"This is the kind of experience I want to have": Supporting the experiences of queer young men on social platforms through design

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ABSTRACT

Queer young men (similar to others in the LGBTQ+ community) depend heavily on social platforms but their use can often be problematic. Their needs are often not adequately considered in the design of general platforms and they can be exposed to intra-community harms on LGBTQ+ specific platforms such as dating apps. To explore how social platform design could be improved to better support the needs of queer young men, we conducted a co-design study. We recruited 13 queer men working in technology design to generate new concepts for social platform features. We then refined these concepts and evaluated them in group sessions with end users, a different cohort of 15 queer young men. Here we present mockups of the concepts and findings from evaluations. Our findings show specific ways that providing more agency to social platform users could improve their experiences and we discuss implications for design.

CCS CONCEPTS

• **Human-centered computing** → **Empirical studies in HCI**; **Interface design prototyping**; **Empirical studies in interaction design**; **Social media**; **Empirical studies in collaborative and social computing**; • **Social and professional topics** → **Sexual orientation**.

KEYWORDS

queer, LGBTQ+, young people, social media, dating apps, co-design

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1 INTRODUCTION

LGBTQ+ [1] young people depend heavily on social platforms to find peer support and explore their identities [15, 17, 20, 27, 28]. However, they are often not considered in the design of such platforms [16]. Work within HCI and the humanities has explored how social platforms shape the experiences of LGBTQ+ young people on social platforms [1, 11, 15, 17, 20, 28, 39]. While they can experience great benefits from social platforms, their design means that LGBTQ+ young people can be exposed to harm. For example, social platforms can provide a way to explore being queer [2] or trans [34] and connect to peers but they can also lead to the unintentional disclosure of their identities or harassment [11, 20, 39]. However, there is comparatively little work that uses design-led approaches to explore how the design of social platforms could be improved to be more supportive of this group.

To address this gap, we conducted a series of co-design workshops that involved both queer designers and end users. This work forms part of broader research exploring how social platforms shape the experiences of queer young men in Australia. We include dating apps within the scope of this work as they are important sites of connection for LGBTQ+ young people [8]. While many LGBTQ+ young people share similar experiences, there are nuanced differences between the experiences of and platforms used by different subgroups within the community. We chose to focus this research

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[1]LGBTQ+ is an acronym for lesbian, gay, bisexual, transgender, and queer. The + recognises all non-straight, non-cisgender identities [23].

[2]Queer describes people whose sexual orientation is not exclusively heterosexual [23].

[3]Transgender, or trans, is an adjective to describe people whose gender identity differs from the sex they were assigned at birth [24].

[4]For stylistic reasons, we alternate between using LGBTQ+ and queer and trans, as together, they cover the groups represented in the acronym.
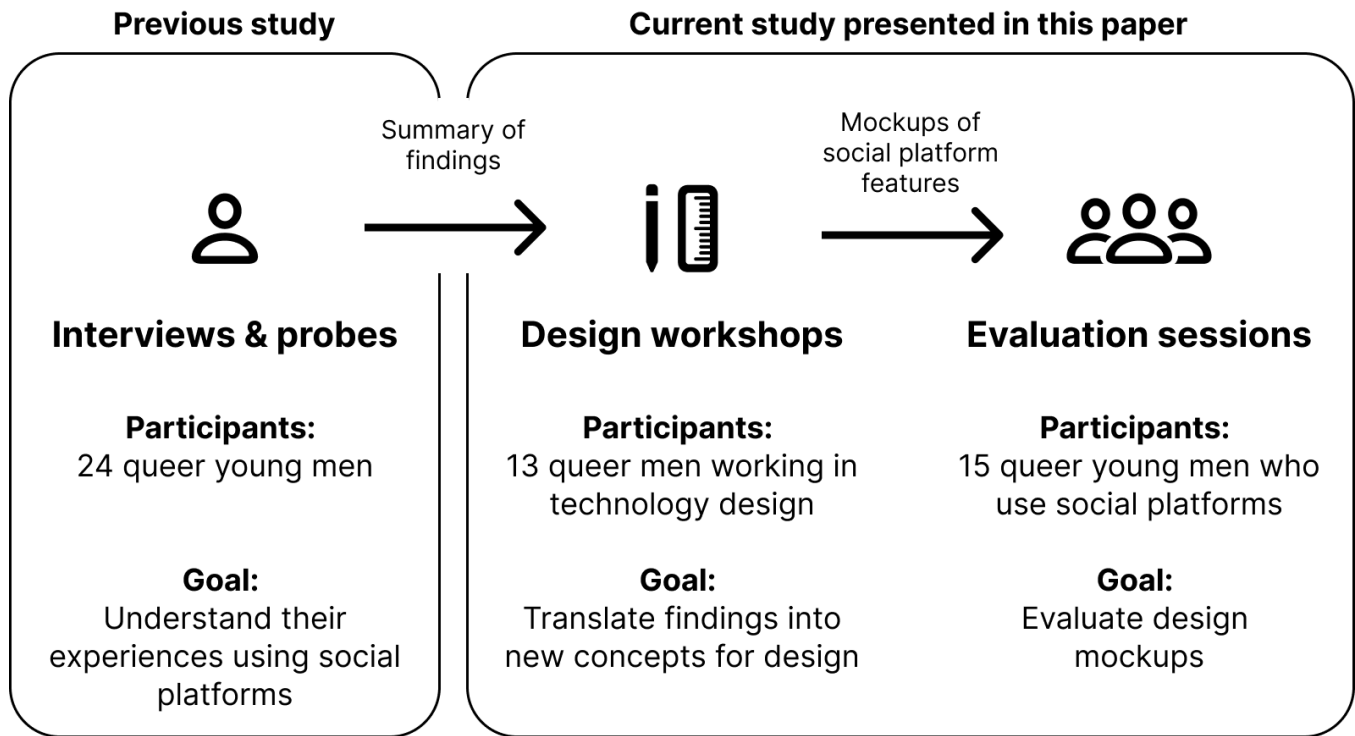
Figure 1: Overview of the research. This paper presents findings from the design workshops and evaluation sessions.

on the experiences of young men in particular, as the first author is a queer young man himself. See section 3.3 for more information about the positionality of the authors.

In the current design-led study, we explored and evaluated how new social platform features could shape the experiences of queer young men. To ground our design explorations, we drew on our empirical findings from a previous study with this group (see section 3.1.2). In the first stage of this study, we ran co-design workshops with designers based in the San Francisco Bay Area to generate new concepts for social platform features (see section 3.1). In the second stage, we presented mockups of features based on these concepts to participants in the Australian demographic for evaluation (see section 3.2). See Figure 1 for an overview of the research.

This paper presents mockups for social platform features that emerged from the co-design workshops and findings from the evaluation sessions. Together, they contribute to understanding how social platforms could be designed in ways that better support queer young men and provide them more agency over the kinds of experiences they have.

While our work focuses on queer young men, contributing to the growing body of work in HCI surrounding the experiences of LGBTQ+ people can also positively impact how technology is understood and designed for all [14, 17]. As Queer HCI researchers have argued, work that involves queer and trans communities can offer a unique perspective to identity management and online communities, among other areas [14, 17].

2 RELATED WORK

In this section, we present how queer young people use social platforms, their use of dating apps as sites of connection and issues around consent identified by prior work. We then discuss prior use of design-led approaches to social platform research with LGBTQ+ people.

2.1 Social platform use by queer young people

LGBTQ+ young people depend heavily on social platforms. While there has been significant progress in the acceptance of LGBTQ+ people in many countries, they still face widespread stigma [40] which can make it difficult or unsafe for many to express and be open about their identities [10, 15]. Social platforms can provide LGBTQ+ young people a place to explore their identities and find social support from peers, often without having to disclose being queer or trans to their existing contexts, which may be unsupportive [15, 17, 20, 27, 28].

While LGBTQ+ young people use many of the same platforms as their heteronormative peers, the norms of specific platforms can vary. For example, while in heteronormative studies, participants described Facebook as a place for "personal" presentations [50], queer and trans people often feel they must curate out their identities on the platform. Often, this is because of an expectation of being "friends" with one's family on Facebook, an audience to which many LGBTQ+ young people do not feel comfortable disclosing their identities [10, 15, 28, 31, 45].

Prior work has shown that while LGBTQ+ young people can use various strategies to curate audiences and manage privacy,

there are barriers and risks to using social platforms in this way [10, 11, 15]. For example, "context collapse", the phenomenon when different contexts unexpectedly clash on social platforms, makes it harder to target performances to a particular context and can lead to inadvertent disclosure of LGBTQ+ identity [10, 11, 15, 36]. Similarly, Carrasco and Kerne [9] argue that platforms do not allow LGBTQ+ people enough flexibility over the visibility of their profiles and content. Moreover, while social platforms offer many benefits to LGBTQ+ young people, they can also have detrimental impacts. Research shows that social technology use by LGBTQ+ people can lead to distress, with the potential for them to experience victimisation or discrimination [9, 25, 38, 43].

2.2 Dating apps as sites of connection

Dating and hookup apps are often left out of explorations of the way queer young people use social platforms (e.g. [9, 15, 21, 45]) and have instead been research separately (e.g. [3, 30, 33]). Prior work has emphasised that people use a range of social platforms in concert with each other and discouraged studying single platforms [15, 29, 50]. However, as Byron et al. [8] note, there is often a problematic separation made between dating apps and other social platforms that does not reflect the role they can play in finding friendships and connections to community.

Dating apps are widely used by LGBTQ+ young men for varied purposes. Grindr, a location-based people nearby application targeted primarily at queer men, is one of the most widely used applications [8, 30]. Although initially created for queer men seeking hookups, it is also a place where other forms of connection can be sought, for example, romantic partners or friendship [3, 8, 30, 53].

2.3 Issues around consent

Prior work with queer young men has highlighted that issues around consent on social platforms are prevalent [18, 19]. On dating apps, mismatched expectations between users about what they are for can lead to negative experiences [7, 48]. Those seeking forms of connection other than hookups on dating apps may also be less satisfied with their experiences [7, 12]. Additionally, as Wongsomboon et al. [48][p. 8] note, "the sexualized culture of adult online dating communities (aimed largely at cisgender sexual minority men) can be intimidating for adolescents and youth experiencing such culture for the first time". Similarly, research by Zytko et al. [52] with both queer and non-queer participants who use Tinder found that people often assume others are on the app solely to look for sex, even if someone's profile states otherwise. As Zytko et al. [52] describes, incorrect assumptions about what others were looking for could lead to mismatched expectations or sexual violence.

Receiving unsolicited explicit or "Not Safe for Work" (NSFW) content is also a common consent issue [19]. However, while work with queer men has explored unsolicited sexually explicit content being shared directly with people (e.g. [46]) or on dating apps (e.g. [19]), little attention has been paid to issues of consent where content is posted to one's social platforms account using features that restrict audiences, for example, Instagram's Close Friends.

In a broader context, Im et al. [32] explore how affirmative consent could be applied as a theoretical framework for understanding

social platforms and imagining new features. They define affirmative consent as "the idea that someone must ask for – and earn – enthusiastic approval before interacting with another person" [32, p. 1]. They then apply this to social platforms through five concepts "which are derived from feminist, legal and HCI literature in the context of social platforms: affirmative consent is *voluntary, informed, revertible, specific,* and *unburdensome*" [32, p. 1]. They then use these concepts to highlight ways social platforms fail to provide sufficient consent to users before using them to generate new ideas for design. While Im et al. [32] explore issues of consent in user interactions, they also go beyond this, for example, arguing social platforms ought to provide users more agency over the visibility of content they share and the content they interact with.

2.4 Using design-led approaches to improve social platform experiences

A growing body of work explores the experiences on social platforms of queer young men and LGBTQ+ people more broadly through qualitative methods. Work within HCI has often provided design considerations; for example, Carrasco and Kerne [9] argue for features that afford users greater "selective visibility" over their social platform presences. However, few studies explore the implementation of such considerations in terms of design.

To date, there has been comparatively little work that uses design-led approaches to understand how to improve platform design for LGBTQ+ people, with some exceptions (e.g. [16, 26, 29, 51]). While such work has generated valuable concepts and findings for design, the design approaches employed often stopped short of developing concepts and evaluating them with users. For example, as Hardy et al. [29][p. 525:7] note, their use of participatory design workshops was "primarily a process of design inquiry". A notable exception was work by Pereira and Baranauskas [41], which used a series of co-design workshops with LGBTQ+ participants who developed and then evaluated social platform designs. Similarly, while Im et al. [32] generated many ideas for design through the application of affirmative consent to social platforms, it was beyond the scope of their work to evaluate the concepts they generated with users. To address this gap, there is a need to contribute more design-led work that explores how social platforms could be improved to better support the experiences of LGBTQ+ people.

3 METHOD

This study is part of broader research that explores how the design of social platforms shapes the experiences of queer young men. Following the work of others who have emphasised the importance of using participatory approaches that give voice to LGBTQ+ users [16, 26, 29, 41, 51], we employed co-design methods to explore new directions for social platform design.

Similar to the work of others (e.g. Derix et al. [13]), we conducted this work in two phases, first recruiting professionals working in technology design to generate concepts, then evaluating them with users following a concept-driven or design workbook approach [22, 44]. In the first phase, we conducted design workshops with participants working in technology design in the San Francisco Bay Area to generate concepts for social platform features, presenting findings from a previous study to act as inspiration for design

(see section 3.1.2). In the second phase, we refined these concepts into a series of design mockups (see Table 1 for an overview) and presented them in a series of evaluation sessions. See Figure 1 for an overview of the research.

Following other work exploring LGBTQ+ young people's use of social platforms [20, 38], this research focuses on the experiences of participants between 18 and 28. Three main considerations supported this decision. Firstly, LGBTQ+ young people depend heavily on social platforms [15, 17, 20, 27, 28] and we wanted to focus on their experiences. Secondly, this work explores participants' practices on dating apps and in NSFW contexts, adult places where minors should not be. Finally, generational differences in the ways LGBTQ+ people in Australia use social platforms [42] led us to restrict the age range.

Both the previous study and the evaluation sessions were conducted in an Australian metropolitan city, while the design workshops were conducted in San Francisco. The San Francisco Bay Area is home to the headquarters of many technology companies, and this means that there are many more interaction designers who are experts in their field there than where the authors are usually based. We conducted the design workshops there for this reason, and because the first author had the opportunity to travel there. While there was a geographic difference between stages, the workshops were grounded in the experiences of Australian participants (see section 3.1.2) and did not involve the sharing of technology designers' personal experiences. The resulting concepts were then evaluated in the same context as the original participants (see section 3.2).

This research was approved by the university's Human Research Ethics Committee.

3.1 Design workshops

To generate new concepts for social platform features, we conducted two design workshops. Based on findings from the previous study (see section 3.1.2), posters were created for each of the five areas of findings and given to participants so that they could explore them in-depth and at their own pace. The first author, who facilitated the workshops, presented an overview of each of the posters at the beginning and answered questions about the findings (posters can be found in the supplementary materials). This was then followed by co-design activities (detailed in 3.1.3).

3.1.1 Participants and recruitment. We distributed adverts describing the study on social platforms through the networks of the first author and through paid placements targeting queer men working in technology design. The first author also contacted technology designers working in the San Francisco Bay Area to invite them to take part. The adverts directed to a sign-up form to provide contact details and answer screening questions. Participants were invited to attend based on their professional experience. 8 participants attended the first workshop and 5 the second. Participants all worked in technology design, 6 at FAANG [5] companies, 5 as senior designers or above, 3 as designers, 2 as software engineers involved in UX design as well as a senior research engineer, a product manager and an accessibility engineer. All participants were queer men, 6

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[5]Facebook, Apple, Amazon, Netflix, Google

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were white, 5 were Asian, and 2 were Latino. This clearly does not provide coverage of all ethnic groups but nonetheless provides reasonable diversity. As noted in section 2.4, prior co-design work with LGBTQ+ end-users has often been done as a process of design inquiry and not led to concepts that were further developed. While none of the designers worked directly on social media apps, their senior roles in the field and experience allowed them to effectively create actionable concepts. Furthermore, all were queer men and end-users of such platforms, and as such, they brought a valuable combination of "insider knowledge" as both designers and end-users.

3.1.2 Using participant experiences as inspiration for design. Findings generated in the previous study were used to ground the design workshops. In that study, 24 queer young men were interviewed about their use of social platforms. The study involved two interviews and the use of a kit of probes, each of which similar to Wallace et al. [47, p. 343], "related to different facets of what we thought might be significant, as informed by theory and our own experiences". The first interview served to get a broad sense of how participants experienced and felt about their use of social platforms. Following others [4, 37, 54], the second interview used the returned probes as a dialogical tool – co-interpreting them with participants to develop a shared understanding of their experiences. The first author, in consultation with the others, used reflexive thematic analysis following Braun and Clarke [5, 6] to generate findings.

3.1.3 Co-design activities. Both workshops ran for approximately two hours, with participants working in small groups to complete activities. Workshops started with an introduction, including an icebreaker activity before the first author presented the findings posters. In the first half, participants wrote on post-it notes, and in some cases sketched, initial ideas for social platform features that responded to the findings. The first author clustered the ideas, and in the second half, gave participants groups of them to develop into concepts. Concept sheets were given to participants to provide a structured way for them to flesh out concepts, including providing a name, rationale, description, sketches and evaluations (see the supplementary materials for a copy). The workshops ended with a closing discussion that asked participants to reflect on the concepts they had created.

3.2 Evaluation sessions

Concepts developed in the design workshops were refined and then evaluated with 15 local participants in one of three group evaluation sessions. This follows concept-driven [44] and design workbook [22] approaches as a form of participant engagement, which use designed mockups as a way to ground explorations of theoretical proposals.

3.2.1 Participants and recruitment. Similar to the design workshops, we distributed adverts describing the evaluation sessions through the networks of the first author and through paid placements. The adverts directed people to a sign-up form to provide contact details and answer screening questions. To include a range of demographics and experiences, we selected participants based on their self-described age, cultural background, and social platform usage. The first author also invited participants from the previous

Australian study (see section 3.1.2), 5 of whom participated in this phase of the research as well. 3 participants attended the first evaluation session, 7 the second and 5 the third. 11 participants were cisgender while 4 were trans. 10 identified as white/European, 3 as Asian, 1 as Latino and 1 as mixed-race European and Pacific. While we were unable to provide coverage of all ethnic groups, this sample broadly reflects the Australian demographic [2]. The youngest participant was 19, and the oldest was 28.

3.2.2　Creating mockups. Based on the ideas and concepts generated in the design workshops, the first author created a number of mockups to evaluate with participants (presented in section 4). He started by visually mapping and clustering the concepts and ideas generated. From this, he selected concepts he thought would be the most supportive of queer young men's experiences to be further developed. Then, he refined the concepts through sketching before creating mockups using Figma [6]. In the process, he drew on the concept sheets completed at the workshops.

Many of the concepts created in the design workshops were based on Instagram and Grindr. Similarly, Instagram and Grindr were the two social platforms participants talked about most in the previous study and are very commonly used. In creating the refined mockups, the first author designed them as features for these apps. By basing the mockups on these apps, the features could be shown in less abstract ways and in contexts that participants in the evaluation sessions were already familiar with. Additionally, by using these two apps which represent different kinds of social platforms, the range of different features developed could be represented in ways that were coherent. For example, the concept *Smart social circles*(4.4.1, Figure 7) relies on posting content to a profile of followers, like one does on Instagram, but this is not usually possible on dating apps. Conversely, the concept *Providing more control over who can find and message you*(4.2.1, Figure 4) is most suited for a dating app such as Grindr where there is a desire to "match" with unknown others.

3.2.3　Evaluation session activities. Evaluation sessions lasted approximately 2 hours. They started with a brief introduction to the session and an icebreaker before the first author led participants through evaluations of each of the design mockups. Worksheets that described and showcased the mockups were given to participants (worksheets can be found in the supplementary materials). The worksheets also had space for participants to rate each concept, provide justification for their rating and suggest improvements.

Mockups were presented in the same groups as they are in this paper (see Table 1). For each group, the first author explained them and then gave participants time to explore them and complete the worksheet. In the second and third sessions, at which numbers allowed, participants worked in 2-3 person groups, discussing the mockups and completing the worksheets collaboratively. The first author would then lead a discussion where participants shared their thoughts. When discussion had been exhausted, the process was repeated with the next group of mockups.

Using worksheets had multiple benefits. Participants could draw on and annotate the mockups with comments. They allowed time

for structured reflection and exploration before the discussion. Finally, they also provided a useful resource during analysis where points that had not been raised in the discussion were found.

3.2.4　Reflexive Thematic Analysis. As Braun and Clarke [6] note, thematic analysis is often perceived as a single method where, in fact, there are multiple approaches, each with its own procedure and epistemological foundation. As a constructionist epistemological approach underpins this work, we chose to follow the reflexive thematic analysis approach described by Braun and Clarke [5, 6]. Reflexive thematic analysis involves six phases that act as guidelines for analytic engagement and are often conducted in non-linear or recursive ways, supporting reflexivity and continued engagement with the data [34]. The six phases are: familiarising yourself with the dataset; coding; generating initial themes; developing and reviewing themes; refining, defining and naming themes; and writing up [6, 34].

The first author transcribed the workshop recordings as part of the data familiarisation process. He then used Atlas.ti [7] to code the transcripts and completed worksheets in an inductive and iterative way that described the semantic meaning communicated by participants and the latent meaning he interpreted from what they described. After initial coding, he organised and refined the codes. He used the resulting codes to create initial themes that reflected participants reactions to the concepts. Where themes were closely related, he grouped them into overarching themes. In total, 12 themes were developed across 4 overarching themes. Throughout this process, the first author consulted with the other authors by presenting initial and draft versions of the coding, themes and theme descriptions. Through discussion, they contributed to refining the initial codes and developing, naming and organising themes. The decisions for the first author to complete all the coding and to code latent meaning reflect the constructionist epistemological approach taken in this work, which values the researcher's subjectivity and renders attempts to demonstrate "coding reliability and the avoidance of 'bias' [as] illogical, incoherent and ultimately meaningless" [6, p334].

3.3　Positionality of authors

I (the first author) am a cisgender queer young man, like many participants involved in the research. In consultation with the other authors, I organised and facilitated the design workshops and evaluation sessions. This involved designing the activities, creating the mockups, recruiting participants and analysing the data. Similarly, in the previous interview and probe study (see section 3.1.2 and Figure 1), I was primarily responsible for interviewing participants, facilitating the use of the probe kit and analysing the data. My experience as an insider within the community enabled me to build rapport with participants. It also allowed me to read between the lines of what participants were saying or to understand their shorthand. I suspect that being a visibly queer man of a similar age to most participants made them feel more comfortable sharing their experiences. On the other hand, some participants may have curated what they shared with me and other participants to present

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[6]Figma, Inc. 2024. Figma. https://figma.com

[7]ATLAS.ti Scientific Software Development GmbH. 2024. ATLAS.ti. https://atlasti.com.

themselves in a better light. While my insider status has been help-ful, I have also taken great care to avoid assuming participants have had the same experiences and to do justice to their unique situations, experiences and outlooks. Nevertheless, it is impossible to remove the researcher from the research, especially in qualitative work such as this, and it is important to acknowledge my position in relation to the work.

Authors two, three and four have contributed to the research design and reporting. They did not have any contact with partici-pants. Author two is also a cisgender gay man, which meant that similar to the first author, he could relate to some of the perspec-tives participants described. The second author notes that this could have led to assumptions about the participants' experiences or the research direction but did his best to remain as guided and led by literature and participants' data as possible. Authors three and four do not identify as part of the LGBTQ+ community. Author three is a heterosexual cisgender man, and author four is a heterosex-ual cisgender woman. She has completed training offered by the university to be an ally to those belonging to sexual and gender minorities.

4 DESIGN MOCKUPS

In this section, we describe the design mockups presented to par-ticipants in the evaluation sessions. See Table 1 for an overview.

4.1 Design concepts that block unwanted messages

On dating apps such as Tinder, one must "match" with someone before any messages can be exchanged. However, dating apps such as Grindr allow anyone to message. While this has positives, receiv-ing unwanted messages, especially unsolicited explicit pictures, is a common problem [19]. These concepts offer users more control over how people can message them.

4.1.1 New settings for accepting or blocking NSFW pics. (Figure 2) Some platforms, for example, Instagram, hide pictures sent by those one is not following by default – that way, users can decide if they want to reveal what may be a problematic image from an unknown other. Alternatively, some platforms, such as Tinder, do not allow pictures or videos to be sent at all. On the other hand, some do not mind receiving NSFW content, especially on dating apps where they may see it as part of facilitating sexual encounters with those they interact with [19, 52]. Some platforms, such as Grindr, recognise variation in whether users would like to receive NSFW content – they offer three profile options for communicating one's openness to receiving NSFW pictures, "yes please", "not at first" and "never". While this allows users to explicitly consent, or not, it relies on someone being proactive enough to check before deciding whether to send NSFW content. This allows users to automatically block or blur NSFW pics.

4.1.2 Block repeated messages. (Figure 3) A common complaint on dating apps such as Grindr that do not have "matching" processes is receiving repeated messages from the same user. This concept allows users to limit how often people can message them. There's an option to allow repeat messages from people in their favourites.

4.2 Design concepts that help align expectations

Dating apps are particularly important places of connection for queer young men and are used for a variety of reasons [3, 8]. How-ever, mismatched expectations can cause issues and many face abuse or harassment [19, 48, 52]. These concepts offer ways to better align expectations.

4.2.1 Providing more control over who can find and message you. (Figure 4) A common feature of dating apps is offering users a way to filter the profiles they see. On matching-based apps such as Tinder, this affects not only the profiles of others presented to a user but also who the user is presented to. On apps such as Grindr, the filters a user selects do not limit their visibility to others, meaning that someone outside their filters is able to contact them. This concept changes Looking For from a static profile field and makes it a filter so that it is easier to change based on what users are after each time they use the app. It also allows the option for filters to be bi-directional. Finally, it shows messages from people they have not interacted with in a separate tab as message requests.

4.2.2 Signalling what you are looking for. (Figure 5) What someone is looking for can vary depending on who they are talking to, so this concept allows users to tailor what their profile shows under Looking For. When messaging someone for the first time, users are prompted to say what they are looking for. In the chat window users can now see both others and their own Looking For and NSFW picture preferences so expectations are clearer.

4.3 Design concepts that help people use dating apps

Sometimes dating apps can be overwhelming, especially when first joining and if users are unsure who to ask for help getting started [48]. People also have different expectations of how to behave on the apps. The concept below explores how a chatbot could help address these issues.

4.3.1 Grindr Bot. (Figure 6) This concept explores what a dating app chatbot could look like. When users first install the app, it helps onboard them. They can also ask it questions they have. Finally, it prompts users when it thinks they are going to do something that might be disrespectful.

### 4.4 Design concepts for improving agency over what you see and share

These concepts give users more agency over the content they see and the audiences for content that they share.

4.4.1 Smart social circles. (Figure 7) Many social apps have ways to filter the audience of posts users make; for example, Instagram has Close Friends. However, such features often allow for only one list, which can be problematic. This concept allows users to create multiple lists and uses AI to suggest lists when posting, as well as people to include in them. This mock-up shows stories but this could also be an option when making posts.

4.4.2 Focus modes for content feeds. (Figure 8) At the moment, many apps offer an algorithmic feed or a chronological one. While there are options to filter out content from algorithmic feeds this

Table 1: Overview of mockups

Group of design concepts	Mock-up	Designed for
4.1 Design concepts that block unwanted messages	4.1.1 New settings for accepting or blocking NSFW pics	Grindr
	4.1.2 Block repeated messages	Grindr
4.2 Design concepts that help align expectations	4.2.1 Providing more control over who can find and message you	Grindr
	4.2.2 Signalling what you are looking for	Grindr
4.3 Design concepts that help people use dating apps	4.3.1 Grindr Bot	Grindr
4.4 Design concepts for improving agency over what you see and share	4.4.1 Smart social circles	Instagram
	4.4.2 Focus modes for content feeds	Instagram
4.5 Design concepts for finding connection to community	4.5.1 Suggested topics	Instagram
	4.5.2 Local Guide	Grindr
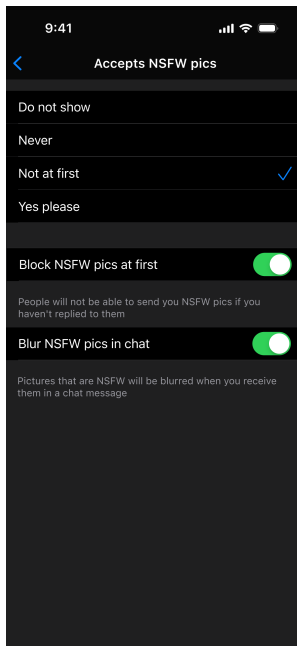
(a) New options for blocking or blurring NSFW pictures are given alongside the existing profile options.
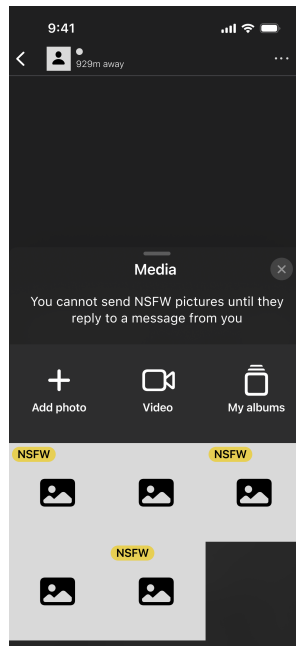
(b) If blocking is enabled, people will be blocked from sending NSFW pics at first. To make this clear, a new message is shown when sending pictures, and a new NSFW label highlights which pictures the app has identified as being explicit.
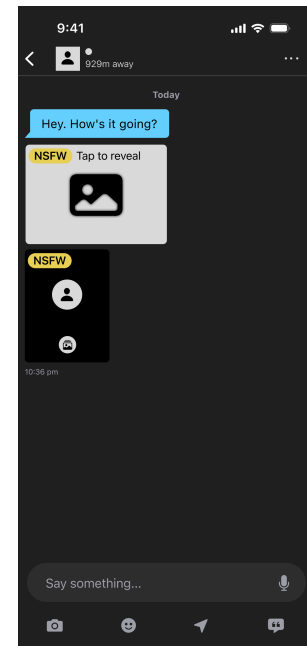
(c) If blurring is enabled, NSFW pics will be blurred until the user taps to open them.

Figure 2: Mockups of a Grindr interface for *New settings for accepting or blocking NSFW pics* (section 4.1.1)

is often static [32] and there is little control over what one sees in the moment. This concept allows users to create customisable focus modes over the content that gets presented to them. They can choose how much content is from friends or suggested, allow or block NSFW content, set the feed type to chronological or algorithmic as well as set what kinds of content they do or do not want to see.

4.5 Design concepts for finding connection to community

Social platforms often offer LGBTQ+ young people ways to learn about being queer or trans and connect to others in the LGBTQ+ community [8, 20, 38]. These concepts try to support this.

4.5.1 Suggested topics. (Figure 9) This concept would make it easier to explore topics related to the content one sees. This example shows how it could help uncover LGBT history content, but this
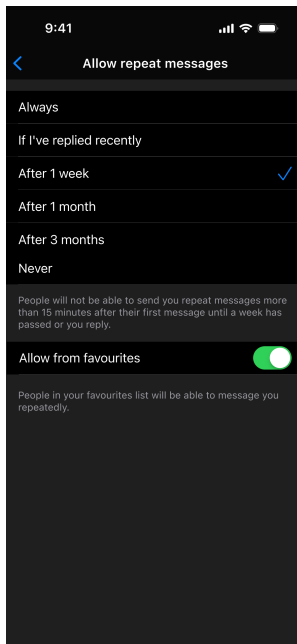
(a) New options for blocking repeated messages. People will have a 15-minute window to send messages before it becomes a repeat message.
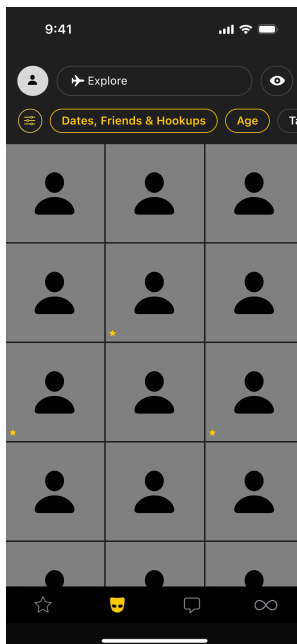
(b) If enabled, a new notice will show when someone is blocked from sending messages and provide users with the option to change their settings.
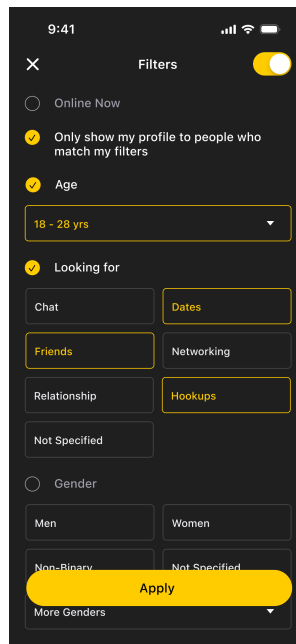
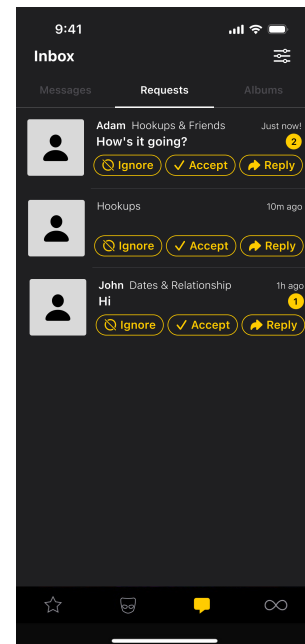(c) A new notice is displayed when someone is blocked from sending new messages.

Figure 3: Mockups of a Grindr interface for *Block repeated messages* (section 4.1.2)

(a) What users are looking for is now highlighted at the top of their filters.
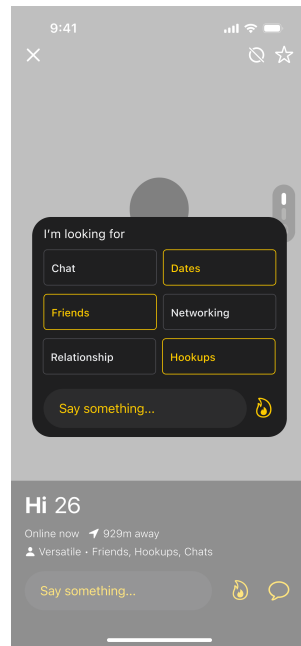
(b) New option to limit who can see users to those within their filters. Looking For is more prominent.
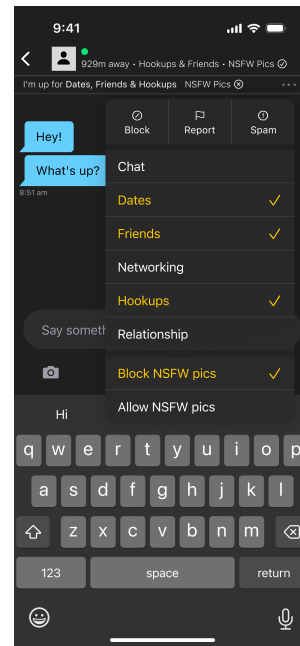
(c) A new requests tab shows messages from people users have not interacted with before.

Figure 4: Mockups of a Grindr interface for *Providing more control over who can find and message you* (section 4.2.1)

(a) New modal for users to signal what they are looking for when they message/tap someone. This defaults to their current Looking For but can be customised.

(b) The chat window now shows both users' expectations for Looking For and NSFW pictures. Users can change this at any time using the dropdown menu.

Figure 5: Mockups of a Grindr interface for *Signalling what you are looking for* (section 4.2.2)

could happen for any kind of content and provide a way to more actively explore communities.

4.5.2   Local Guide. (Figure 10) Maybe a user is in a new city or just wants to get more involved in the local LGBTQ+ community where they are. This concept showcases a new explore feature for Grindr that lets users find out about a city and its LGBTQ+ events, places and support services. It also helps them find people who are local or perhaps just passing through.

5   FINDINGS

Through our analysis, we developed a number of themes related to participants responses to the mockups. We present themes in four sections: 1) providing more opportunities for consent and clarifying expectations, 2) providing more agency over self-presentation, 3) providing transparency and control over automated, algorithmic and AI features, and 4) providing ways to connect with local communities.

5.1   Providing more opportunities for consent and clarifying expectations

Participants greatly appreciated features that gave them agency over the kinds of interactions they had, particularly on dating apps. This section explores participants' responses to features designed to address issues of consent and mismatched expectations.

5.1.1   Providing more agency over receiving or viewing NSFW pictures. Participants overwhelmingly liked the ability the mock-up, *New settings for accepting or blocking NSFW pics*(4.1.1, Figure 2), provided them to block NSFW pictures. One participant not use Grindr because of how common it is to be sent NSFW pictures and said that were this feature available, he would start using the app. Similarly, participants liked the ability to toggle blocking NSFW pictures within a chat as afforded by *Signalling what you are looking for*(4.2.2, see Figure 5b). Currently, Grindr allows users to specify their preference for receiving NSFW pictures as "never", "not at first" or "yes please". While the first and last options are clear, "not at first" may be ambiguous, and this ability to signal gives agency to users to communicate when and if they are happy to receive them.

The main concerns around features that block NSFW content were related to how the app would identify NSFW content. These and other concerns related to automated features are discussed in section 5.3.3. Additionally,some participants expressed that they are happy to receive NSFW pictures. However, they appreciated that others would benefit and were not opposed to their existence.

The automatic blurring of NSFW pictures shown in *New settings for accepting or blocking NSFW pics*(4.1.1, Figure 2) was also popular with participants. As they noted, blurring all pictures, by default, is a simpler solution than detecting whether they are NSFW. However, it still provides agency to users to decide whether they want to see a picture. One participant noted that Instagram by default already blurs pictures from people one does not follow.
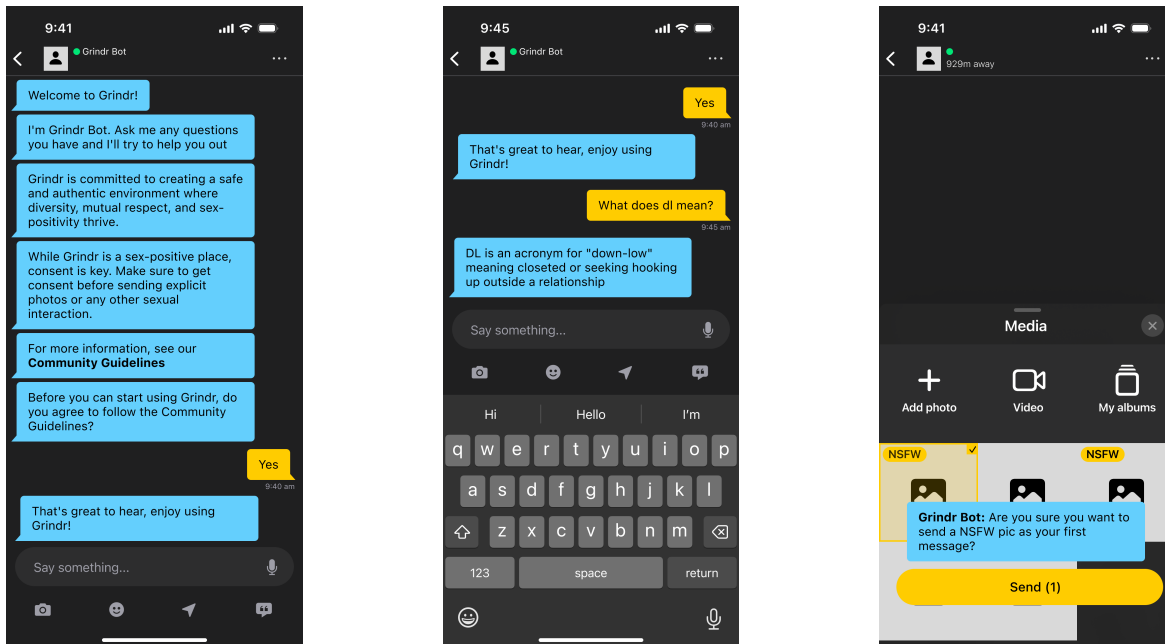
(a) When users sign up, Grindr Bot welcomes them to the app and makes sure people are aware of the Community Guidelines.

(b) Users can ask Grindr Bot questions, for example, if they do not understand something.

(c) Grindr Bot prompts people when they are about to do something that might be disrespectful.

Figure 6: Mockups of a Grindr interface for *Grindr Bot* (section 4.3.1)

"it gives you a blurry version of it. And then you can go, 'That's a dick. I'm not going to look at it.' But like, if you look at it and it's like purple, you're like, 'Okay, that's not a dick.'" [Evaluation session two]

The desire to control receiving NSFW pictures could also be situational. Participants described situations where they thought the blur function would be beneficial, for example, when using Grindr in a public place. Similarly, participants appreciated the ways *Focus modes for content feeds* (4.4.2, Figure 8) could help them sanitise their content feeds in situations where it would not be appropriate for NSFW content to appear. One group suggested making this more accessible by including a toggle they could quickly use to remove NSFW content from their feed.

5.1.2 Supporting people to communicate what they are looking for and expectations in dynamic ways. A common reason that participants liked *New settings for accepting or blocking NSFW pics* (4.1.1, Figure 2) and *Signalling what you are looking for* (4.2.2, Figure 5) was that they would make their expectations around receiving NSFW content and what they are looking for very clear to other users.

"I quite like this feature in that, I mean, the intent of Grindr is to find people quickly, whether you're dating or hooking up, it's trying to get to a connection as quick as possible. And I feel like this helps you get there. It's not a tap, it's not a vague emoji. It's 'I'm looking for this, this and this with you.'" [Evaluation session three]

While Grindr profiles can already show what a user is looking for and whether they consent to receiving NSFW pics, it is common for profiles to be ignored. Participants liked that *New settings for accepting or blocking NSFW pics* (4.1.1, Figure 2) would prevent people from ignoring their preferences and sending NSFW content anyway and that *Signalling what you are looking for* (4.2.2, see Figure 5b) puts what they are looking for and their preferences in a very obvious place at the top of the chat screen. In addition, participants thought it would be helpful to see signals from others which would help them decide how to interact, for example, when talking to someone who is only looking for hookups compared to someone who is interested in dates.

"I also like that it's... there's a flag at the top. So, depending... regardless of how many conversations you've had, you're reminded constantly based on a specific prompt that they've input into the system, what they're looking for. So you might not have messaged them for a month or two, and you instantly know what they're looking for. I think that's beneficial." [Evaluation session three]

Participants also liked the ability that *Signalling what you are looking for* (4.2.2, Figure 5) would provide them to adjust their expectations for specific users as they could vary depending on who they were talking to as well as their current mood and situation. Some participants suggested that there should be a way to signal on their profile what they are looking for in that moment separately to what they are generally looking for, for example, if they are temporarily
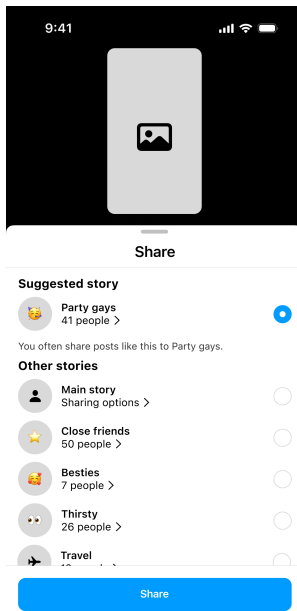
(a) When posting a story, users can now pick from a number of lists. A suggestion is made for which list to share it to, and other lists are shown below.
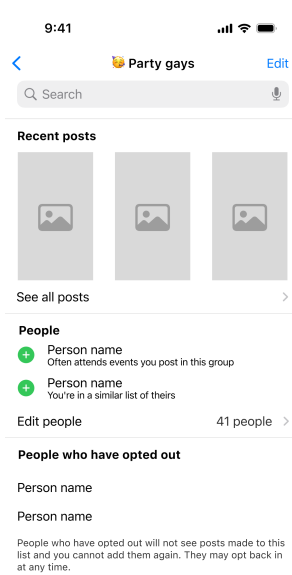
(b) A new edit list interface. Users can see recent posts, get suggestions for who to add and see who has opted out.
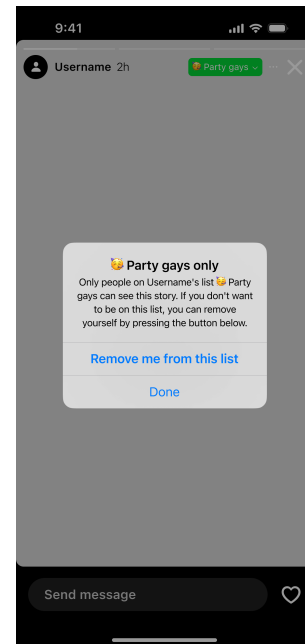
(c) When viewing a story shared to a private list, users can see the name of the list as well as opt out of it.

Figure 7: Mockups of an Instagram interface for *Smart social circles* (section 4.4.1)
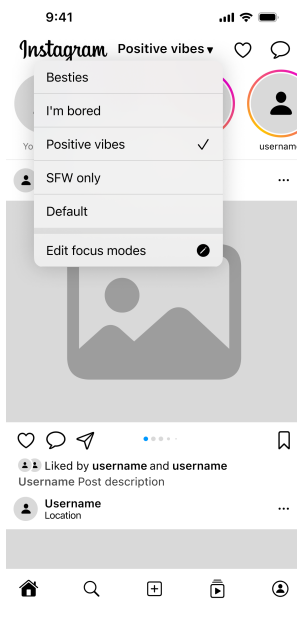
(a) Users can select a focus mode to change what the algorithm presents them.
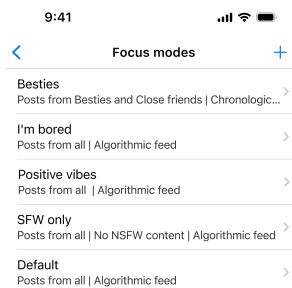
(b) Users can create focus modes that suit different moods or contexts.

(c) Each mode is customisable.

Figure 8: Mockups of an Instagram interface for *Focus modes for content feeds* (section 4.4.2)

(a) The Explore page has a new section that shows suggested topics.

(b) Users can explore topics in a new network view.

(c) Suggested topics are highlighted on related content to encourage users to explore more.

Figure 9: Mockups of an Instagram interface for *Suggested topics* (section 4.5.1)

open to hookups. Participants also noted that being able to signal to specific users could allow someone who is reluctant to put what they are actually looking for on their profile to more accurately present themselves to someone they are talking to.

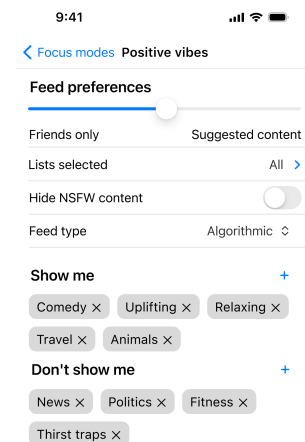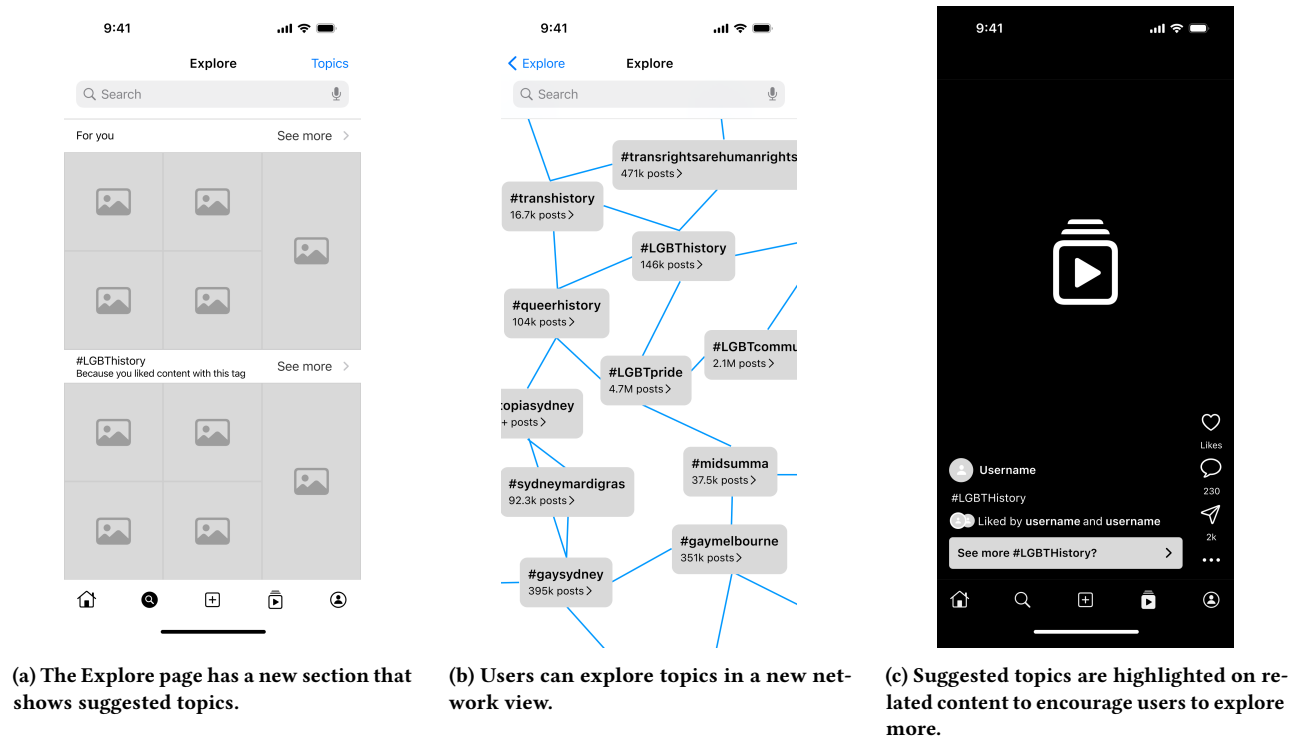Participants much preferred the option to change their expectations within the chat window at a time of their choosing (see Figure 5b) compared to when beginning an interaction with someone (see Figure 5a). Some thought that customising this for each new interaction was overkill. Others highlighted that they often do not know what to expect before interacting. The third evaluation session had an in-depth discussion between participants about how it would look when someone changes what they are looking for with you.

Interestingly, participants thought that regardless of whether they changed the expectations signalled to another user, that their profile should still state their general preferences and not be overridden. However, some commented that this might lead them to be more conservative on their profile so that when signalling, they are more likely to add something they are looking for than to remove something.

> "I think the benefit of this is that it's short-cutting communication. So, yes, they might have one thing on their profile, but they made it clear that they're only looking for chats with you" [Evaluation session three]

5.1.3   Building consent into features that target audiences. Building more consent into features that target audiences was another area

where participants appreciated increased agency over seeing NSFW pictures. The ability to opt-out of someone's private list for stories, as shown in *Smart social circles*(4.4.1, see Figure 7c), was widely desired. However, a number of participants suggested that this did not go far enough and wanted private stories to be opt-in. During discussions about how opting in could work, the first author suggested being prompted the first time a private story appears and received the following response:

> "Yeah, of course. 'cause it's just like, instead of just being shown. Like for example, if you're just swiping, it would just go to someone's Close Friends without any choice of whose Close Friends you're gonna see next, or for the first time. And so like obviously now if I get that opt-in to like, oh, are you happy to join this person's 'booty pics' [private story], then you're allowing, you know, whatever group you're added into, if you're given that choice, then it's a safe mechanism to not be shown anything that you don't want to see." [Evaluation session one]

One participant noted, however, that such a feature may be undermined by people naming and using their private lists in a way that suggests they will be safe for work but then later posting NSFW content. One suggestion was to provide the option to blur NSFW content by default on platforms such as Instagram. Another suggestion was based on the way Instagram currently highlights Close Friends stories by making the circle that appears around a
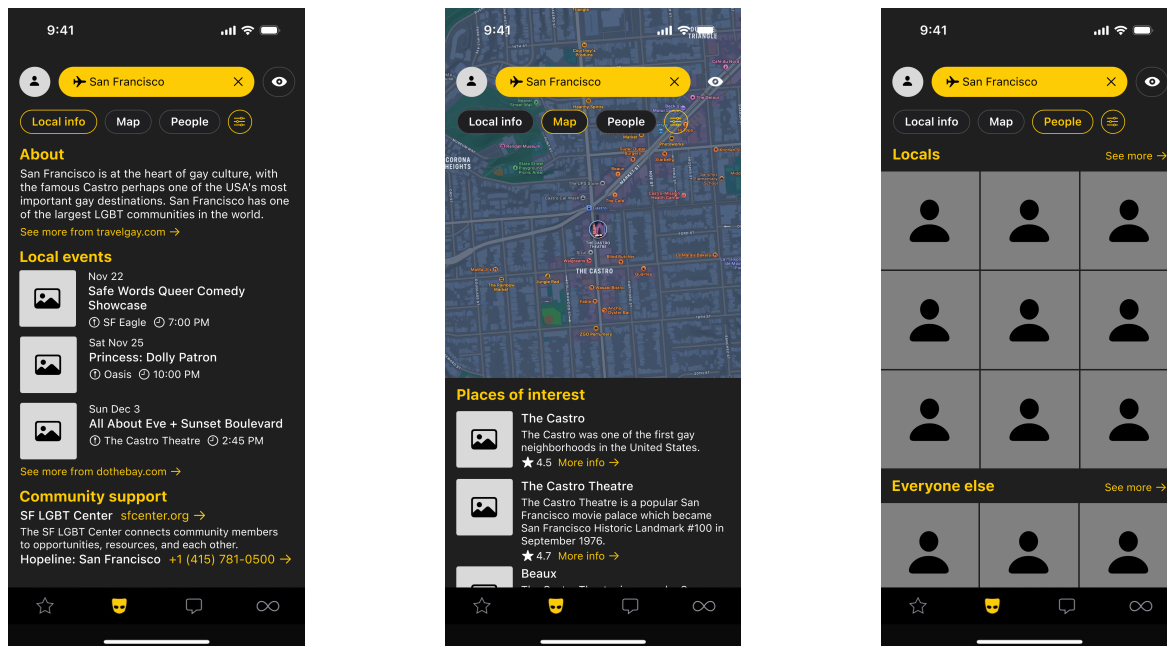
(a) The local info page gives information about a city, LGBTQ+ events that are on and community support services.

(b) The map page shows a map of LGBTQ+ places users can explore.

(c) The people page lets users find people based on whether they are local or not. Maybe they want to find someone who knows the city well or a fellow traveller to explore with.

Figure 10: Mockups of a Grindr interface for *Local Guide* (section 4.5.2)

user's profile picture in the stories section green; NSFW stories could be highlighted in a different colour to make it obvious.

5.1.4 Helping people connect more easily with matches but not blocking those who do not fit filters. Participants were broadly in favour of the filtering mechanisms in *Providing more control over who can find and message you*(4.2.1, Figure 4). Some participants appreciated the ability to restrict those who do not match their filters to interact with them. The main reasoning was that it could help save them time and improve their experiences. For example, one participant liked that this would enable them to block anyone just looking for hookups. On the other hand, a participant who uses Grindr solely to find hookups did not see a benefit in the concept.

However, there were concerns over how aggressive the filtering could be. While the design of *Providing more control over who can find and message you*(4.2.1, see Figure 4c) sends all messages from people a user has not interacted with to a "Requests" tab, participants disagreed with whether this was a desirable approach or not. There was a broad consensus, however, that message requests should only appear for those who do not match one's filters. Some thought that separating message requests would mean that they were likely to miss new requests and preferred that they be shown alongside regular conversation threads in the main tab. Others appreciated keeping message requests separate and thought that they might occasionally check to see any from those outside their filters.

Similar to concerns raised about overzealously filtering out content or other people discussed in section 5.3.3, there was also a desire to be able to see how restrictive the filters they select are.

> "I would love some transparency over how much of the, for lack of a better word field, I'm excluding by filtering in whatever way I am." [Evaluation session three]

Part of the desire to keep message requests alongside existing conversation threads was an awareness of the many discreet profiles that exist on Grindr. While participants expressed that blank or discreet profiles can have a bad reputation on the app, they noted that many have privacy concerns related to being identified as part of the LGBTQ+ community. They saw it as important to support their use of the app and worried that showing message requests separately would make it more difficult for discreet users of the app to interact with others.

Similarly, many participants recognised that there could be benefits to people who do not match their exact filters interacting with them.

> "Do these explicit filters that cut people out change the dynamic of Grindr to being not just a place where you meet people or explore things that you might not have been entirely open to? But because that one person who doesn't maybe fit all of your preconceived filters, but does fit what you find attractive slips through,

would this then stop that from happening?" [Evaluation session two]

5.1.5 Limiting repeated messages could be beneficial. Participants had mixed feelings about *Block repeated messages*(4.1.2, Figure 3). A number expressed their disdain for often receiving repeat messages from people they have not responded to. Feeling that manually blocking people entirely could be too harsh, some thought this would stop them from receiving annoying repeat messages in a nicer way.

In contrast to participants' thoughts on wanting others to see both their general expectations and those that have been signalled to them in particular as part of *Signalling what you are looking for*(4.2.2, Figure 5) (see section 5.1.2), it was thought that telling participants that they had been blocked as in *Block repeated messages*(4.1.2, see Figure 3c) might be unnecessarily harsh. However, participants in multiple evaluation sessions suggested that a nudge from *Grindr Bot*(4.3.1, see Figure 6c) that asks users if they are sure they want to send a repeated message could be helpful.

Similar to other mockups (see section 5.3.3), some participants had concerns about an automated filter restricting messages that they actually wanted to receive. For example, some participants shared that they are bad at keeping on top of messages and that even if they have not responded to someone, this does not necessarily mean they are not interested in them. Instead, some participants thought it would be more beneficial to have a mute function on Grindr, similar to other social platforms where they could mute specific people.

5.2 Providing more agency over self-presentation

In this section, we explore themes relating to participants' desires for greater affordances over the visibility of the content they post, and ways to elude visibility.

5.2.1 Allowing for greater selective visibility. Participants liked the ability to create multiple private audience lists shown in *Smart social circles*(4.4.1, Figure 7) so they could better target the audience of their posts. The way that *Smart social circles*(4.4.1, see Figure 7a) suggests a list to post to was also appreciated as a way to reduce the chances of posting to the wrong list. Participants noted, however, that there might be overlaps between groups and that it would be good to be able to share something to multiple lists.

A suggested improvement for *Smart social circles*(4.4.1, Figure 7) was to add a way to exclude specific people from seeing their content as well. Currently, Instagram allows people to be blocked from seeing all of one's stories, but this would do so for particular stories. Similarly, some participants suggested that there should also be an option to restrict screenshots.

> "my parents are pretty transphobic and I want to post something that's trans-related, but I want everyone except my mom to see it." [Evaluation session two]

There were concerns, however, about the amount of effort it may take to manage lists. Additionally, some participants highlighted that they might create lists for more mundane content they did not want to "spam" everyone with. They suggested an option to make lists publicly visible so that any of their followers could opt-in.

> "So you can post on your public story and be like, 'Hey, if you want to join this story to find out more about what video game I'm playing or how I'm doing with my mental health or whatever, then feel free to join that.' So perhaps to have certain lists that can be joined by public and other lists that you have to control and be added to in order to actually see what's on there." [Evaluation session three]

5.2.2 Providing ways to elude visibility. Throughout discussions of concepts, participants noted ways in which they wanted more ability to elude visibility.

In discussions around *Providing more control over who can find and message you*(4.2.1, Figure 4) participants highlighted that they were often reluctant to view people's profiles on Grindr. By default, the app alerts people when someone has opened their profile through a "Viewed Me" list shown in the title bar of the app. One participant suggested that this is particularly problematic when trying to ascertain what someone is looking for to see if they are compatible. However, while participants could be reluctant to trigger the notification for other users, some shared how they appreciated being able to see who had viewed them. As a way around this, they suggested the main grid view of profiles (see Figure 4a) in Grindr show icons that indicate what someone is looking for.

As discussed in section 5.1.2, participants noted the importance of supporting those who wish to be discreet and elude being identifiable to other users before interacting. Also discussed is the way that *Signalling what you are looking for*(4.2.2, Figure 5) could support this by allowing people to specify a more conservative version of what they are looking for on their profile and communicate the full story to a specific user they interact with.

Participants liked the ability to explore in *Suggested topics*(4.5.1, Figure 9). However, they raised concerns about whether others would be able to see what they were looking at.

> "Don't make it public. Like right now if I follow an hashtag [on Instagram], you can see what I am following, which I don't mind. I don't have anything to hide. But some people, again, in some places of the world, do not want to be shown [as] following LGBT" [Evaluation session one]

Similarly, one participant noted that many people have main Instagram accounts and separate accounts where they are more happy to follow others who post NSFW content. He thought that *Focus modes for content feeds*(4.4.2, Figure 8) could help consolidate these Instagram accounts, however, he noted that an important function of people using separate accounts in this way is obscuring who one is following from the audience of the main account. Accordingly, he emphasised that *Focus modes for content feeds*(4.4.2, Figure 8) should be designed in a way that allows users to elude visibility.

5.3 Providing transparency and control over automated, algorithmic and AI features

In this section, we present participant responses to automatic, algorithmic and AI features in the mockups.

5.3.1 Providing control over algorithmic content feeds. Participants generally liked the concept of *Focus modes for content feeds*(4.4.2, Figure 8), which would provide them with more agency over how algorithms present content to them. A common sentiment was that user-tuned algorithms would be better at presenting content that they wanted to see. Accordingly, the ability for user customisation was popular when discussing *Focus modes for content feeds*(4.4.2, Figure 8).

> "I really like that you can customise each of those categories even further. It's not just what Instagram thinks is positive vibes, it's what you specifically want when you select that tab." [Evaluation session three]

While not the original intention of *Suggested topics*(4.5.1, see Figure 9b), some participants saw its network view as a way to visualise the model being used to generate the algorithmic content feeds they see. Similarly, participants in the first evaluation session wanted a way to see judgements of interest made by platforms and correct them.

> "I'd love to know, or I'd love to even just be more conscious in what kind of subcultures I'm not interested in participating in, or ones that I want to subscribe to more. And having a networked way of seeing it." [Evaluation session three]

Participants appreciated that the design of *Focus modes for content feeds*(4.4.2, Figure 8) would allow them to alter their algorithm dynamically to suit their mood.

> "I think that it's such a dream that we'd be able to go into a platform and be like, 'This is the kind of experience I want to have on here today'" [Evaluation session three]

This could be beneficial when wanting to explore beyond what their algorithm was presenting them. For example, some participants also saw *Focus modes for content feeds*(4.4.2, Figure 8) as a way to influence the algorithm when they got bored. Similarly, participants liked the way *Suggested topics*(4.5.1, Figure 9) could provide new ways to explore content and some thought that it could help them grow by exposing them to informational content.

> "It's kind of nice to be able to choose what rabbit-hole you go down... and if I keep scrolling down after I click on that, I find more of what I want. It's an easier way I think to, I think Instagram has such issues with the search engine." [Evaluation session three]

Part of the rationale for *Focus modes for content feeds*(4.4.2, Figure 8) was that it could allow users to create what participants in the first co-design workshop referred to as a "mental health algorithm". Participants in the evaluation sessions agreed that it could be helpful for their mental health, and some thought that it would help make the app less addictive.

> "I think it would be great, especially if like you're in the like down the like oh I don't want to see abs today I want to see kittens" [Evaluation session two]

On the other hand, some participants highlighted that they often enjoy seeing what the algorithm presents them and that they would likely alternate between using a targeted focus mode and not.

> "I like the randomness of going on there and then whatever comes. Sometimes it is nice to see what your friends are doing, because you might get distracted by [algorithmic posts]. So I like both." [Evaluation session one]

5.3.2 Using AI to support understanding. Participants particularly liked the way *Grindr Bot*(4.3.1, see Figure 6b) could support understanding. They saw it as especially beneficial in helping new users understand the culture of the app and the slang that people use. Beyond this, participants also saw *Grindr Bot*(4.3.1, Figure 6) as a way for people to get support by connecting them to local services and community, similar to what was shown in *Local Guide*(4.5.2, see Figure 10a) to providing a virtual companion.

> "a lot of people don't have a support circle, like friends, [if they're] in the closet and they don't have a support circle and this could be it for them... like it would just be like a friend that you can just talk to, ask questions." [Evaluation session one]

While some appreciated the way *Grindr Bot*(4.3.1, see Figure 6c) could prompt users before doing something that could be disrespectful, others had a strong preference for the feature to be passive and only respond to user questions. They thought that prompts could become annoying and were concerned that they would be co-opted for marketing purposes.

Beyond the functionality of *Grindr Bot*(4.3.1, Figure 6) shown, participants had ideas for how to improve it. Some did not want *Grindr Bot*(4.3.1, Figure 6) to appear alongside conversations with other users as they thought it could create clutter. However, this did not necessarily indicate a dislike for the feature. One such participant wanted it to be ever present in the interface for easy access. Participants also suggested ways that *Grindr Bot*(4.3.1, Figure 6) might help them navigate the app. One thought it could help him search for people contextually, for example, by showing him all the profiles he interacted with when in a specific city.

While participants saw *Grindr Bot*(4.3.1, Figure 6) as beneficial, some expressed concerns about how accurate its responses would be. They noted that there can be great geographical variation in how people communicate and that its responses may not be adequately localised. There was also a suggestion that those who might need *Grindr Bot*(4.3.1, Figure 6) the most to understand the use of slang or emoji, might also be those who struggle the most to use it. Finally, one person had concerns about *Grindr Bot*(4.3.1, Figure 6) sharing right-wing content. Some also raised privacy concerns about *Grindr Bot*(4.3.1, Figure 6).

> "I don't trust any of the information that I give to these platforms. Especially if I'm talking to one of their bots. Like private messages I have some sort of expectation of confidentiality. They're probably skimming my information... But when I'm talking to one of their bots, I know that they're going to be collecting all that information." [Evaluation session two]

5.3.3 Concerns about automatic, algorithmic or AI filtering and classification. A common concern from participants was about trusting automated features to make the right decisions for them. While

in favour of *New settings for accepting or blocking NSFW pics*(4.1.1, Figure 2), they raised concerns over how accurate the automated detection of NSFW content might be. Some participants also noted variations in what people might consider to be NSFW and suggested that if the algorithm was just looking for nudity in images, it might miss content that is confronting in other ways.

For some features, transparency over algorithmic features could help alleviate concerns. For example, participants thought that the automated detection of NSFW pictures in *New settings for accepting or blocking NSFW pics*(4.1.1, Figure 2) would be acceptable if there was an option to report photos for manual review.

Similarly, there were concerns that the classification of content that *Focus modes for content feeds*(4.4.2, Figure 8) relies on may cause issues.

> "I feel like there's a lot of trust in the platform's ability to categorise this content. Comedy for one is subjective based on who you are, where you are based. Is it satirical? Is it a political jab? Or is it comedy?" [Evaluation session three]

Some participants suggested that users could be made to classify their own content but acknowledged that this would create extra labour. On the other hand, participants also had concerns about *Focus modes for content feeds*(4.4.2, Figure 8) relying on users to accurately classify their own content.

> "So maybe I want to limit what [I] don't want to see, but then... a lot of people use random hashtags. So they're probably going to be using those. I'm going to watch an editorial or some anime reel, and I'm going to see people tagging that as politics, because they just wanted to have the most views. But then if I do say no politics, then I don't see it." [Evaluation session one]

Some highlighted concerns about *Focus modes for content feeds*(4.4.2, Figure 8) creating echo chambers that would reinforce divisions between people. Others worried that if they set up *Focus modes for content feeds*(4.4.2, Figure 8) to be too narrow, that it could unintentionally filter content they would have wanted to see. Participants raised similar concerns about filters in *Providing more control over who can find and message you*(4.2.1, Figure 4) being too narrow (see section 5.1.4) and about *Block repeated messages*(4.1.2, Figure 3) blocking messages that they would actually want (see section 5.1.5).

Participants also noted concerns about the accuracy of *Grindr Bot*(4.3.1, see Figure 6c) nudges. While seen as positive in some cases, participants noted that such an automated system could misidentify what is happening and provide inappropriate feedback.

> "The prompt that comes up when you're about to do something that may not be respectful, that could be annoying and especially as I was just saying like if your sort of kink is to be degraded or something like that, then obviously that's going to come up a lot." [Evaluation session three]

5.4 Providing ways to connect with local communities

Participants liked *Local Guide*(4.5.2, Figure 10) and saw it as a helpful concept for finding connection to local communities whether at home or when travelling.

5.4.1 Helping people find their footing in the community or when travelling. Participants highlighted how *Local Guide*(4.5.2, Figure 10) could be helpful when travelling.

> "I would definitely use [Local Guide]. I think 10 out of 10. It would be like Google Maps but like queer. There's no app that has the people. It has the local people right now. And like the information, events, that's so important because you arrive from any city and you want to go out, hang out, meet new people but you don't know what the locals use for events." [Evaluation session one]

Participants also saw the benefit of being able to use *Local Guide*(4.5.2, Figure 10) at home. Some thought that it would be particularly useful for those who have had little exposure to the local queer community.

> "I think it's good, especially in a regional sense, some people are quite isolated generally. So being able to see where they can find community, where they can reach out to people, where there's a safe space and where there's support." [Evaluation session three]

Participants had a number of ideas for extending *Local Guide*(4.5.2, Figure 10) and *Grindr Bot*(4.3.1, Figure 6) to provide local knowledge. Some thought that it should provide safety information about places that are safe to visit and areas to avoid. Similarly, participants discussed how *Grindr Bot*(4.3.1, Figure 6) could allow someone to ask "I'm visiting this area, what's happening?". In addition, they thought that it could also provide local knowledge about the "vibes" of different venues.

The map view of *Local Guide*(4.5.2, see Figure 10b) for exploring where to go was popular. To improve it, participants suggested a filter to show different kinds of queer establishments. They also suggested features that would provide information about where people were, for example, a heat map showing where users of the app were congregating or indicators of how busy venues were. Participants thought that such features could be useful if travelling and unsure where to go but also at home when deciding where to go. However, some also raised privacy concerns.

> "I would be concerned. I feel like that leads to potential hate crimes and stuff. It's like, okay, there's a lot of queers in this district, let's target them. So I feel like that could potentially be a negative use of that, but I see the benefit from, for me, like, I want to see where queers are." [Evaluation session three]

Participants also suggested ways that users could play more active roles in *Local Guide*(4.5.2, Figure 10). Adding the ability to leave reviews was suggested, as was functionality for allowing people to connect over attendance at events.

> "members of the app can actually comment, suggest. Yeah. Because I think it would be more trusted if it's

coming from a queer source like Grindr, like you know, then like anything that is general to the public, like Google" [Evaluation session one]

Participants saw the separation between locals and everyone else in *Local Guide*(4.5.2, see Figure 10c) as overly binary and unneeded. However, some participants liked the ability to find those who were open to exploring new places with them. One participant commented on how much they liked the idea of being able to "fellow travellers" while others suggested that people could opt-in to being displayed as "guides" for those visiting.

5.4.2 Supporting a wide range of interests. The mockups for *Local Guide*(4.5.2, Figure 10) show real information that was found in online listings found when searching for queer venues and events. However, some participants highlighted that the listings shown were very much focused on the dominant scene for queer men, and they wanted it to show a broader range. In the third evaluation session, one participant shared how he has recently joined a local queer sports team and suggested the inclusion of community and sporting organisations into *Local Guide*(4.5.2, Figure 10). Similarly, one participant noted that the topics provided in *Suggested topics*(4.5.1, Figure 9) could be expanded, and some talked about wanting it to surface content related to community groups.

> "I feel like a lot of these things are related to the scene. I don't go to [the main local queer event]. It's not my thing. And then a lot of the things that come up are either gay clubs or drag queens. Some of my friends, we don't really... It doesn't interest us. [Talking about Suggested Topics,] I love history but I also like things other than queer history. So a diversity of options I think would be good." [Evaluation session one]

6 DISCUSSION

Our study adds to the small but growing body of work that involves LGBTQ+ participants in design-led research exploring how to improve social platform experiences. Our findings reveal a number of ways that social platform design could be improved and a strong desire from participants to have more agency over their experiences. We now offer considerations for design based on our findings. As noted in the introduction, work with queer and trans communities can enlighten how technology is designed and understood for all [14, 17]. While we base these considerations on our work with queer young men, they may be transferable to other groups, although it is beyond the scope of evidence in this paper.

6.1 Designing to improve consent over NSFW content

The mockups that gave users more agency over receiving NSFW pictures and signalling expectations to others were consistently among the most popular concepts in the evaluation sessions. This highlights, similar to the findings of others [19, 32, 52], that there are issues with consent in the current designs of social platforms that need to be addressed. *New settings for accepting or blocking NSFW pics*(4.1.1, Figure 2) and *Signalling what you are looking for*(4.2.2, Figure 5) both offer design solutions that would give users more agency to assert their preferences over receiving NSFW content, and

which were popular with participants. However, similar to findings by Zytko and Furlo [51], participants did express concerns around the timing of *Signalling what you are looking for*(4.2.2, Figure 5), highlighting an area for future design work.

While consent has often been discussed in the context of unsolicited explicit pictures that are sent directly (e.g. [19, 46]), consent in situations where content is posted publicly or to a restricted audience on someone's profile, has received less attention. Features for restricting the visibility of self-presentations are most often designed from the perspective of the person sharing content – left out is the perspective of the person who sees these curated presentations (e.g. [9, 35]). While this may be benign in cases where it pertains to non-explicit content, when these features are used to share sexually explicit content to curated audiences, consent becomes a concern. While *Smart social circles*(4.4.1, Figure 7) offered a new feature for users to opt-out of being on restricted stories, participants highlighted that this did not go far enough to address issues of consent. Future design work should explore features that allow users to opt-in to seeing restricted content.

6.2 Designing to support variation in desired experiences

A number of the concepts explored how social platforms could be designed in ways that adapted users' experiences situationally. For example, participants appreciated how *Signalling what you are looking for*(4.2.2, Figure 5) would afford them the ability to signal what they were looking for with specific users. Similarly, participants wanted to be able to communicate in their dating app profiles what they were looking for in the moment separately to what they are generally. Currently, many social platforms are designed in ways that only afford static profiles or user preferences, but participant responses to these concepts suggest that this is not adequate.

Supporting variation in desired experiences should also extend to users' motivations for using apps. For example, as prior work on dating apps has found, those who are seeking more than hookups are often at a disadvantage and have more negative experiences [48, 52]. It is not surprising, therefore, that the participants who were not interested in hookups were those most in favour of concepts such as *Providing more control over who can find and message you*(4.2.1, Figure 4) and *New settings for accepting or blocking NSFW pics*(4.1.1, Figure 2). Given that issues of consent and sexual violence are prevalent on dating apps [19, 52], features that afford users more control over who can interact with them are important for safety reasons. On the other hand, our findings highlight that some users appreciate being able to be contacted even by those who do not match their filters and do not want their experiences on dating apps such as Grindr to be sanitised.

Beyond dating apps, concepts that would afford participants more control over the content they see were also popular. Im et al. [32], in their work around applying affirmative consent to social platform design, suggested that users should be regularly asked what they want to see on a given platform. However, our findings suggest that in addition to consenting to seeing different types of content, features that allow users to customise what they see in a given situation, similar to *Focus modes for content feeds*(4.4.2,

Figure 8) are valuable. For example, they did not want explicit content to appear when looking at social platforms on the bus, even if in a different context they were happy to see them.

6.3 Using AI in ways that support user understanding or exploration

While participants appreciated the use of features that relied on AI in some contexts, there were concerns about features that relied on them to make decisions for users or to classify content. As Yildirim et al. [49] found in their research, it is common for designers to envision new concepts that require near-perfect model performance and that would be difficult to build. Similarly, some participants in the evaluation sessions had concerns that features relying on classification would not be accurate enough for them to want to use them. In some cases, they thought this could be mitigated by allowing oversight, for example, being able to flag content for manual review. However they were wary of features that would automatically block others from interacting with them or limit the content they saw. Designers of AI-based features for social platforms should be aware of the limitations of the models they rely on and provide transparency to users.

On the other hand, participants seemed to appreciate uses of AI that would support understanding. For example, similar to prior findings by [48], they thought that dating apps could be overwhelming and an AI assistant like *Grindr Bot*(4.3.1, Figure 6) could be helpful. Similarly, while participants had concerns over how classification could work as part of *Focus modes for content feeds*(4.4.2, Figure 8), the ability to explore using *Suggested topics*(4.5.1, Figure 9) was popular. This suggests that AI-based features that offer contextual support to users or aid exploration will be more popular with users than those that provide automated classification or filtering.

6.4 Limitations

Our work is based on engagements with 13 queer men working in technology design and 15 end users. They are, therefore, limited in the extent to which they can be generalised across wider populations. While all LGBTQ+ young people may have similar experiences in some ways due to heteronormativity, there are nuances in experiences between subgroups which impact the transferability of findings based solely on queer and trans young men to the wider community. Similarly, the evaluations and the previous study that informed the co-design workshops were situated in a specific geographic context, a metropolitan area in Australia with fairly accepting attitudes towards LGBTQ+ people. While queer and trans young men in other areas with similar cultures and attitudes may share similar experiences, this impacts the transferability of findings to areas where being LGBTQ+ is more highly stigmatised.

7 CONCLUSION

This paper presents mockups of new social platform features based on co-design workshops with queer men working in technology design and findings from evaluation sessions with queer young men. In doing so, we extend prior work around LGBTQ+ young people on social platforms through a design-led approach that explores how their experiences could be improved. We find that participants greatly appreciated features that gave them more agency over their experiences, especially where they support consent. Additionally, participants liked features that would provide them more control over their visibility and connect them to community. While participants had mixed reactions to automated features, they appreciated the use of AI-based features to support understanding and exploration. Our work suggests the need for social platforms to be designed in ways that better support consent, allow for variation in user preferences and situations and use automated features in ways that are mindful of user desires for agency.

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