Building and Restructuring Social Media Platforms for Non-Binary Users: Pilot Survey of Non-Binary Social Media Users

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The past ten years has seen a positive trend in people openly identifying outside of the gender binary, as knowledge of Non-Binary identities becomes more widespread and accepted. In an increasingly online world, there is pressure on social media platforms to accommodate these diverse gender identities. In online spaces driven by self-expression, Non-Binary users feel frustrated and forgotten by the lack of diversity in the options they are presented with. There is also an absence of standardisation across platforms: it seems every social media site has its own idea of how to tackle the problem. In this work in progress, I present the findings of a pilot study carried out in March 2022, wherein I asked Non-Binary social media users about their experiences across various social media platforms. The results of this study create the foundation of a larger user study that will explore these questions in more depth, and inform proposed guidelines and standardisation for social media platforms in accommodating diverse gender options.

CCS Concepts: \bullet Human-centered computing \rightarrow Human computer interaction (HCI).

Additional Key Words and Phrases: non-binary, social media, pronouns, gender

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1 METHODOLOGY

The survey was carried out over a 3-week period in March 2022 and was primarily shared via word of mouth and via the social media platforms Discord and Facebook. The survey garnered a total of 49 total respondents, with 36 completing the survey in full. The survey consisted of 5 questions: 1) Which social media sites do you regularly use?; 2) On sites where you have the option, how often do you disclose details about your gender identity in your bio (eg pronouns)?; 3) (In reference to Q2- optional) Why/Why not?; 4) Does the decision to disclose information about your gender identity vary depending on which site you are using (eg, you disclose your pronouns on Twitter, but not Facebook)?; 5) If a social media site asks you to describe your gender identity upon sign-up (even if you have the option not to make this information public), do the options provided affect your decision to continue to use the site? The number of questions was intentionally small, consisting primarily of questions that could be answered quantitatively, with some space for detailed answers. The survey was short and simple in order to encourage participation and trial questions that could be refined in a further, more comprehensive study. The survey also included some optional demographic questions which weren't intended to be part of the survey, but yielded some interesting responses. They were: Age, gender, occupation, subject/area of work.

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2 OVERVIEW & ANALYSIS

I surveyed 49 Non-Binary social media users (aged between 18-46) to gather information about their experiences using social media. Participants were recruited via snowball sampling, university groups, and safe spaces on social media platforms such as Discord and Facebook. Of the 49 participants, 36 completed the full questionnaire, but I discuss partial answers where they are of importance or particular interest. Ethics approval was granted by the Lancaster University Undergraduate Ethics Review Board, and all participants gave informed consent. Participants were located across the UK, with some international respondents, and covered a variety of professional fields including STEM, art, and academia. Additionally, although not intended as a part of the analysis, the Demographic questions became their own source of insight.

2.1 Demographic questions

- Age: The respondents' ages ranged from 18 to 46, with the majority of respondents aged between 19-22. This was expected as the survey was shared primarily within student groups who were contacted via group chats and social media, although the reach of the survey meant that the experiences of older Non-Binary people have also come to light. This is significant, as many critics claim that Non-Binary identities are a fad amongst young people; a "phase" that we will eventually grow out of [2]. Responses to the survey indicate otherwise.
- Gender: Respondents identified themselves in myriad ways. Many of the responses to this question were unique, although there were some commonalities: for example, several respondents using "Non-Binary" as an adjective in the way they described their gender; and some expressing demi genders (Demiboy/Demigirl) - an identity that can be explained as alignment with a gender, but not complete identification with it. Twenty-one respondents used the term "Non-Binary" when describing their gender: either as a noun (identifying as Non-Binary) or as an adjective (e.g. "Non-Binary Woman"). Five respondents listed more than one description of their gender identity (e.g. "bigender/transfeminine"). One respondent simply gave their pronouns, and another individual described their gender identity as Dude (as well as Demiboy/Male). With Non-Binary identities being diverse by nature, people will often experiment with or use different labels, including unconventional ones. There were a few other responses to the survey that fell in line with this style of label (one being Genderfae), but "Dude" stood out as an example of a Non-Binary person explicitly rejecting the rigidity of a gender binary. Finally, one respondent described their gender as Butch. This respondent did not go on to complete the survey, however, this response is still significant as Butch Lesbians have a rich history and influence on gender non-conformity and identity [1].
- Occupation/Area of Work: Nearly half of respondents (20) were students, which was expected, as the spaces that the survey was shared in would have been university spaces. However, given the reach of the survey, respondents reported a wide range of fields and occupations: including environmental science, tattoo artistry, education and teaching, and computer science. These demographics did not generate any data of interest but are included here for consistency.

2.2 Survey Questions & Analysis

Which Social Media sites do you regularly use?

Respondents were asked to check off social media sites they used from a list consisting of: Facebook, Twitter, Instagram, Tumblr, Discord, Snapchat, Reddit, and "Other", which provided a text box for participants to write an

 answer. Sites listed under "Other" were TikTok (4), LinkedIn (1), YouTube (2), and School Social Sites (unspecified) (1). The data shows a slight skew towards Discord, which may be due to the way that the survey was shared: however, as respondents were allowed to select multiple options, and the survey was shared across at least three different sites (Discord, Facebook, and Twitter), I do not believe this introduced any significant bias in subsequent data. The top three sites used by survey respondents were Discord, Instagram, and Twitter. It is notable that Facebook, despite having the largest overall userbase of all the sites listed (2.9bn users ¹), doesn't make the top three: in responses to later questions, multiple respondents talk about potential negative reactions to their gender identity from family, which may be the reason that Facebook is underrepresented in these numbers. It should be noted that the wording of this question does not ask users which sites they have accounts on – only which sites they use regularly. This is to gauge activity, as the existence of a users' account does not necessarily mean they engage with the site.

On sites where you have the option, how often do you disclose details about your gender identity?

Responses show that the vast majority (94.4%) of respondents will choose to disclose details about their gender identity at least some of the time, with over a third willing to do so all the time. This indicates a need for users to be able to express their gender accurately on social media; additionally, they should be able to decide how much information they are able to display and disclose. When asked *Why/Why not?* sentiments across all choices were comprehensive and they are able to display and disclose. When asked *Why/Why not?* sentiments across all choices were comprehensive and

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If a social media site asks you to describe your gender identity upon sign-up (even if you have the option not to make this information public), do the options provided affect your decision to continue to use the site?

I anticipated this question to skew more heavily towards "No", as sentiments expressed in the interviews I conducted at around the same time— as well as anecdotally—suggested that Non-Binary users tend to take a more passive approach to selecting specific gender options when required. I am steadfast in being able to express my gender accurately, and

 $^{^{1}} Statista. Facebook \ users \ by \ country \ 2021 \ www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-users/based-on-number-of-facebook-user$

 will usually turn away from anything that gives me no option to do so – this decision is influenced by the fact that I am openly Non-Binary and have no desire to be closeted, hence my expectation that this attitude would not be the norm. To the contrary, respondents were split almost exactly (47.2% Yes; 52.8% No). As there is nothing mandatory about social media use: unlike the cases for web design sign-up investigated in Katta Spiel's paper "Why are they all obsessed with Gender?"—(Non) binary Navigations through Technological Infrastructures [3], which concerned formal data collection in government and academic contexts, among others (Spiel, 2021) – Non-Binary users have no obligation to use a site that will not grant them the freedom to express their gender identity, which may be an explanation for the division of the results.

It should be noted that users were not asked to elaborate on their answers, so this could have generated further details of interest and will be investigated in more detail in subsequent research.

2.3 Conclusion

The data presents a desire for choice and control within the Non-Binary user group, with decisions around gender presentation online influenced by factors that vary across social media platforms and their demographics. There is no straightforward solution to social media design that encompasses Non-Binary gender expression, given the differing goals of each platform. I endeavour to develop guidelines for integrating Non-Binary gender expression into platform design, which will be based on further research for which this pilot study provides a solid foundation.

Going forward, research should consider the safety of the Non-Binary user group, in addition to the practical implementation of UX features for diverse gender expression.

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