed methods study, J. Med. Internet Res. 26 (2024) e53146.

[4] S. Mihaila, Period tracking app flo launches feature for male partners, 2023. URL: https://www.femtechworld.co.uk/news/period-tracking-app-flo-launches-feature-for-male-partners/.

[5] Stardust App LLC, Stardust: Period tracker, 2023. URL: https://apps.apple.com/us/app/stardust-period-tracker/id1553659764.

[6] Perigee AB, Cycles: Period & cycle tracker, 2020. URL: https://apps.apple.com/us/app/cycles-period-cycle-tracker/id505864483.

[7] A. Pichon, K. B. Jackman, I. T. Winkler, C. Bobel, N. Elhadad, The messiness of the menstruator: assessing personas and functionalities of menstrual tracking apps, J. Am. Med. Inform. Assoc. 29 (2022) 385–399.

[8] K. Kruglova, E. N. Gelgoot, P. Chan, K. Lo, Z. Rosberger, E. Bélanger, J. Kazdan, S. Robins, P. Zelkowitz, Risky business: Increasing fertility knowledge of men in the general public using the mobile health application infotility XY, Am. J. Mens. Health 15 (2021) 15579883211049027.

[9] R. L. Roudsari, F. Sharifi, F. Goudarzi, Barriers to the participation of men in reproductive health care: a systematic review and meta-synthesis, BMC Public Health 23 (2023) 818.

[10] N. Jacobs, J. Evers, De kwetsbaarheid van femtech, Podium voor Bio-ethiek 26 (2019) 13–15.

[11] N. Jacobs, J. Evers, Ethical perspectives on femtech: Moving from concerns to capability-sensitive designs, Bioethics 37 (2023) 430–439.

[12] E. Hammond, M. Burdon, Intimate harms and menstrual cycle tracking apps, Comput. Law Secur. Rep. 55 (2024) 106038.

[13] H. Martin, M. Narushima, Bleeding beyond binaries: a critical interpretive review of trans, non-binary and gender non-conforming experiences with menstruation, Cult. Health Sex. 27 (2025) 371–387.

[14] P. Power, Menstrual complexities, Health Educ. (Lond.) 95 (1995) 17–21.

[15] B. A. Corbin, Digital micro-aggressions and discrimination: Femtech and the'othering'of women, Nova L. Rev. 44 (2019) 337.

[16] C. Taylor, Biopower, in: Michel Foucault, Routledge, 2014, pp. 41–54.

[17] D. Lupton, The Quantified Self, 1st ed., Polity Press, 2016.

[18] G. Arnason, Biopower (foucault), in: Encyclopedia of Applied Ethics, Elsevier, 2012, pp. 295–299.

[19] L. A. Balfour (Ed.), FemTech, Springer Nature Singapore, Singapore, 2023.

[20] M. Brady, Helen o'grady, woman's relationship with herself: Gender, foucault and therapy (london & new york: Routledge, 2005), isbn 0415331269., Foucault Studies (2008) 101–104.

[21] L. Della Bianca, The cyclic self: Menstrual cycle tracking as body politics, Catal. Fem. Theory Technoscience 7 (2021).

[22] K. M. Shaffer, L. S. Mayberry, E. G. Salivar, B. D. Doss, A. M. Lewis, K. Canter, Dyadic digital health interventions: Their rationale and implementation, Procedia Comput. Sci. 206 (2022) 183–194.

[23] T. Cornelius, K. Gettens, E. Lenz, A. C. Wojtanowski, G. D. Foster, A. A. Gorin, How prescriptive support affects weight loss in weight-loss intervention participants and their untreated spouses, Health Psychol. 37 (2018) 775–781.

[24] M. Kirkman, D. A. Rosenthal, S. S. Feldman, Talking to a tiger: fathers reveal their difficulties in communicating about sexuality with adolescents, New Dir. Child Adolesc. Dev. 2002 (2002) 57–74.

[25] E. A. Kissling, Bleeding out loud: Communication about menstruation, Fem. Psychol. 6 (1996) 481–504.

[26] M. Epstein, L. M. Ward, "always use protection": Communication boys receive about sex from parents, peers, and the media, J. Youth Adolesc. 37 (2008) 113–126.
[27] G. B. Forbes, L. E. Adams-Curtis, K. B. White, K. M. Holmgren, The role of hostile and benevolent sexism in women's and men's perceptions of the menstruating woman, Psychol. Women Q. 27 (2003) 58–63.
[28] J. L. Goldenberg, T. Roberts, The beast within the beauty, Handbook of existential experimental social psychology (2004) 71–85.
[29] T. Peranovic, B. Bentley, Men and menstruation: A qualitative exploration of beliefs, attitudes and experiences, Sex Roles 77 (2017) 113–124.
[30] K. Zablock, Y. F. Fei, Young men's attitudes and understanding of menstruation, J. Adolesc. Health 74 (2024) 782–786.
[31] D. Duncan, G. W. Dowsett, "there's no teleology to it; it's just about the spirit of play": Men, intimacy, and "LATE" modernity, J. Mens Stud. 18 (2010) 45–62.
[32] M. Hayman, Breaking the Silence: Exploring the Impact of Supervisor Vulnerability on Menstrual Disclosures at Work, University of Arkansas, 2024.
[33] J. Cao, H. Laabadli, C. H. Mathis, R. D. Stern, P. Emami-Naeini, "i deleted it after the overturn of roe v. wade": Understanding women's privacy concerns toward period-tracking apps in the post roe v. wade era, in: Proceedings of the CHI Conference on Human Factors in Computing Systems, volume 18, ACM, New York, NY, USA, 2024, pp. 1–22.
[34] K. Amelang, (not) safe to use: Insecurities in everyday data practices with period-tracking apps, in: Transforming Communications – Studies in Cross-Media Research, Springer International Publishing, Cham, 2022, pp. 297–321.
[35] T. Forbrukerrådet, Out of control: how consumers are exploited by the online advertising industry, 2020.
[36] P. International, We asked five menstruation apps for our data and here is what we found..., 2020. URL: https://privacyinternational.org/long-read/4316/we-asked-five-menstruation-apps-our-data-and-here-what-we-found.
[37] J. Gunawan, C. Santos, I. Kamara, Redress for dark patterns privacy harms? a case study on consent interactions, in: Proceedings of the 2022 Symposium on Computer Science and Law, ACM, New York, NY, USA, 2022, pp. 181–194.
[38] A. E. Prince, Reproductive health surveillance, BCL Rev. 64 (2023) 1077.
[39] S. C. Conrey, E. L. Zurbriggen, Surveillance and gender-based power dynamics: Psychological considerations, in: The Palgrave Handbook of Power, Gender, and Psychology, Springer International Publishing, Cham, 2023, pp. 129–150.
[40] F. Rampazzo, A. Raybould, P. Rampazzo, R. Barker, D. Leasure, "UPDATE: I'm pregnant!": Inferring global downloads and reasons for using menstrual tracking apps, Digit. Health 10 (2024) 20552076241298315.
[41] D. A. Grimes, M. F. Gallo, V. Grigorieva, K. Nanda, K. F. Schulz, Fertility awareness-based methods for contraception: systematic review of randomized controlled trials, Contraception 72 (2005) 85–90.
[42] M. Mirzaliyeva, Ai features in period-tracking applications: The effect of ai on user experience of period-tracking apps, 2024.
[43] A. Tavassoli, M. Ahmadian, A. Abu Samah, L. A. Latiff, N. Taheri, A survey on men's awareness of premenstrual syndrome and marital satisfaction in married women in tehran, iran, Open Public Health J. 11 (2018) 104–111.
[44] C. Tila, Most downloaded period tracker apps worldwide 2025, 2025. URL: https://www.statista.com/statistics/1307702/top-period-tracker-apps-worldwide-by-downloads/.
[45] SimpleInnovation LLC, Period tracker and calendar, 2025. URL: https://apps.apple.com/us/app/period-tracker-and-calendar/id1032267351.
[46] Flo Health Inc, Flo period & ovulation tracker, 2025. URL: https://apps.apple.com/app/id1038369065.
[47] Biowink GmbH, Clue, 2025. URL: https://apps.apple.com/app/id657189652.
[48] A. Limited, Period tracker period calendar, 2025. URL: https://apps.apple.com/app/id896501514.

[49] Wachanga LTD, Clover: Menstruatie kalender, 2025. URL: https://apps.apple.com/nl/app/clover-menstruatie-kalender/id1423628793.
[50] A. L. Beatty, S. L. Magnusson, J. C. Fortney, G. G. Sayre, M. A. Whooley, VA FitHeart, a mobile app for cardiac rehabilitation: Usability study, JMIR Hum. Factors 5 (2018) e3.
[51] K. T. Bosworth, L. Flowers, R. Proffitt, P. Ghosh, R. J. Koopman, G. Wilson, A. K. Tosh, A. S. Braddock, Mixed-methods study of development and design needs for CommitFit, an adolescent mhealth app, MHealth 9 (2023) 22.
[52] K. Gambier-Ross, D. J. McLernon, H. M. Morgan, A mixed methods exploratory study of women's relationships with and uses of fertility tracking apps, Digit. Health 4 (2018) 2055207618785077.
[53] E. Goodman, M. Kuniavsky, A. Moed, Observing the user experience: A practitioner's guide to user research (second edition), IEEE Trans. Prof. Commun. 56 (2013) 260–261.
[54] I. Koskinen, J. Zimmerman, T. Binder, J. Redström, S. Wensveen, Design things, in: Design Research Through Practice, Elsevier, 2012, pp. 125–143.
[55] G. Rugg, C. Corbridge, N. P. Major, A. M. Burton, N. R. Shadbolt, A comparison of sorting techniques in knowledge acquisition, Knowl. Acquis. 4 (1992) 279–291.
[56] A. Osman, H. Baharin, M. H. Ismail, K. Jusoff, Paper prototyping as a rapid participatory design technique, Comput. Inf. Sci. 2 (2009).

A. Full Survey Questions

Survey questions used in the online survey with corresponding answer options. With the exception of the final question all are multiple choice:

1. What is your age?

- Under 18
- 18-24
- 25-24
- 35-44
- 45+

2. What is your gender?

- Female
- Male
- Non-binary / third gender
- Prefer not to say

3. What is your relationship status?

- Single
- In a relationship
- Married
- Other: …

4. Are you familiar with using a period-tracking app?

- Yes, I have used one
- Yes, my partner has used one
- Yes, both my partner and I have used one
- No, I am not

5. Which of the following apps are you familiar with? (Select all that apply)

- Flo
- Clue
- Clover
- Stardust
- Other, namely: …

6. What are/were your reasons for using or being interested in period-tracking apps? (Select all that apply)

- Period tracking
- Fertility and ovulation prediction
- Pregnancy prevention or planning
- Symptom management
- Supporting a partner
- Curiosity or learning
- Other, namely: …

7. If you are aware of a partner-access feature, have you used it?

- Yes, and I have used it
- Yes, but I haven't used it
- No, I was not aware

8. Do you feel confident about your amount of knowledge about female reproductive health and periods?

- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

9. How comfortable would you (hypothetically) feel sharing your cycle-tracking data with your partner?

- Very uncomfortable
- Somewhat uncomfortable
- Neither comfortable nor uncomfortable
- Somewhat comfortable
- Somewhat comfortable
- Very comfortable

10. Do you believe that menstrual cycle tracking should be seen as a shared responsibility in relationships?

- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

11. To what extent do you agree with the following statement: *"Period-tracking apps should offer features that allow partners to access cycle-related information."*

- Strongly disagree
- Somewhat disagree

- Neither agree nor disagree
- Somewhat agree
- Strongly agree

12. How likely would you be to use an app that allows partners that do not have a period, to help track their partners that do? (If you do not have a partner, you can answer this hypothetically as if you do have one)

- Extremely unlikely
- Somewhat unlikely
- Neither likely nor unlikely
- Somewhat likely
- Extremely likely

13. What level of detail should be available to partners in a cycle-tracking app?

- Full access to all information that is normally available, including symptoms, cycle stages, and notes
- Access to key highlights only (e.g. period days, fertile window)
- personalisable access: primary user chooses what the partner can see
- Educational mode only: no personal data about the menstruating partner, only general knowledge about cycles
- Partners should not have access to cycle-related information
- Other, namely: …

14. What style of information delivery would be most helpful for partners in cycle-tracking apps? (Select all that apply)

- Visual app features (e.g., calendars, timelines, icons)
- Bite size textual content (e.g. tips, summaries, facts)
- Notifications (e.g. about cycle stage updates and context)
- Walkthroughs and larger amounts of text (e.g. articles, blogs, wiki's)
- Gamified learning (e.g. quizzes, scores and points, awards)
- Infographics and charts
- Videos and animations
- None of the above
- Other, namely: …

15. Do you find it important that period-tracking apps maintain a gender-neutral design (e.g., removing stereotypically feminine visuals, using inclusive language)?

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

16. Do you have any suggestions or concerns regarding the integration of partners into cycle-tracking apps? (Open answer)

B. Full Interview Questions

1. What is your age?
2. What is your gender?
3. What is your relationship status?
4. Have you or your partner ever used a period-tracking app before? If yes, which one?
5. What would withhold you and what would motivate you to use a period tracking app with your partner?
6. Think of any app you really enjoy using. What do you like about it?
7. Walk us through a day when knowing something about your or your partner's menstrual cycle would help. What happens during such a moment? When and how would you open an app that could help track that?
8. Think of the apps that you have used in the past. What are some features that you have seen that you would put in a period tracking app, for partners that do not have periods and that may not know much about periods?
9. Here are some other example features. Can you sort the features you listed, and the example ones into 'Must Have', 'Nice to Have', and 'Not Useful'?"

- Mood tracker
- Fertility window
- Period countdown
- Symptom tracker
- Notes from partner
- Recommendations and notifications (e.g. foods, self-care)

10. Now also sort them based on accessibility in Woman Only, Shared View, or Not necessary for either.
11. Imagine there's a period tracking app made for partners. Can you sketch what the main screen might look like for the partner? You can use the features on the cards as examples.

- Would it be used actively or just to observe?
- What do you see as the most important features?
- Why did you arrange it this way?
- What should the partner see?
- What should they not see?
- How does it differ in comparison to an app for just for women?
- What features came up multiple times?
- Which ones caused debate?

12. If you could make just one rule for how a shared period app should work or what app-designers should keep in mind while designing an app like this, what would it be?