Uses, perspectives and affordances: an exploratory study on gender identity for young adults in social media platforms in Portugal

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Abstract
This research endeavour explores the relationship between gender identity and the employment of digital social platforms and applications among young adults. The investigative approach entails an analysis of smartphone tracking data for characterising mobile app usage, as well as proposing a simplified alternative to the walkthrough method for identifying gender on the six most prevalent social apps amongst young adults in Portugal. Furthermore, gender differences in the usage of these platforms are explored through focus groups. The study aims to address two research questions: firstly, does social media platform usage vary based on gender? Secondly, do the affordances of these platforms differ in terms of the (re)construction and performance of gender identities? The findings suggest that two principal behavioural groups exist: a group that views themselves as neutral, and another group that displays active and contesting behaviour, which seems to align with the
affordances of the most widely used social apps in Portugal. Additionally, the study identifies that YouTube, Facebook, WhatsApp, Instagram, Messenger, and TikTok either offer complete freedom in adding gender and pronouns or do not provide the option to fill in this information.

**Keywords**: app studies, gender identity, social media apps.

1. **Introduction**

In a world of increasing digitisation, particularly relevant among the younger generations (Comunello *et al.* 2017), societies are facing a state of media saturation, which itself culturally and socially rearranges the world (Encheva *et al.* 2013). The Covid-19 pandemic increased feelings of social anxiety and social isolation, which are linked with higher usage of social media platforms (Banerjee and Rao 2021; Nekliudov *et al.* 2020). Any process of social interaction, such as media interactions, is involved in a network of power imbalances. Typically, these imbalances are based on socio demographic identity factors, like gender identity and sexual identity. In the particular context of young adults (with ages between 18 and 30 years old), their gender identity in digital spaces is a form of representation of social, symbolic and personal basis (Amaral *et al.* 2022). Regarding that age cohort, studied “media effects are frequently connected to sex and sexuality, and sexual(ised) media are often framed in terms of empowerment or victimisation” (Cardoso *et al.* 2023). Studying digital social interaction processes through a lens attentive to gender and sexual imbalances must also include, not only a critique of the ability of those who design digital platforms but also an analysis of who and what is being represented in such digital spaces (Burgess *et al.* 2016; Duguay 2016). People tend to adhere to dominant digital gender norms and scripts (Comunello 2020).
Butler (1990) stated that gender is a social construction. Nowadays, such construction is also digital or at least based on socialisation processes that are ubiquitously digital (Carter 2014; Santinello 2017). While digital spaces like social media platforms allow socialisation processes beyond geographical limits (Zeitzoff 2018), the technological necessity of location-aware mobile apps implies that online interactions are profoundly rooted in offline places, relationships and other socialisation marks (Blackwell et al. 2015). Although it is difficult to ignore or even go beyond the geographical bond and the social circumstances of real physical life, besides media devices, digital spaces such as social media platforms can also be understood as spaces of high dissemination potential. This dissemination potential also concerns ways of looking at gender identity and the social relations that intersect with gender. Thus, while the digital space may simultaneously be a space for the propagation of feminist and gender equality ideals (Baer 2016; Semenzin 2022), it may also serve as an anti-feminist space, charged with biological determinism and desires for the maintenance of patriarchal societies, with this latter option being referred to as “manosphere” (Cannito et al. 2021; Cousineau 2021; Ging 2019). Either that is through media representations, affordances or even socialisation practices, social media platforms can reproduce and even reinforce hegemonic imbalances of gender and sexual identities' basis.

This study addresses identity as a central aspect of the relationship between gender and social media platforms. Thus, with an exploratory nature, first and with smartphone tracking data, it seeks to characterise the uses of mobile social media applications, which may be dependent on the gender identity of those who use these applications. From there, it then seeks reports on the gendered use of these platforms, concerning takes from focus groups. This study is concluded with the walkthrough app analysis of the gender identification possibilities of the 6 main social media platforms used, according to the initial tracked data.
2. Gender and Digital Identity

Understanding gender as a continuous process of social construction (Butler 1990) must incorporate reflections regarding how such a process influences the multidimensional aspects of identity construction. Even when the idea of digital environments seemed farfetched, gender has been studied as a major social (constructed) category that also influences buying decisions (Dittmar et al. 1995), which with time extended to the online realm (Dittmar et al. 2004). Nowadays, gender norms define purchasing decisions even for digital objects, like mobile applications1 (Skop 2018), which itself contributes to the (re)construction of mediated images of womanhood, manhood, and gender identity. In fact, the identity of someone plays a significant role in digital consumer behaviours (Rogova and Matta 2022). According to Baer (2016, 19) “identity in post-Fordist societies is increasingly linked to the body, which may be shaped, repurposed, and given value through consumer choices”. Nonetheless, the digital space is not uniformly suitable for the expression of identity (Rogova and Matta 2022; Roma and Aloini 2019), including gender and sexual identities.

The idea of digital identity does not necessarily presuppose some correspondence with the real world. As a matter of fact, in digital spaces, such as video games, digital identity may exceed the limits of human physiology and other social categories related to the interpretation of human corporeality (Yumartov and Shuvalova 2021). This non-matching of digital identity to the even humanly attainable corporeal reflex is not limited to video games but also occurs in other types of digital environments such as social media platforms. Even in the case of people who are attentive and aware of the privacy and digital surveillance problems of online interactions, just by having a profile on a social media platform, identity is

1 m-apps or apps, from now on.
being expressed. It is the mere existence of digital identities that makes it possible to access such social media platforms, allowing users to afterwards carry out digital tasks that are nearly universally found across the social media platforms landscape, such as uploading, posting, liking and commenting (Susanti and Hantoro 2022). As users operate and interact in digital spaces, trails of their online activity are being created and commodified (Bollmer 2018; Couldry 2012). In the case of social media platforms, mutual co-veillance is incorporated into generic practices of everyday life. Using social media platforms implies some sort of mutual co-veillance (Couldry 2012; Couldry and Hepp 2017), with it taking part in the never-ending (digital) identity construction.

A world of increasing digital transformations that affects everyone’s lives, with an emphasis on younger generations (Comunello et al. 2017), enables specific acts that reshape expression and transform identities (Bollmer 2018), which may vanish human corporeality (Yumartov and Shuvalova 2021). The intersection of digital culture and the disappearance or even freeness of human corporeality was part of the early discussions of digital culture (Bollmer 2018; Turkle 1995). However, present-day studies like the one of Susanti and Hantoro (2022) reveal that the majority of users of digital spaces like social media platforms display personal information that corresponds with their real-world identities.

The overall digital identity construction process has such particular importance that digital media, including social media platforms, may be considered extensions of the users’ identities (Zhang et al. 2018), which are not only limited to younger generations. Even though there is an important link between social media platforms and younger generations (Comunello et al. 2017), young adults and older people both have an interesting cross-generational usage of such social media platforms (Napoli 2014). In the specific case of young adults - an age group focused in this article -, there have been reported connections between increased usage of
social media platforms by young adults at important moments to the development of their identity (Świdziński et al. 2022).

Even regarding the already mentioned problems of surveillance and privacy, it is gender-based in the way that social media platforms play a “double function” as the locus of empowerment as well as identity construction (Baer 2016; Carstensen 2014). The negative impacts tend to highly affect women. Gender imbalances not only surpass digital spaces but are native to the social hierarchy of patriarchal basis. Therefore, despite the social media platforms’ potential of encouraging feminist, identity politics (Semenzin 2022), the digital space does not challenge, completely the structural gender imbalances. Digital media spaces like social media platforms not only do not necessarily challenge such structural gender imbalances, but they do offer tools for the spread of misogynistic ideals and ideologies, to toxic understandings of masculinity, femininity and gender (Simões et al. 2021), reinforcing “manospheres” (Cannito et al. 2021; Cousineau 2021; Ging 2019).

Nonetheless, they can intensify the performance aspect of identity expression, even if it ends up being visible or invisible, according to the aforementioned hierarchy subjection (Cerqueira and Magalhães 2017). Men tend to be linked with games and entertainment (Lemish 2014), while women tend to be associated with self-care. Between Portuguese young adults, such hegemonic gender roles are reinforced and perpetuated by their digital media usage (Antunes et al. 2023). With the precise intention of questioning hierarchical structures of gender and sexual identities, it is important to understand and analyse people’s usage of social media platforms, which allows continuous (re)negotiations of user’s/people’s sexual and gender identities through their digital experiences (Lupton 2015; 2016).
3. Methodology

This article has an exploratory and mixed methods approach and intends to critically reflect on the context of social media platforms’ representations, performances and constructions regarding the gender and sexual identities of young adults in Portugal. Here we conceptualise young adults as an age group of 18 to 30 years old, as opposed to the set of studies that focus on youth aggregating adolescents and young people in adulthood, or even as opposed to other studies that focus on adulthood as a whole, without the youth component in adulthood itself being marked. In the particular domain of Portugal, there is no robust body of science focused on the connection of younger adults with digital technologies. Also taking into account this scientific gap and, in particular, since this study is inserted in a context of digital platforms and digital identities, which are linked to the younger generations, the conceptualization focused on the interconnection of the identity dynamics of young adults between 18 and 30 years old is consequently justified. Therefore, the methodology (Fig. 1) encompasses several elements: 1) An overview of social media platforms usage is presented through empirical data from three months of tracking the usage of smartphones by 342 young adults in Portugal. The tracking process was conducted by a contracted external company following all anonymity norms. A random sample of 342 young adults that use mobile apps was selected within the database of the contracted external company, whereby the 90 days of data tracking correspond to three different sampling periods, each lasting one month, between the period of March 2020 and July 2021. Such tracking data results allow a quantitative characterization of social media usage, with gender as the main highlighted social/demographic variable. And 2) in a second step, a series of six focus groups were conducted. Due to the constraints of the covid-19 pandemic, the focus groups were carried out remotely through the Zoom platform. Each meeting gathered between four and six people and had an
average duration of 60 minutes. In addition to age as a selection criterion, the participants were undergraduate or master's students from several Portuguese public universities, in distinct areas such as international relations, journalism or economics. The researcher who conducted the focus groups proposed mediation through questions and comments, always seeking to promote interaction between all participants in the most natural way possible. The focus groups had a total sample of 31 young adults living in Portugal. This method aimed to analyse particular details drawn from the contributions made to focus groups concerning the gendered digital practices of young adults in Portugal. All conversations were audio and video recorded with the participants' prior permission. The consent form - with items explaining the Procedures, Data Processing namely in Articles 13 to 22 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 - General Data Protection Regulation, Confidentiality (Anonymity), Data Treatment, Refusal to Participate and the absence of potential risks - was read and explained at each session, and subsequently signed by all participants.

By reflecting insights into gendered and sexual practices of digital identity, this article also includes a qualitative analysis of social media platform affordances (targeted to the six most used social media platforms according to the tracking data). This is an effort of understanding the possibilities of gender identity among the most used social media platforms of the two previous empirical objects.

Hence, the following research questions arise:

1. Does the use of social media platforms differ according to gender?
2. Do the affordances of these social media platforms differ in terms of the possibility of (re)construction and performance of gender identities?
Fig. 1 - Research visual protocol of the main steps of the study (Source: Authors)

Regarding the quantitative approach of tracked smartphone usage during 90 days, the sample of 342 young adults in Portugal was composed of 201 panellists that identify as women (58.77%) and 141 panellists who identify themselves as men (41.23%). The tracked data showed a 100% usage rate of social media platforms among all 342 users, during those three months. To the further understanding of this article, it is with a broad notion of “social media platforms” that such numbers are revealed. Therefore, we have considered such a term as a macro category of apps, which does not include platforms of dating, gaming, health, fitness and self-tracking nature, for example.
In addition, the results of six focus groups (N = 31) with university students from Portugal between 18 and 30 years of age were considered for this study. Data were analysed using critical thematic analysis, which provides a method to "identify, analyse and report patterns (themes)" (Braun and Clarke 2006, 79). In total, 16 participants identified as women, 14 as men and one as non-binary. The main focus was to understand how young adults use mobile apps, and how they usually identify themselves in digital spaces. Also, it was important to identify if they are aware of gender issues in mobile apps, considering the options provided by the platforms.

And finally, we assessed the six mobile applications most used by young people from the tracking results and also from the recurrence of social platforms in the focus group discussions. To do so, and to answer the second research question, a streamlined version of the walkthrough method (Light, Burgess and Duguay 2018) is conducted by focusing on the possibilities of gender identification in each one of the apps. Step-by-step observation and documentation of the app’s screens, features and activity flows will be exposed through annotations and screenshots.

4. Analysis and Discussion

4.1. Tracking
Data from the tracked general category of social media platforms' app usage of 342 young adults in Portugal reveals that an average of 134,73 are daily users of social media platforms in general (which equals 39.39% of the sample), as Table 1 shows. Percentages of daily users concerning the total number of young adults in the sample do not suggest a gender difference. Nonetheless, a gender-based difference may exist regarding how many minutes a day each user does spend on this broad social media platforms category since each woman in the sample spends 73.41 minutes per day on social media platforms, while men, on average, spend 20 minutes less (with average daily minutes per man of 53.46), which contributes in
answering RQ1: “Does the use of social media platforms differ according to gender and sexual identity?”.

<table>
<thead>
<tr>
<th></th>
<th>Users</th>
<th>Daily Average Users</th>
<th>% of Daily Users by Total Users</th>
<th>Average Visits Per User</th>
<th>Average Pageviews Per User</th>
<th>Average Daily Minutes Per User</th>
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<tbody>
<tr>
<td>Women</td>
<td>201</td>
<td>80,11</td>
<td>39,86%</td>
<td>515</td>
<td>2920</td>
<td>73,41</td>
</tr>
<tr>
<td>Men</td>
<td>141</td>
<td>54,62</td>
<td>38,74%</td>
<td>523</td>
<td>2727</td>
<td>53,46</td>
</tr>
<tr>
<td>TOTAL</td>
<td>342</td>
<td>134,73</td>
<td>39,39%</td>
<td>519</td>
<td>2840</td>
<td>65,18</td>
</tr>
</tbody>
</table>

Table 1 - General social media platforms tracking data (Source: Authors)

The tracked broad category of social media platforms included 10 different social media platform apps. However, Table 2 reveals data regarding the six most used social media platforms in the sample. Those are the only six apps that have registered more than 100 users during the entire tracking sample of three months, which in itself exposes the dominance of the broad category of social media platforms in young adults’ digital usage.

YouTube, Facebook, WhatsApp and Instagram have very similar numbers/percentages of users, with between 304 and 295 total users (which equals percentages between 88.89% and 86.26%). However, even though YouTube is the most used app of the sample, results reveal that it is less used daily (63.83 daily average users; 21.00% % of daily users by total users) in comparison to Facebook, WhatsApp and Instagram (with all three having between 104.91 [Facebook] and 92.79 [WhatsApp] daily average users; between 34.75% [Instagram] and 31.14% [WhatsApp] of daily users by total users). Messenger and TikTok have registered 152 and 132 users,
equaling 44,44% and 38,60%, respectively, in comparison to the 342 total samples of young adults in Portugal.

<table>
<thead>
<tr>
<th></th>
<th>Users</th>
<th>% of Users by Total Users (Female/Male/Total)</th>
<th>Daily Average Users</th>
<th>% of Daily Users by Total Users (Female/Male/Total)</th>
<th>Avg Visits Per User</th>
<th>Avg Pageviews Per User</th>
<th>Average Daily Minutes Per User</th>
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<tr>
<td><strong>Female</strong></td>
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<tr>
<td>Facebook</td>
<td>188</td>
<td>93,53%</td>
<td>65,40</td>
<td>34,79%</td>
<td>164</td>
<td>822</td>
<td>21,68</td>
</tr>
<tr>
<td>Instagram</td>
<td>179</td>
<td>89,05%</td>
<td>61,98</td>
<td>34,63%</td>
<td>177</td>
<td>1038</td>
<td>23,56</td>
</tr>
<tr>
<td>Messenger</td>
<td>93</td>
<td>46,27%</td>
<td>21,00</td>
<td>22,58%</td>
<td>66</td>
<td>246</td>
<td>1,15</td>
</tr>
<tr>
<td>TikTok</td>
<td>81</td>
<td>40,30%</td>
<td>11,53</td>
<td>14,23%</td>
<td>31</td>
<td>105</td>
<td>6,21</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>176</td>
<td>87,56%</td>
<td>52,09</td>
<td>29,60%</td>
<td>127</td>
<td>770</td>
<td>8,45</td>
</tr>
<tr>
<td>YouTube</td>
<td>177</td>
<td>88,06%</td>
<td>38,13</td>
<td>21,54%</td>
<td>46</td>
<td>409</td>
<td>24,25</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Facebook</td>
<td>114</td>
<td>80,85%</td>
<td>39,51</td>
<td>34,65%</td>
<td>160</td>
<td>812</td>
<td>19,61</td>
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<tr>
<td>Instagram</td>
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<td>Messenger</td>
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<td>23,09%</td>
<td>58</td>
<td>195</td>
<td>1,15</td>
</tr>
<tr>
<td>TikTok</td>
<td>51</td>
<td>36,17%</td>
<td>9,16</td>
<td>17,96%</td>
<td>40</td>
<td>131</td>
<td>7,84</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>122</td>
<td>86,52%</td>
<td>40,69</td>
<td>33,36%</td>
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<td>10,17</td>
</tr>
<tr>
<td>YouTube</td>
<td>127</td>
<td>90,07%</td>
<td>25,71</td>
<td>20,24%</td>
<td>44</td>
<td>171</td>
<td>9,59</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facebook</td>
<td>302</td>
<td>88,30%</td>
<td>104,91</td>
<td>34,74%</td>
<td>162</td>
<td>818</td>
<td>20,90</td>
</tr>
<tr>
<td>Instagram</td>
<td>295</td>
<td>86,26%</td>
<td>102,51</td>
<td>34,75%</td>
<td>176</td>
<td>999</td>
<td>21,82</td>
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<tr>
<td>Messenger</td>
<td>152</td>
<td>44,44%</td>
<td>34,62</td>
<td>22,78%</td>
<td>63</td>
<td>226</td>
<td>1,15</td>
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<tr>
<td>TikTok</td>
<td>132</td>
<td>38,60%</td>
<td>20,68</td>
<td>15,67%</td>
<td>35</td>
<td>115</td>
<td>6,85</td>
</tr>
<tr>
<td>WhatsApp</td>
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<td>87,13%</td>
<td>92,79</td>
<td>31,14%</td>
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<td>883</td>
<td>9,16</td>
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<tr>
<td>YouTube</td>
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<td>88,89%</td>
<td>63,83</td>
<td>21,00%</td>
<td>45</td>
<td>310</td>
<td>18,13</td>
</tr>
</tbody>
</table>

*Table 2 - Social media platforms with more than 100 total users tracking data*

*Source: Authors*
Regarding gender differences, Table 2 shows higher female percentages of users in comparison to the total female panellists than the percentages of men users in five out of six apps, with the exception being YouTube (with 90.07% men users in comparison to 88.06% women users). In terms of percentages of gendered daily users by its total, men have higher percentages in 5 out of the 6 apps, with the exception being Facebook (with 34.79% daily women users in comparison to 34.65% daily men users). Regarding average daily minutes per user, the results are more balanced. Messenger has 1.15 average daily minutes per user both in women and men of the sample. Men have higher average daily minutes per user in WhatsApp (10.17 in comparison to 8.45 of women) and TikTok (7.84 in comparison to 6.21 of women). Women have higher average daily minutes per user on Facebook (21.68 in comparison to 23.56 men), Instagram (23.56 in comparison to 19.15 men) and YouTube (24.25 in comparison to 9.59 men). YouTube’s gender differences in terms of average daily minutes per user, may explain women’s 20 minutes superiority in average daily minutes per user, in comparison to men, which was shown in Table 1. YouTube is the app with more gender-difference usages in general, even though the overall gender differences in terms of social media platforms do not seem to be tremendously significant.

4.2. Social media apps
Considering the six apps most used by young people in Portugal selected through the tracking study sample, we have sought to understand how these mobile apps allow the personalisation of the user regarding gender. The YouTube app is the application with more users in the tracking sample, adding up to a total of 304 users. YouTube is a free video-sharing website and the second-largest search engine behind Google Search. Also, the website version of YouTube is the second most visited on a global level (Statista 2021). To access YouTube in the app, one needs a Google account that can be connected to the Gmail email, for example.
With the user profile, it is possible to create its own channel, publish videos and comment on other people’s content.

With this, the profile identification and editing options on the platform will always be combined via Google Account. In the options presented regarding gender, there are “female”, “male” and “rather not say”. Complementarily, there is the option to customise the gender field. Also in the privacy settings, the YouTube app user (and all the other Google services linked to the same profile) can choose not to leave this information visible, or leave it visible only to their network of friends on the platform (Fig. 2).

Fig. 2 - Screenshots of profile creation on YouTube (Google account) (2023)

Source: Authors
The platform also includes examples of how the pronouns can be used (Fig. 3).

WhatsApp is the third app with the most users in the sample and the fourth on which young adults spend the most time per day. WhatsApp is a messaging app for smartphones (but also has desktop and web versions) that allows one to send text messages and make voice calls using a smartphone’s Internet connection. Since 2014, the company has been owned by Meta Platforms and has more than 2 billion users worldwide (Statista 2022).

Although it is linked to the same company, registration on the online messaging platform is independent of the Facebook profile, the key information is on the user’s mobile phone number. The TikTok application is the least used by the people tracked in the tracking survey. TikTok is an app focused on creating and sharing short videos. It is currently owned by the technology company ByteDance. TikTok gathers more than three billion downloads worldwide (Statista 2021). Although they have very different functionalities, WhatsApp and TikTok have in common that both do not provide a specific field for gender in the profile and identification area in the apps (Fig. 4). Both present the standard possibility to display a photo/video, name, username, and bio or about.
The most used application when considering minutes/day is Instagram. As for the number of users in the sample, the app appears in fourth place (295 in total). Instagram is a social media platform founded in 2010 focused on sharing photos and videos. It is also owned by Meta Platforms. In the Instagram app, the user can take, edit, and post visual content and can interact through likes, comments, shares, and saves.
When looking at the options for gender identification within the application, it is observed that the logic is quite similar to that found in Facebook, owned by the same company. It is possible to choose between the genders “male” and “female”, besides customising the gender the user identifies with. Furthermore, it is possible to choose not to provide such information (Fig. 5). There is also a specific section to introduce the preferred pronouns of treatment to which the user prefers to be called. By selecting the pronoun or pronouns (up to four are allowed), the user can still choose to make that information public to everyone or only to their followers.

Fig. 4 - Screenshots of profile creation in TikTok and WhatsApp (2023) (Source: Authors)
4.3. Focus Groups

Regarding gender and app usage, therefore, there are few differences between women and men identified in the implementation of the tracking technique. However, a repetition of patterns is noted in the 18 to 30 age group as a whole. The use of mobile apps being strongly focused on digital social platforms also appears in the focus groups carried out with young adults of the same age range. The discussions in the groups always started from a macro point of the applications and were invariably taken by the young to the social platforms; especially the same apps that appear in the tracking as the most used (Facebook, Instagram, Messenger, TikTok, WhatsApp and YouTube) plus Twitter, Reddit and LinkedIn. Patterns in
perceptions about gender and sexuality issues were found when they create or edit their profile in these same apps. The guiding themes were divided into 1) To understand how the participants use mobile apps; 2) To understand how they usually identify themselves in digital spaces; 3) To identify if they are aware or if they question gender issues in mobile apps, namely with the options provided by the platforms. After conducting the focus groups with the young people, the discussions were transcribed and analysed by identifying themes, patterns and repetitions that occurred in all groups using critical thematic analysis (Braun and Clarke 2006). Some representative excerpts of the main thematic patterns identified are highlighted:

As for my gender identification, I never felt the need to set it. Also for me, I don’t think it’s something relevant, not least because sometimes I don’t interact either (female 21).

It makes no difference to me. My friends and I don’t have those issues, but then again what bothers anyone to express themselves like that? There is no problem at all (male 27).

This issue of gender ends up being so deeply rooted and so normalised in our daily lives that we end up not caring that much. For example, if we were a target of discrimination, perhaps it would be something that we would take into account, but we are included in current social norms, and standards of heteronormativity, and these are things that end up passing us by completely. I think it’s a bit like that. And, of course, I don’t know any people who have fluid genders... I don’t know if that’s how you say it... (male 24).

I know on Instagram that’s been a possibility for a little while, I don’t know if months, but it wasn’t until this year that there became a specific part to put the pronoun that people want to be addressed by. In my circle, I’ve seen a lot
of people putting those pronouns, which I think are all in English. I think it makes special sense when people are feeling, there it is, ‘misgendered’. I follow a lot of people who feel, for example, that they have non-binary identities, they have for example ‘she’ and ‘they’ which I think somehow clarifies people who would just see the name, for example, let’s say they see ‘Mary’ and think it’s necessary, it’s 100% a woman. Maybe it’s not, so I think it’s important that it exists, but I also don’t think that everyone has to use it (male 25).

I think there has been a change, no doubt! (Smile) These pronouns, for example, are subjects that my grandmother, for example, doesn’t even cross her mind, she doesn’t even talk about them, and she finds it strange too. For us, it is more normal and I’m glad that it is good that we are moving towards a path where there is more equality, more acceptance, and more respect for others, because, deep down, there is nothing wrong with it (female 23).

For example, one thing I have done, when I can, when I don’t need to really fill out a form, is if it’s... if I feel that it’s carried out in a binary attitude, it’s not, I refrain from filling it out. So if I feel it’s constituted in a binary way, I kind of boycott the application or the form or the questionnaire or whatever. Because nowadays I find it strange that, even within the Social Sciences and Humanities, I have found many questionnaires... I try to help, to participate, to help as much as I can, on top of that I am in Sociology, so I know how important it is... so I participate whenever I can... but when binarity appears, I completely abstain from filling in. So, as much as possible I try not to participate (female 22).

Two behaviours stand out in particular: 1) efforts of neutrality anchored to normativity and 2) gender awareness and sexual identity issues as an ally. Also, young adults understand digital spaces as a real extension of who they are, so they are appropriated according to specific goals. In addition, they need to underline the
non-dependence of platforms, even if extended uses are acknowledged. Some imaginaries are challenged and others are perpetuated, however, most participants find it difficult to verbalise how the uses and appropriations result from (re)negotiations of their identities. Although no comparison is made between the different research techniques, it becomes interesting to understand the robustness of the archetypes identified.

5. Conclusions

According to data from the tracking of mobile application usage among 342 young adults in Portugal, social media platforms stand out. In particular, six apps registered more than 100 users during the entire tracking sample: YouTube, Facebook, WhatsApp, Instagram, Messenger and TikTok. However, even though YouTube is the most used app of the sample, results reveal that it is less used daily in comparison to Facebook. Although the gendered differences are reduced, albeit existing, from the descriptive statistical point of view, it stands out some more disparate observations such as the fact that women, on average, spend more than twice as many minutes per day on YouTube, compared to men.

Evaluating the complete context of the six apps most used by Portuguese young adults, in a specific clipping, it is possible to consider some takeouts; interestingly, the apps allow editing information regarding gender at the moment of registering in the apps on two levels: a) either there is complete freedom in adding the gender or b) there is not even the option to fill this information. It is known, however, that the appropriations of the apps are endless and that the user can explore any space of the platform, namely the content, to make a statement if he/she/they feel that his/her/their gender is not properly represented. On the other hand, it is important to stress that one of the themes taken from the focus groups with young Portuguese reflects in part this context of the apps: either 1) there is total
and inclusive openness, as we identified in the young people who are aware of these issues, either on their behalf or in defence of gender minorities not represented in these digital spaces, as the examples of most of the apps: YouTube, Facebook, Messenger, and Instagram. Or 2) there is a behaviour and discourse of (young) people who do not think that the gender issue is something that deserves much attention since they are anchored in the binary idea of gender and may believe that if someone wants to define themselves differently, there is “no problem”. This also recalls the pattern of behaviour of people tending to follow dominant digital gender norms and scripts (Comunello et al. 2020). As already pointed out, we identify a group that considers itself "neutral" and a group with active and contesting behaviour. When asked about whether they think it is important for apps to present varied options of gender and sexuality, some excerpts make this divide quite explicit. Although the discourses are notoriously different, there is an openness to dialogue between the different opinions and uses. At no time intolerant behaviour or a “right” or “wrong” vision was noted among the participants. It should even be pointed out that many put themselves in a place of learning, recognizing that they do not possess much knowledge about the theme, but that they would be willing to understand better. The exception is made from the point of view of the real uses given by the apps. This logic seems to be the one we identified in the apps TikTok and WhatsApp, where there is no specific field for this information. TikTok could be a space where identifying gender or at least having the choice to identify would make some sense with the logic of usage of the app. Previously the platform allowed gender identification only as to the ads shown, although it claimed “TikTok infers your gender for ad serving purposes based on your in-app activity” (TikTok 2022). Since WhatsApp, for example, is a space for exchanging messages with a network that is usually already known, the fact of including gender in the app would not make as much sense as in a network where you meet new people.
Although this study is based on an understanding of digital spaces as spaces with the potential for a continuous mutable process of gender identity construction, unfortunately, the binary corporeality cannot be avoided. This can be identified in the process and capacity of sampling by contracted external companies. That is the case of the company that carried out the tracking of the 342 young adults, which does not have samples updated regarding diverse gender identities beyond the binary terms of woman and man. Although this is a limitation of this study, it is also a clear sign of how little this topic has evolved in practical and daily life. Precisely in view of this limitation that directs this study towards a tendentially binary vision of gender, it is important to understand if the most used social media platforms themselves also root the idea of gender as binary. Or if on the contrary, such social media platforms can be and are becoming structures that help the deconstruction of binarism, thus, as pointed out by Susanti and Hantoro (2022) allowing an ever greater correspondence between personal identities in the digital sphere with the identities outside of it.

This exploratory study reinforces the preponderance of the uses of social media platforms for young adults, through the specific context of Portugal. Gender identity (even if in binary terms) does not seem to provoke major differences in uses. And even the focus groups take a somewhat unconcerned view of the problems associated with the need for gender identification. Perhaps, given this popularity, although not totally echoed here, social media apps are on a path of greater inclusivity in terms of gender identity definition, despite the fact that there are different approaches to the possibilities of gender identification among the platforms themselves, as explained. This should not imply that gender can be constructed and performed (of performance) freely in digital spaces such as social media platforms. Indeed, this study reiterates the need for critical visions that encourage change in digital affordances and technical and scientific contributions to a world (including digital) that is less divided based on gender.
References


DataReportal (2022), *Social Media Users* - https://datareportal.com/social-media-users


Skop, Y. (2018), How are gender norms reconstructed through app store ecologies and visual interfaces? (pp. 1-14), Masters of Media, New Media & Digital Culture M.A., University of Amsterdam.
TikTok (2022), How your ads are personalized - https://support.tiktok.com/en/account-and-privacy/personalized-ads-and-data/how-your-ads-are-personalized


Zhang, J., Calabrese, C., Ding, J., Liu, M., and Zhang, B. (2018), Advantages and challenges in using mobile apps for field experiments: A systematic review and a case study, in *Mobile Media and Communication*, vol. 6, no. 2, pp. 179-196 - https://doi.org/10.1177/2050157917725550