

# **How toxic are non-straight dating platforms?**

An analysis of masculinity in online dating app Grindr

Student Name: Floortje Koster

Student Number: 515552

Supervisor: Dr. Débora Antunes

Master Media Studies - Media & Business  
Erasmus School of History, Culture and Communication  
Erasmus University Rotterdam

Master Thesis  
*June 23rd, 2021*

## HOW TOXIC ARE NON-STRAIGHT DATING PLATFORMS?

### ABSTRACT

*In contemporary society, people are more likely to meet their significant other online than offline. Therefore, people are prone to turn to online dating applications such as Tinder and Grindr to find the right person to satisfy their potential romantic encounters. Among a broad spectrum of dating apps that are designed for specific communities and sexualities, Tinder and Grindr are two of the most popular mobile dating apps for straight and non-straight communities. This research seeks to observe gender behavior in the context of non-straight dating application Grindr, aiming to answer the research question: How is masculinity displayed on the online dating platform Grindr? As little research has explored this particular phenomenon, this study aimed to explore the concept of masculinity and toxic masculinity on Grindr. By conducting a thematic analysis and comparing the results to earlier work on gender behavior on online dating platforms it aimed to observe non-straight masculine dating behavior. With a dataset of 200 images derived from Instagram containing Grindr conversations, different themes and patterns were found in non-straight Grindr communication. The findings from the analysis include the use of humor to reject sexual proposals, the use of compliments and emojis to indicate intentions, deceptive self-presentation caused by insecurity, the focus on hookups indicated by sexual language and images. As well as the use of critical tones to promote racism and homophobia, the indication of preferences based on appearance and race, the persuasion of others to engage in sexual behavior by acting dominant and the judgement and rejection of anonymity and effeminacy. After conducting the analysis, it was found that these communicative patterns of masculine and toxic masculine behavior were frequently displayed within Grindr conversations of the non-straight community. Masculine behavior was found in dominant, confident, competitive, and homophobic masculine behavior. Additionally, toxic masculine behavior included sexualizing, racist, objectifying, and aggressive. It can thus be concluded how traditional gender roles are still deeply rooted in straight and non-straight societies and are reinforced by the Grindr platform. Some of the study's limitations that were found include little diversity relating to language, community, and platform. Therefore, it is suggested that further research includes additional data for other countries, queer communities, dating platforms and conducts quantitative research methods to consider the effect of toxic masculinity on dating behavior, responses, and perceptions.*

**Keywords:** *Toxic, Masculinity, Non-straight, Dating, Grindr*

## **Acknowledgements**

This master thesis is the final result of six months of reading, writing, and dedication. During this year, which included a global pandemic, writing a thesis was challenging. Especially when rules and restrictions prohibited us from on-campus education and meeting friends and family was forced to a minimum. This last year has given me much perspective and is coming to an end with completing the current thesis. This thesis would not have been possible without the help and support of some people who were there for me during this master, even in times when we could not meet physically.

First and foremost, I would like to thank my supervisor Dr. Débora Antunes, who patiently supported and guided me throughout the project and steered me in the right direction with her honest feedback. Even when I doubted myself, her knowledge, personal engagement, and enthusiasm guided me through. Furthermore, I am thankful for all the help and support of my friends and family during this project. You know who you are. Without their endless love and support, I would have never started and completed this dream of obtaining my master's degree. For that, I am eternally grateful. Last but not least, I want to thank my fellow M&B students whom I have met during this program and made this experience even more extraordinary.

## Table of Contents

1. Introduction.....	5
1.1. Scientific and societal relevance.....	6
1.2. Chapter outline.....	7
2. Theoretical framework.....	8
2.1. Online dating apps and Grindr.....	8
2.2. Grindr affordances.....	10
2.3. Masculinity.....	12
2.4. Toxic masculinity.....	16
2.5. Comparison framework.....	18
2.6. Summary.....	19
3. Methodology.....	20
3.1. Research design.....	20
3.2. Sampling and data collection.....	21
3.3. Sensitizing concepts.....	22
3.4. Thematic analysis.....	22
3.5. Research design.....	23
3.6. Credibility and ethical considerations.....	23
3.7. Summary.....	24
4. Results and discussion.....	26
4.1. Communicative patterns of masculinity.....	27
4.2. Display of toxic masculinity.....	33
4.3. Comparability to previous research about dating app behavior.....	38
4.4. Summary.....	41
5. Conclusion.....	42
5.1. Academic and social implications.....	43
5.2. Limitations and recommendations.....	43
5.3. Reflexivity.....	44
6. References.....	46
7. Appendices.....	54
Appendix A – References dataset.....	54
Appendix B – Coding tree.....	61

## 1. Introduction

In the early 2010s, the online dating industry was completely changed by the apps Grindr and Tinder. Both apps are location-based and let users decide if they like someone based on photos or swiping left and right (Curry, 2021). In times of a global pandemic, people longing for dates or hook-ups increasingly turn to these platforms as COVID-19 impacts our lives, as rules and restrictions prohibit people from going out (Safronova, 2021). When examining online dating success and experiences, reports discuss the importance of online dating, claiming that approximately 70% of same-sex couples meet online than heterosexual couples, out of which 20% met on the internet. (Blackwell and colleagues, 2014; Rosenfeld and Thomas, 2012). Dating apps offer platforms designed for different people, including straight, gay, have a specific kink, and everything in between (Kalia, 2020). In 2017, heterosexual dating sites and app usage were less frequent than non-straight males in the United Kingdom (Kunst, 2019). In 2012, Grindr reported that more than a million users were using the app every day, and their users sent more than seven million messages and two million photos (Groves and colleagues, 2014). This number has grown to even 3 million daily users in 2018 (Truong, 2018).

While most people associate online dating with positive experiences, they also experience harassment (Brown, 2020). Anderson and colleagues (2020) indicated that young women often report that they have been harassed or sent explicit messages on online dating platforms. As a result of this behavior, social media pages intentionally and anonymously post screenshots of conversations on dating applications that are perceived as inappropriate (Hess and Flores, 2016). According to Temple and colleagues (2015), online dating abuse also includes the monitoring of smartphone behavior of partners without actual permission in the first place and sexual cyberbullying like sending graphic sexual photos or messages and offensive and intimidating messages. Some of these harmful behavioral approaches in dating app conversations are related to gender performance, specifically masculinity. As indicated by Hofstede's (2011) culture dimensions, dominant masculine values are success, money, and commodities. On the other hand, Hofstede (2011) describes dominant feminine values as caring and quality of life. Since the perceptions of gender values might have changed since Hofstede's initial research in 1984, it would be relevant to investigate this behavior in the 2020 era. More specifically, stereotypical masculine behavior on online dating platforms.

Tinder and Grindr were designed respectively for the straight and non-straight communities; assumptions and stereotypes regarding their target audience are likely embedded and communicated on the platform. As masculinity and toxic masculinity have already been studied on straight dating app Tinder (Hess and Flores, 2016), this study will analyze 200 Instagram posts that present dating app conversations on non-straight dating app Grindr. After conducting the analysis, multiple studies will be employed for a comparison framework. Included are Hess and Flores (2016) study and the research of Filice and colleagues (2019). The question guiding this research is:

*How is masculinity displayed on the online dating platform Grindr?*

Three sub-questions follow this question:

*Sub-question 1: What are the main communicative patterns related to masculinity?*

*Sub-question 2: How is toxic masculinity portrayed on Grindr?*

*Sub-question 3: How does masculinity on Grindr correlate to previous research about dating app behavior?*

This research intends to answer these questions by conducting a qualitative research method, thematic analysis. Possible results can include current gender representations, little diversity, the perseverance of traditional gender values, what different masculine forms entail, sexually driven relationships, and how dating apps reinforce classic gender stereotypes. The concept of masculinity has been operationalized as dominant, confident, competitive, and homophobic behavior. In addition, toxic masculinity has been operationalized to display sexualizing, racist, objectifying, and aggressive behavior. Research has discussed masculinity in the context of traits such as rules and traits including confidence, independence, and assertiveness (Leaper, 1995). Other studies mentioned how masculine values ask men to refrain from being perceived as gay, effeminate or weak (Sattel and colleagues, 1978). Additionally, masculinity was linked to female oppression, intermale dominance, and hegemony, indicating how masculinities are collectively created (Connell, 1987, 2005). This collective creation of gender is supported by other scholars as well (Carrigan and colleagues, 1985; West and Zimmermann, 1987).

The literature discusses the concept of toxic masculinity in the context of dominance, deprecation of women, homophobia, and careless abuse (Hess and Flores, 2016; Kupers, 2005). Furthermore, toxic masculinity emerged from fathers' and sons' emotionally distant relationships, resulting in men who felt they needed to prove their manhood (Harrington, 2020). Additionally, the concept has been linked to more critical concepts such as terrorism (Haider, 2016; Pearson, 2019). Ever since the #MeToo movement, feminists have linked sexism, homophobia, and male abuse to the concept, encouraging men to rethink their gender behavior (Harrington, 2020; PettyJohn and colleagues, 2019).

### *1.1. Scientific and Societal Relevance*

The social relevance of this project lies in exploring how Grindr users display gender behavior since not much is known about the dating behavior of this group. Here, the LGBTQ+ community has been relatively underrepresented in society as well as in the scholarly community and literature (Boehmer, 2002; Carter, 2018). Furthermore, due to the more recent rise of online dating platforms, there appears to be a gap in the academic literature. This gap is related to exploring the different forms and displays of gender behavior by non-straight Grindr users as the platform accommodates diverse people and communities. In the same manner, toxic masculine dating behavior has not been linked to the Grindr platform by scholars yet, which further adds to the scientific relevance of the study. Moreover, the relevance of this study relates to business as well, as dating applications like Grindr have a commercialized business model based on selling private and

personal data of its users. Since Grindr is valued at 620 million dollars, with annual revenue of 100 million dollars, it has emerged as an essential integrator of sensitive dating app data (Wang, 2020). Despite Grindr being a leading player in the dating app market, little is known about the underlying business models of these apps, the economic value of information of dating apps, and how this information is monetized (Wilken and colleagues, 2019). Therefore, it is crucial to examine some of the Grindr affordances and the stakeholders involved.

## *1.2. Chapter outline*

This thesis consists of five chapters, including a theoretical framework, methodology, results and discussion section, and a conclusion. The following section will give a short overview of what each chapter includes. First, the thesis will start by discussing literature about online dating behavior. In this theoretical framework chapter, concepts including online dating, Grindr, masculinity, and toxic masculinity will be operationalized and linked to other scholarly work. Additionally, other research about dating apps behavior will be discussed. After the theoretical framework is discussed, the methodology chapter will explain the employed research method and operationalize the main concepts. The chapter will continue by reviewing the chosen research method and describing the steps taken to conduct the analysis. Following the methodology chapter, the research findings will be presented and discussed in the results and discussion chapter. The results will be put into context by linking them to the theory discussed in the theoretical framework and comparing them to two studies that were employed for the comparison framework. Examples derived from the dataset will be discussed, and relevant additional information will be provided. In total, three themes related to the research question and sub-questions emerged from the subthemes. The first theme discussed communicative patterns of masculinity and included humor to reject sexual proposals, compliments and emojis to indicate intentions, deceptive self-presentation caused by insecurity, and the focus on hookups indicated by sexual language and images. The second theme discussed the display of toxic masculinity, and included the use of critical tones to promote racism and homophobia, indicated preferences based on appearance and race, the persuasion of others to engage in sexual behavior by acting dominant and judgment and rejection of anonymity and effeminacy. Lastly, the third theme discussed the comparability with previous work on dating app behavior, including Hess and Flores's (2016) study and the study of Filice and colleagues (2019), and found that both studies largely overlap yet differ from the current analysis. The final chapter will present the conclusion of the research that has been done. The chapter gives an evaluation and summary of the findings. Moreover, an outline of the limitations of this study will be given as well as recommendations for future research. The chapter ends by reflecting on the researcher's role in the study.

## **2. Theoretical Framework**

In this chapter, the concept of online dating and dating applications will be discussed and how men, with a focus on non-straight men, are using dating apps. Then, the concept of masculinity and its ramifications will be further elaborated. Specifically, the non-straight dating app Grindr will be examined. The chapter will start with a comparison of relevant literature and scholarly work by framing the virtues of online dating and dating apps and essential concepts like gender performance and masculinity which will provide the study's conceptual framework.

### *2.1 Online dating apps and Grindr*

Ever since the development of online dating applications revolutionized the dating industry, it has been a compelling topic of study for scholars. Not only have studies paid attention to the importance of online dating, daters' profiles, and the reasons for using online dating sites and apps (Finkel and colleagues, 2012; Tong and colleagues, 2019). Attention has also been paid to different personality types associated with the amount of dating app usage. For instance, Valkenburg and Peter (2007) indicate that online behavior resembles that of the offline world. Additionally, for both online dating sites and dating applications, online dating success has been studied in the context of long-term relationships and negative experiences. The research includes users discovering people who misrepresented themselves on their profiles or that have been approached in a way that made them feel threatened or insecure (Smith and Duggan, 2013; Anderson and colleagues, 2020). However, misrepresentation is not the only negative online dating experience users might encounter.

To examine whether online dating differed from offline dating, three online dating app services of access, communication, and matching were analyzed by Finkel and colleagues (2012). It was established that the popularity of Tinder, Grindr, and other dating sites is caused by an increase in dating platforms and internet access, which have given people seeking relationships access to a variety of potential partners previously unknown or unavailable to them. Race (2014) reported how Grindr facilitates local, direct social or sexual interactions and digitally enables non-straight people to experience sexual encounters formally hidden. As a result, the gap is revealed between straight and non-straight communities regarding how and where they meet their potential partners. As Hennelly (2010) points out, non-straight males prefer to meet online rather than in cruising areas, where there is a higher chance of being mugged or assaulted. Still, it needs to be noted that online environments are not always safer than meeting in real life, as Rowse and colleagues (2020) reported how numerous dating app users had been sexually assaulted after dating app meetings.

Possibly, these risks are the result of the increase in the popularity of dating apps. Sexual assault has been described as one of the dating app risks by Couch and colleagues (2012), who also mentioned risks related to sexual health, deceit, and violence. Besides Grindr, numerous dating applications are available for non-straight people. Rogge and colleagues (2019) indicated that apps like Grindr and Tinder facilitate sexual risk-taking since the barrier for finding casual sex is removed. Their study on the sexual behavior of dating app users revealed that men have more sexual



partners than women but seem to care less about contraceptives. Accordingly, research has found how Grindr users have more sexual partners than straight daters, are less likely to carry contraceptives, and have a higher rate of sexually transmitted infections than women (Rogge and colleagues, 2019; Hoenigl and colleagues, 2019). Landovitz and colleagues (2012) have pointed out how especially the Grindr community is at an extremely high risk of contracting HIV compared to other age groups, as this young age group represents high rates of HIV infection cases. Additionally, studies have indicated that men are more inclined to seek casual sex than women (Scannell, 2019; Sumter and colleagues, 2017).

Next to risks regarding sexual health and assault, online dating app users are also more likely to experience risks in the shape of harassment or sexually explicit messages, especially for non-heterosexual daters (Brown, 2020). Where Couch and colleagues (2012) mentioned the risk of deceit earlier on, Waldman (2019) further describes how non-straight dating apps users experienced cases of extortion for explicit images, impersonation, sexual harassment based on race, and revenge pornography. This behavior relates to toxic masculinity as racist, objectifying, and sexualizing behavior was operationalized earlier as toxic masculine behavior. Additionally, studies have indicated how Grindr communication is often focused on body image and sex (Anderson and colleagues, 2018; Filice and colleagues, 2019). Impersonation relates to masculinity as well, as Hall and colleagues (2010) have indicated that men are more likely to misrepresent traits regarding their belongings, motives, ambitions, and characteristics on online dating platforms.

When users communicate on online dating platforms, several behavioral approaches can be distinguished and observed regarding how people present and disclose themselves to potential partners. Ward (2016-a) argued that self-presentation is an essential part of constructing an impression on online dating apps. The study illustrated how dating techniques are usually similar: presenting oneself in an attractive way to others. The study of Jaspal (2016) showed that Grindr users exaggerated confidence to be perceived as more confident. Grindr allows people to establish a more attractive identity; therefore, it enhances people's self-presentation and generates self-esteem. However, when a more confident image is portrayed on the Grindr platform, the expectations of others caused by this can be challenging to meet in an offline environment.

Licoppe and colleagues (2016) noticed three other aspects of specific Grindr behavior. Initially, it was indicated how users ask and answer questions that included details such as pictures, location, and motives. The design of the chat interface reinforces these aspects as it shows different features such as sending videos, locations and clearing the chat history (Licoppe and colleagues, 2016). Grindr chats were observed to have a checklist type of conversation where users seek to explore potential partners by asking for intimate pictures and their intentions, while also suggesting possible meeting times and locations. This indicates how Grindr is primarily designed for enabling fast encounters, as users do not seem to waste any time getting into additional informal talk with potential partners but instead use the chat to set up a time and location for a meeting promptly. Additionally, the option to send videos indicates sexual notions, where the option to clear the chat

history implies secrecy. Further details about some of the Grindr affordances, user behavior, and how the dating app distinguishes from Tinder, will be discussed in the following subsection.

## *2.2. Grindr affordances and characteristics*

Furthermore, it would be relevant to explore some of the Grindr affordances and characteristics to show how the platform distinguishes itself from other dating platforms like Tinder. This way, the researcher can observe the behavioral differences of both Tinder and Grindr users in their specific context and compare them. Race (2014) emphasizes how "affordances of an object depend on the predispositions and goals of the creature encountering it" (p. 500). In other words, Grindr reflects stereotypes of non-straight male culture, including the stigma that Grindr is a platform that facilitates sexual relationships (Rice and colleagues, 2012). More details about masculinity and masculine values will be discussed later in this chapter. The concept of affordances stems from the cognitive psychology field. In the late 1970s, Gibson (1979) described how affordances relate to the design of items so that the user can predict how to use them by identifying visual clues. Scholars in the media field also use the term to study modern communication technologies (Baym, 2010).

Even though both Tinder and Grindr align in their function, they have a completely different interface and design. For example, when a user opens the Grindr application, it shows a map of more than twelve active users listed by their distance to the user (Licoppe and colleagues, 2016). On the other hand, the Tinder application shows a card stack with only one potential match at a time that the user can like or dislike. The Grindr feature of proximity exemplifies that the app is mainly designed for facilitating fast hookups and casual sex (Blackwell and colleagues, 2014). Hence, it characterizes Grindr and its community and distinguishes it from Tinder as some of the Grindr affordances reinforce these fast hookup notions. Including the earlier mentioned affordances of sending videos, deleting chat history and proximity, and other features. Including the 'looking for' option that was described by Anderson and colleagues (2018). Here, the user can select friends, relationships, chat, dates, networking, or 'right now', meaning sexual encounters. This concept of the Grindr platform facilitating fast hookups and casual sex relates to masculinity in the sense that masculine values might cause men to see sex as a competition, thereby perceiving Grindr as a competitive space (Bird, 1996). Additionally, this relates to toxic masculinity as this behavior includes sexualization, objectification, and persuading others into sexual acts. These concepts will be more extensively explored in the following chapters.

Furthermore, another unique affordance of Grindr that differs from Tinder includes filtering for desired characteristics such as body type, HIV, and ethnicity (Miles, 2021). The Grindr platform's focus on appearance has been mentioned by multiple scholars (Anderson and colleagues, 2018; Filice and colleagues, 2019). Grindr also allowed users to perform ethnicity-based searches on their platform, implying that race filtering is appropriate (Shield, 2019). In contrast to all other available filters, the ethnicity filter was not explicitly promoted by Grindr. Shield (2019) continues how this is notable, as Grindr does not allow its users to filter on HIV status to take a stance against

discrimination. However, they did not take a stance on racial filtering until recently, as the ethnicity feature was removed in 2020 to support the Black Lives Matter movement (Wei Ang, Tan, and Lou, 2021).

An additional feature implemented in the Grindr application enabled users to share their HIV status and last test date on their profile. With this feature, Grindr frequently sent reminders to its users to get HIV tested, aiming to prevent STD outbreaks while also reducing the stigma of getting tested (Warner and colleagues, 2018). In April 2018, Grindr received significant backlash when users revealed that the dating app shared HIV data and users' location with third party companies (Warner and colleagues, 2018). As been made public by European researchers and nonprofit Norwegian Consumer Council, Grindr provided two software companies with users' HIV status data and location. This revelation concerned researchers that user health data combined with email addresses and GPS data could identify users, risking them being exposed (The Guardian, 2018).

Moreover, one of the Grindr features includes the "Tribes" function, which allows users to select tribes they want to be a part of and search for other Tribe members (Grindr, 2013). Users can associate with niche Grindr communities and filter to find their specific type using Tribes with this feature. Some of these include appearance-based descriptions such as Bear, Clean-cut, Daddy, Discreet, Geek, Jock, Leather, Otter, Poz, Rugged, Trans, and Twink (Clay, 2018). These terms relate to the terms and abbreviations that are commonly used in the Grindr community. For example, regulars, FWB, Top, fnf, and NPNC are some of the abbreviations that users include in their profile to indicate what kind of encounters they are seeking (Fadzil and Dato' Haji Abdul Hamid, 2020). Similar to the Tribes function and more relating to the concept of body image, Filice and colleagues (2019) mentioned how Grindr included categories to indicate the user's appearance. The six categories include "toned", "average", "large", "muscular", "slim", and "stocky". Other scholars have indicated how Grindr users are indicating their preferences regarding appearance in their profiles, such as "no blacks" or "big NO to chubby" (Baggs, 2018; Fadzil and Dato' Haji Abdul Hamid, 2020). Such behavior relating to racism has been operationalized as toxic masculine behavior.

Besides abbreviations, other communicational patterns relating to masculinity in online dating contexts can be distinguished. Several scholars, including Gesselman and colleagues (2019) have explored the role of emoji use. The study of Nexø and Strandell (2020) found how provocative emojis have been used to test the other person's intention. It can thus be noted that most of the Grindr affordances are based upon appearance and sexual desires. Relating to the key concepts as the focus on appearance and sex were observed in the comparison framework studies. The study of Hess and Flores (2016) mentioned how toxic masculinity includes objectification and sexualization. Additionally, the study of Filice and colleagues (2019) described how Grindr is impacting body image through stigma relating to weight, objectification, and social comparison. Moreover, objectification and sexualization were operationalized as patterns of toxic masculine behavior.

Some of the dating risks described earlier in the chapter may be related to the features and affordances of online dating platforms, including users sharing their location, among other sensitive data that users share on their online dating profiles. When users share their location, it allows other app users to monitor their movements or stalk them using their location data (Cheung, 2014). One of these Grindr features includes sharing the user's location when they login to the Grindr application to identify nearby users (Blackwell and colleagues, 2014). Grindr users can also share their exact location via map "pins" in the app's chat feature. These affordances can be a double-edged sword as the location sharing feature can be perceived as a risk. However, on the other hand, it has been described as a justification for using Grindr as it allows for quick hook-ups based on proximity (Van De Wiele and Tong, 2014). Therefore, some users might not be concerned with their location being shared. Blackwell and colleagues (2014) indicated that users did not seem distressed about sharing their location with other users. Instead, they found that users often add location tags to identify their location even though these tags were not included in the Grindr interface, indicating that most users value the feature of proximity instead of perceiving it as a risk or privacy issue.

Next to risks regarding privacy, Corriero and Tong (2015) indicate how Grindr users might be afraid of being "outed" as some Grindr users may not have determined their sexual orientation yet and are still exploring. Afraid that peers discover their profile on non-straight dating apps, thereby forcing them out of the closet, users display anonymized photos to hide their identity (Blackwell and colleagues, 2014). Jaspal (2016) mentions how users refrain from disclosing their sexual identity to their peers while discreetly using Grindr to maintain their heterosexual privilege while simultaneously satisfying their true sexual desires. The need for anonymity is possibly caused by oppression, as Steinfeld (2020) has mentioned how outing can be fatal in countries where non-straight people are oppressed. Therefore, Grindr has launched another application, Grindr Lite, for people living in countries where non-straight people are oppressed. In such countries, the use of Grindr may cause life-threatening situations once their use is discovered by peers (Steinfeld, 2020). This application offers additional services to enable the health and safety of users while enabling them to connect with the LGTBQ community. The display of anonymity was also shown in the analysis and will be further discussed in the results chapter.

After examining some of the main affordances and characteristics of the Grindr platform, including proximity, appearance, race, health, emojis, sexual preferences, and anonymity, the following subsections will elaborate on the main concepts of masculinity and toxic masculinity.

### *2.3. Masculinity*

This study aims to explore how masculinity is displayed on the online dating platform Grindr. The analysis intends to examine communicative patterns, specifically toxic masculinity, on the Grindr platform and whether or not this aligns with previous research about dating app behavior. In order to observe masculinity and toxic masculinity, it is necessary to explore and define masculine patterns and behavior, so they are framed and can be observed in the analysis.

While the terms masculinity and femininity can be used independent of (biological) sex, Stoller (2020) describes that gender is the amount of masculinity or femininity found in a person. Gender identity relates to the knowledge and awareness that a person belongs to a particular sex, and this identity can become more complicated as a person develops. For example, when a man perceives himself as an effeminate male, as effeminacy does not relate to traditionally masculine traits or values. On the other hand, gender the overt role that one displays in society to establish their position with other people (Stoller, 2020). The work of Sattel and colleagues (1978) continues by mentioning the four rules for masculinity:

1. Men need to refrain from being perceived as gay, effeminate, or weak.
2. Measures for masculinity include status, power, and wealth.
3. Masculinity entails that men can be relied upon during a crisis so they can respond to the situation.
4. Men need to take risks and should not care about the opinion of others.

As the work of Leaper (1995) suggests, masculine traits are instrumental or agentic traits such as confidence, independence, and assertiveness. These contrast to understanding, affection, and compassion, which are socioemotional traits within the feminine stereotype. Contrarily, other research does not describe gender as a trait, variable, or role; instead, people are “doing” gender. This act of gender is reinforced by the digital or physical presence when people are interacting with each other (West and Zimmermann, 1987). Bird (1996) has described men to perceive sex as a competition. Therefore, men might perceive Grindr as a competitive space, pressured to perform masculine or even toxic masculine behavior.

Gender behavior depends on the situation as masculinities and femininities are performed differently in any given context. Butler (1999) describes how the concept of gender is performative and a social construct. Carrigan and colleagues (1985) argue that instead of gender being performed individually, it is impacted by different external factors such as countries, institutions, businesses, and communities. Goffmann (1978) further argued how people seek to control the impression they give others by manipulating behavior, appearance, and setting. As the literature has indicated how dating app impressions and behavior are based on the expectations of others, also in the case of Grindr (Blackwell and colleagues, 2014; Ward, 2016-b). Mainly sexual behavior is dependent on others' expectations as Stoller (2020) mentioned. The concept of altering behavior based on others' expectations can be linked to Grindr as it has been perceived to accommodate hook-up culture. Additionally, men likely recognize Grindr as a competitive space, as sex is perceived as a competition, therefore, pressured to perform masculine or toxic masculine behavior (Bird, 1996).

Because of the different factors that impact gender, it is not possible to perceive gender without considering the circumstances it has been produced in. This approach is supported by Weaver-Hightower (2003) as well, who describes that gender is shaped by both individual and institutional factors. The author states that there is no universal form of masculinity supported by global communities. Instead, masculinity is traditionally and contextually dependent, allowing

people to create multiple masculinities that are adjusted to cultural frames (Weaver-Hightower, 2003). This hypothesis of different groups of people expressing different masculinities further supports the work of Connell (2005), one of the leading scholars who has studied masculinity in great detail and has linked it to hegemony, implying a constant hierarchical battle of power between different masculinities. Her work discusses how hegemonic masculinity expects men to have an income, succeed professionally and support their families (Sallee and Harris, 2011). Therefore, causing groups that meet these masculine expectations achieve dominance, while the hegemonic group oppresses people who do not embody these characteristics. Usually, the hegemonic group includes white, heterosexual, physically strong men and the oppressed group consists of colored, working-class, gay and effeminate men (Connell, 2005).

Interestingly, females have more versatility regarding gender role modeling and are allowed to be boyish, while men are expected to meet masculine standards by refraining from acting weak and effeminate. As a result, young men learn not to cry when injured and are forced into male behaviors despite their preference or abilities, thus compelled to prove their masculinity (Baker and Balirano, 2017). According to Connell (2005), masculinities “come into existence as people act” (p.208), suggesting that organizations and other factors construct it, therefore, limiting options of different masculine behavior. When people ignore gender behavior defined by and expected from society, they may be criticized or punished. Jaspal (2016) has mentioned how Grindr users who indicate not to seek sex are commonly ignored, judged, and blocked, reinforcing the notion that Grindr is perceived as a platform that solely facilitates hook-up culture. On the other hand, when people’s gender behavior conforms to these culturally determined standards, it is expected that they will be rewarded.

The theory of Connell (2005) aligns with the theory of West and Zimmermann (1987) that describes how gender is collectively created as people collaborate to produce gender instead of gender being an individually built-in characteristic (Sallee and Harris, 2011). According to West and Zimmerman (1987), gender is a process rather than a role. Their gender interpretation builds on three points:

1. It is argued that gender is context-dependent, with various masculinities and femininities being enacted in different contexts.
2. Gender is cooperatively constructed as people collaborate to create gender instead of it being an inherited personality trait.
3. Men and women portray gender roles that are expected by others and are aware of the roles that their gender determines.

Moreover, though many individuals combine both masculine and feminine characteristics, males usually display masculine traits, and females display feminine traits (Stets and Burke, 2000).

Though many scholars support and build upon the theory of Connell (2005), it has been challenged by scholars too. Anderson (2011) argues that modern changes in men’s values and attitudes are common and should be seen as structures that challenge gender and sexual inequality.

The Inclusive Masculinity Theory (IMT) was proposed by Anderson (2011) and sought to comprehend the evolving relationship between young males and masculinity in society. This inductive theory was created to understand social dynamics in sports and fraternity environments that were not based on homophobia, stoicism, or rejection of feminine behavior (Anderson and McCormack, 2016). Anderson (2011) argues that in the absence of homophobia, the male gender can evolve the display of openness of emotion, the increase of peer tactility, the relaxing of gender codes, and strong friendships based on emotional exposure. Wailing (2019) earlier referred to such behavior as forms of healthy masculinity. The concept of toxic masculinity will be discussed in the following subchapter.

Kimmel (2001) has argued that for men, violating gender norms includes the suspicion of homosexuality or being too feminine. As Kimmel (1997) states, homophobia is the fear of men that they will be emasculated as they do not want other men to see their fear. Fear that others will reveal their true identity of not as manly as they want to be perceived. García-Gómez (2020) mentions this as the concept of femmephobia, also known as hatred or fear for femme, feminine or effeminate people. This phenomenon of femmephobia is mainly found in the LGBTQ+ community. As a result, gender policing and regulation are deemed practical tools for establishing socially defined male gender roles.

As is shown how masculinity has been studied to a great extent, scholars have noted the absence of masculine considerations for minorities, including non-straight men (Dowsett, 1993). Increasingly more work on non-straight masculinities has emerged in the last decade (Baker and Balirano, 2017; Edwards, 2006). Still, Mowlabocus (2010) has described how the underrepresentation of gay culture in society turned non-straight men to online platforms, including pornography and dating apps. It is their only depiction of what it includes to be a non-straight man and likely causes them to embody stereotypes of the non-straight culture that Grindr also embodies. The table below summarizes the mentioned descriptions of masculinity from different scholars.

Table 1  
Masculinity as described by different scholars

<b>Scholars</b>	<b>Description of masculinity and gender behavior</b>
Anderson (2011)	The nature of masculinities is shifting as men’s gendered behavior is changing.
Buchbinder (1994)	Hypermasculinity includes the performance of masculinity based on excessive levels of toughness, machismo, and inviolability.
Butler (1999)	Gender is performative and a social construct.
Connell (1987, 2005)	Hegemonic masculinity is built on female oppression as well as intermale dominance. The stigmatization of homosexuality also influences it.

Hofstede (2011)	Dominant masculine values are success, money, and commodities.
Kimmel (1997, 2001)	Masculinity is a homosocial enactment, as men need to be approved by other men to affirm their manhood.
Leaper (1995)	Masculine traits are confidence, independence, and assertiveness.
Sattel and colleagues (1978)	Refrain from being perceived as gay, effeminate, or weak. Masculinity is measured by status, power, and wealth. Men need to be reliable during a crisis to respond to the situation. Men should emit aggressiveness, dare to take risks, and should not care about the opinions of others.
West and Zimmermann (1987)	Gender behavior depends on the context; gender is a process instead of a role.
Weaver-Hightower (2003)	There is no universal form of masculinity supported by culture. Instead, gender is shaped by both individual and institutional factors.

As illustrated above, the concept of masculinity is shown by complex expressions of gender and identity. The definition of *masculinity* used for this thesis is a combination of the traits mentioned by scholars in the table illustrated above. In order to examine different features of masculinity in the dataset, it will be described as the expression of confident, dominant, competitive, and homophobic behavior. The following subsection seeks to specify the concept of toxic masculinity and find linkages to the non-straight community.

#### 2.4. Toxic masculinity

Scholars have been studying masculinity since the fifties, and the previously mentioned work of Connell (1987, 2005) is perceived as most shaping by recognizing how specific masculinities prevail and what masculinity entails. In his work, Connell (2005) takes a socio-cultural approach, arguing that masculinity is not only the gender role but also the process of men and women pursuing their gender role and the impact thereof on their body, character, and culture. Furthermore, Connell discusses masculinity in the context of hegemony; other scholars link specific gender behavior to the concept of toxic masculinity (Haider, 2016; Harrington, 2020; Kupers, 2005; Wailing, 2019).

The term toxic masculinity can be traced back to its origins in psychology research on masculinity, which is part of a larger body of Critical Studies on Men and Masculinities, also known as CSMM (Pearson, 2019). While it may be thought that toxic masculinity mainly emerged from feminist work, it emerged in the 1980s to describe emotionally distant relationships between fathers and sons that produced “toxically” masculine men that felt the need to prove their manhood (Harrington, 2020). Ever since then, scholars seek to address the complexity of masculinities. For example, research has described how masculinities are shaped in contrast to femininities.



Additionally, it has been examined how masculinities are hierarchically performed and how some masculinities are preferred over others. Furthermore, it has been found that toxic masculinity consists of a collection of socially regressive male characteristics that promote dominant, sexualizing, homophobia, and objectifying behavior (Hess and Flores, 2016; Kupers, 2005). Thus, behavioral patterns linked to the main concepts like dominance, confidence, competitiveness, and homophobia have been operationalized as masculine behavior. In addition, sexualizing, racist, objectifying, and aggressive behavior were operationalized as toxic masculine behavior.

Since the research in the eighties, the term toxic masculinity has increased in scholarly feminist work as the term gained popularity. Though toxic masculinity is used by authors who refrained from operationalizing, it usually includes rape and sexual violence that is legitimized by society (Posadas, 2017). Additionally, toxic masculinity has been linked to other pressing concepts as Pearson (2019) described linkages to terrorism after the 9/11 terrorist attacks in New York in 2001. While there remains little evidence that supports this interrelationship, an increasing amount of research seeks to examine the concept of toxic masculinity with terrorism to indicate a link between gender roles and terrorist motives (De Boise, 2019; Haider, 2016; Pearson, 2019). The outcomes of these studies illustrate how the relationship between gender and violence needs to be addressed. However, it remains important to note that masculinities can be observed in women's behavior and understand that toxic behaviors are presented throughout society.

Besides the concept of terrorism, sexism, homophobia, and male abuse have additionally been linked to toxic masculinity by feminists as a new "feminist movement" was created in 2014 (Harrington, 2020). Within this new movement, toxic masculinity emerged as the primary term in feminist discourses related to Trumpism and #MeToo. Ever since the #MeToo movement in 2017, people were encouraged to rethink typical gender behavior, particularly men, to make behavioral changes that lead to or reinforce rape culture (PettyJohn and colleagues, 2019). In contrast to toxic masculinity, 'healthy masculinity' has now emerged as a response, encouraging men to perform masculinity in non-harmful ways in order to resolve gender inequality. Some characteristics of healthy masculinity include men engaging in the emotional and sexual relationships they have with women and maintaining emotional relationships with other men (Waling, 2019).

According to Waling (2019), the rejection of toxic masculinity needs men to refrain from acting emotionally detached when faced with emotionally vulnerable periods. It would be expected that Grindr and its inclusive queer community would not display such toxic masculine behavior compared to the straight community, but evidently, this is not the case. As has been indicated, Grindr users report different types of harassment such as racial and body discrimination, some of which even resulted in a lawsuit (Truong, 2018). Seemingly, bullying and hate within the gay community are more common than one would expect. In the description of their Grindr profile, users express rude statements such as no Blacks, no Asians, or no Hispanics to indicate preferences regarding race and appearance for potential partners (Baggs, 2018; Fadzil and Dato' Haji Abdul Hamid, 2020). As a response, Grindr launched an anti-racism campaign in 2018, 'Kindr', to spread awareness about

racism and discrimination within the Grindr community and to encourage diversity and inclusion (Grindr, 2018; Ramos and Mowlabocus, 2020). In addition, Grindr claims to have updated their community guidelines on the website, banning users who harass or insult others and encouraging users to report people violating these guidelines.

The definition of toxic masculinity that will be used for the current study consists of a combination of the previously stated definitions provided by the literature. For toxic masculinity to be observed in the dataset, it will be indicated to display sexualizing, racist, objectifying, and aggressive behavior. After considering the literature on Grindr affordances, masculinity and toxic masculinity, it can be acknowledged Grindr reinforces masculine and toxic masculine notions despite affording community formation. Furthermore, as scholarship points out, Grindr is used for hook-ups and with strong instances of bias, harassment and prejudice (Baggs, 2018; Fadzil and Dato' Haji Abdul Hamid, 2020; Jaspal, 2016; Truong, 2018). The following subsection will discuss the two studies that will be employed for a comparison framework with the findings of the analysis.

### *2.5. Toxic Masculinity in Dating Apps*

To provide a comparison framework for this thesis, research about masculinities in dating apps will be discussed. The first study employed for the framework includes Filice and colleagues' (2019) study, which explores the concepts of social comparison, body image, and sexual objectification of Grindr users. Additionally, the study examines how Grindr differs from other dating applications regarding issues relating to body image. The study was chosen to be employed for the comparison framework related to the concept of body image and connects this topic to the Grindr platform. Body image further relates to the focus appearance of the Grindr platform that, according to scholars, was set by the media, advertisements, and pornography (Anderson and colleagues, 2018; Mowlabocus, 2020). Findings of the study included how many Grindr users reported to have experienced negative comments related to their appearance by other users relating to weight, skin tone, and shape. According to Filice and colleagues (2019), appearance is culturally relevant and represented in many discourses reinforce prejudice as Grindr connects users for sex. Additionally, this focus on appearance is bolstered by the Grindr affordances that let users filter on appearance-based categories resulting in further objectification of self and others.

The second study employed for the framework includes Hess and Flores' (2016) study investigating performances of toxic masculinity on Tinder. In their study, the Instagram page *Tinder Nightmares* describes the display of toxic masculinity on Tinder that confronts the heterosexist normative conceptions of masculinity commonly found in hook-up culture (Hess and Flores, 2016). The study was chosen to be compared with the current analysis as it employed a similar topic and approach, analyzing dating app conversations and linking it to the concept of toxic masculinity. Hess and Flores' (2016) study found two initial responses when women encountered toxic masculinity on Tinder. Firstly, strategic silence was displayed by not engaging in pickup lines, misogynistic or sexual responses. Secondly, women were found to respond in an improvising manner to reject the

way men would like to be responded to when sending toxic masculine lines, to shame and disciplining toxic masculinity. Besides observing the screenshots of Tinder conversations found on the *Tinder Nightmares* page, Hess and Flores (2016) add layers by interpreting audience responses on Instagram.

The studies mentioned above will be employed as a comparison tool for the analysis results as they examine dating app dialogues on Tinder and Grindr by distinguishing typical gender behavior. The points compared with these studies are related to the research question and respective sub-questions and include the main communicative patterns relating to masculinity, how toxic masculinity is displayed on Tinder and Grindr, and how the results from the current study correlate to the outcomes of the studies from the comparison framework.

## 2.6. *Summary*

This chapter illustrated a need for online dating studies because many of the gay community meet their partners on online dating platforms. Nevertheless, ever since the number of online dating apps and their users increased, so did the negative experiences as people were harassed or sent sexually explicit images. Such “toxic” behavior can be distinguished as typically masculine, and this type of behavior has been linked to sexism, homophobia, male abuse, and even terrorism. Other insights from the chapter include that hate and racism are not uncommon in the queer community. Therefore, it can be expected that in the analysis, hateful and toxic behavior will be identified. The next chapter further discusses how it aims to analyze typical gender displays on Grindr.

### **3. Methodology**

This chapter will address the research design and all the decisions made to answer the research question: How is masculinity displayed on the online dating platform Grindr? Alongside the research question, three sub-questions are used to guide this study. The first sub-question asks what the main communicative patterns related to masculinity are, and the second sub-question asks how toxic masculinity is portrayed on Grindr. The third sub-question seeks to examine whether masculinity on Grindr correlates to previous research about online dating applications. First, this chapter will discuss the analytical choices as well as explaining the sample and sampling criteria. Subsequently, the concepts that relate to the research question and sub-questions will be operationalized. Eventually, the chapter will explain the chosen research method of thematic analysis and demonstrate how the analysis was conducted to answer the research question and sub-questions.

#### *3.1. Research design*

As this research examines the patterns of masculine behavior on Grindr, a qualitative research method has been employed as qualitative methods are more suited to answer open-ended questions (Allen, 2017). Additionally, qualitative research methods provide a more comprehensive explanation of the explored concepts, thereby allowing the researcher to determine what needs to be observed, analyzed, why, and how (Babbie, 2014). According to Babbie, two tasks need to be considered in any research design. Firstly, the researcher tries to be as transparent as possible about the topic of study, and secondly, the most effective research method should be determined (Babbie, 2014). For this study, the qualitative research method of thematic analysis has been employed to examine masculine behavior as it identifies, analyzes, and reports patterns or themes within data (Boeije, 2009). This method was chosen for the current study as it involves searching across a dataset to find repeated patterns of meaning. The dataset that was acquired for the study consists of 200 Instagram posts that display conversations between non-straight males on the online dating application Grindr. It was decided to analyze images with a qualitative research method. The method allowed the researcher to explore the roles and dynamics of the Grindr conversations more in-depth than quantitative research methods. Additionally, this enabled the researcher to compare the results from the analysis with each other and other work on dating apps.

Comparing the 200 Instagram images with thematic analysis, themes, patterns, and the constructive role of language will be investigated. This thematic analysis method aimed to look for key themes in the dataset that relate to the broader topic of gender behavior. More specifically, it explored the concepts and gained detailed insight into non-straight male behavior and communication in the dating app Grindr. While research already pointed out several behavioral patterns of Grindr users, including displaying identity and body image, little attention has been paid to specific concepts of gender behavior, including toxic masculinity (Filice and colleagues, 2019; Jaspal, 2016). Therefore, the current study was designed to address masculine Grindr behavior by comparing it to earlier work about gender behavior on online dating applications.

### 3.2. Sampling and Data Collection

The sampling method that has been chosen to identify the posts was purposive sampling. Babbie (2014) mentioned that this non-probability sampling method lets the researcher select the materials based on the judgment of their usefulness. In order to select the most representative data, the sample selection was based upon some criteria. Firstly, the post should contain a screenshot of a dialogue on the Grindr platform. Grindr was chosen as it is the dating platform that non-straight males are most active on (Filice and colleagues, 2019). Therefore, this dating platform was most relevant to study. Second, the Grindr conversations must have occurred in the last ten years, meaning between 2011 and 2021. This criterion aims for the data to represent the current behavior of non-straight males on Grindr instead of old, possibly more obsolete kind of behavior.

Additionally, the conversations should be spoken in the English language, enabling the data to be compared and interpreted in the same way. This way, an additional language barrier can be avoided. It ensures comparability within the dataset and other work. This study compares Grindr behavior with previous scholarly work on dating app behavior in a later stage of the research. Lastly, quality is ensured by the five concepts of credibility, transferability, dependability and confirmability that were described by Guba and Lincoln (Treharne and Riggs, 2015). The ensuring of quality through the personal reflexivity of the researcher will be discussed in the conclusion chapter.

The analyzed posts were retrieved from the social media platform Instagram. *Instagram* is a mobile social media application that can be freely accessed. It enables its users to edit photos and share them with their friends and followers on the platform. Schreiber (2017) mentioned that Instagram users mainly share refined, familiar, and appealing images with a broader audience. The social media platform has been founded in 2010 and has been owned by Facebook since 2012. When these two platforms are compared, it is shown how Instagram is now one of the biggest social media platforms available, with approximately 75 million people worldwide using the application daily (Ting and colleagues, 2015). A younger generation mainly uses it as more than half of the global Instagram population worldwide is 34 years old or younger (Tankovska, 2021). On the other hand, Facebook is most popular amongst an older generation than Instagram (Greenwood and colleagues, 2016). This group mainly uses Facebook to communicate with specific friends, read social news, and broadcast, as has been indicated by Burke and colleagues (2011).

Some of the features of Instagram include an integrated hashtag system that assigns tags to photos, thereby making the posts easier to find by assigning them to different categories. The 200 analyzed for this research have been tagged as either #grindrchat, containing 1.881 posts, #grindrfail, a category containing 55.337 posts, or #bestofgrindr contains 22.170 posts (Instagram, n.d.-a; Instagram, n.d.-b; Instagram, n.d.-c). These tags were chosen for the research since they specifically contain Instagram posts that indicate Grindr conversations. Primarily, it was aimed to obtain the data from a single source or Instagram page, but as the pages did not contain enough data, it was chosen to use the tags instead. This way, there was enough diverse data to analyze and compare the outcome to other studies on dating app behavior. Dates and sources of the Instagram posts can be found in

Appendix A, where the dataset references are listed in a table. The images from the dataset were manually saved as jpeg images on the researcher's personal computer so they could be uploaded onto the ATLAS.ti program. All the data from the sample was externally saved since it was observed how some of the Instagram posts were removed if other users flagged them or when the page moderator deleted them. Therefore, it was decided that the items from the dataset will be safely stored and removed when finishing the research process.

### *3.3. Sensitizing Concepts*

Since the concepts that guide the analysis might be perceived as considerably abstract, it would be necessary to clearly define these concepts and how they will be observed in the analysis. The concepts that will be observed in this research relate to the performance of masculinity, toxic masculinity, and typical Grindr affordances described by the literature to focus on appearance and sex. Such affordances include the sharing of locations, filtering on characteristics and ethnicity, and the 'looking for' feature (Anderson and colleagues, 2018; Licoppe and colleagues, 2016; Miles, 2021). Utilizing concepts that derived from existing literature and the Instagram data sample aims to define and point out masculine and toxic masculine behavior when analyzing the Grindr conversations. Masculinity has been operationalized as dominant, confident, competitive, and homophobic behavior. Subsequently, toxic masculine behavior has been operationalized as sexualizing, racist, objectifying, and aggressive behavior. Therefore, it is intended to observe these operationalized behavioral patterns in analyzing 200 Grindr chat conversations collected from Instagram. Additionally, this behavior will be compared with the dataset and user responses and the literature employed for the comparison framework. As it is unknown which themes are likely to occur from the data, it is intended to use other scholarly research to observe and compare dating app behavior. This way, the researcher has already acquired themes to start the analysis with while simultaneously building upon and finding new themes and concepts when conducting the analysis.

### *3.4. Thematic Analysis*

The qualitative method chosen for this research on non-straight gender performance in dating app Grindr is thematic analysis. The thematic analysis method has been chosen to answer the research question for this project since it seeks to describe and interpret the data in great depth. *Thematic analysis* is a creative process that involves searching across a dataset to find repeating patterns of meaning. These patterns arise from the codes that the researcher has assigned for every item in the dataset grouped into overarching themes (Braun and Clarke, 2006). Braun and Clarke (2006) describe thematic analysis to identify, analyze and interpret meaningful patterns, thereby enabling the researcher to look for crucial patterns in the obtained data. The analysis aims to look for toxic and toxic masculine behavioral patterns of non-straight males on the Grindr app.

### *3.5. Research design*

Additionally, King (2004) describes thematic analysis as helpful when dealing with a large dataset as it causes the researcher to structure the data processing method, enabling to summarize the essence of the data. This way, thematic analysis helps to structure the research findings into an organized report. This research followed the six-step approach that was suggested by Braun and Clarke (2006). The first step from this approach illustrates how the researcher familiarizes themselves with the data. This step views and reviews all the data and lets the researcher explore initial ideas from the dataset. After familiarizing oneself with the data, the researcher creates initial codes from the data related to the research question. Therefore, all items related to masculinity and toxic masculinity were acknowledged as relevant for the analysis. The codes enabled dataset organization since they are more detailed than the themes that initially emerged.

From the analysis, 172 open codes occurred in the dataset. Next, the researcher assigns the codes to overarching themes by grouping similar codes into themes and subthemes. After the codes are assigned to the themes, all themes and items are reviewed and re-evaluated considering the whole dataset. The next step that the researcher took seeks to refine the themes to guarantee that the themes align with the nature of the data. Additionally, the themes were defined to show how they related to the dataset and to ensure transparency. The thematic map that defines the themes and how they relate to the dataset can be found in Appendix A. Finally, the findings were presented in an academically structured thesis found in the results and discussion section in Chapter 4. To help the researcher with data coding, the coding program ATLAS.ti was employed (ATLAS.ti Scientific Software Development GmbH, n.d.). This program accompanies the researcher with analyzing the data in a very structured manner. The researcher has created the codes, themes, and sub-themes with this program. As has been indicated by Hwang (2007), ATLAS.ti enables a more credible research process due to the transparent and replicable nature of the program.

### *3.6. Credibility and ethical considerations*

As was claimed by Lincoln and Guba (1985), the quality of qualitative research depends on five different concepts. These include credibility, transferability, dependability, confirmability, and authenticity. Firstly, the credibility or the internal validity or accuracy of the findings will be ensured by comparing the research outcomes to other studies related to gender behavior in online dating applications. Secondly, another criterion of Lincoln and Guba (1985) describes the concept of transferability. Transferability relates to how the research design and findings can be applied to another study with different circumstances and other researchers. For example, it could include other participants, locations, and moments for the study and ensure a detailed description of the collected data (Lincoln and Guba, 1985). To correctly handle the data and guarantee the research quality, the data has been carefully analyzed by continuously reading and rereading.

As Silverman (2011) describes, transparency regarding the use of theory and the employed research method is essential. To ensure trustworthiness, the researcher thoroughly analyzed the

obtained data combined with the theory. Additionally, reliability was ensured by transcribing the quotes from the dataset verbatim, including errors and emojis, which might be critical for accurate interpretation of the data (Silverman, 2011). Additionally, Gibson and Brown (2009) mention how for research to be reliable, a complete description of the subject, and the researcher's role in the process, should be provided to comprehend the presented ideas and their reliability. Next, confirmability describes that the findings need to refrain from being biased by the researcher's possible motivations, interests, or perspectives (Lincoln and Guba, 1985). It is of utmost importance that the researcher understands that their decisions on the research design may impact the data quality. Therefore, the researcher has to reflect on their role critically to refrain from biasing the research. Brennen (2017) describes how the researcher's race, ethnicity, class, and gender are all factors that need to be considered to affect the interpretation of the results. Therefore, the researcher attempted to refrain from being biased by remaining neutral and trying not to overgeneralize when interpreting the data. Moreover, the retrieved data has been treated for the intentions and agencies of the people involved in the images.

Other ethical considerations that needed to be made for this research project relate to anonymity and data protection. As has been mentioned, the data sample has been acquired from the social media platform Instagram which is considered to work well for research as the content on this platform is freely accessible (Laestadius, 2016). Data that has been collected from social media platforms is usually perceived as public domain, but Zimmer (2010) describes that this does not necessarily mean it is fair to use social media data for research purposes without any restrictions. Generally, social media users have agreed to their data to be used for research purposes but only for improving the platform, optimizing displayed content, and marketing purposes. Social media platforms, such as Facebook, define their terms on personal information about their users, big data mining, and communication data usage (Sormanen and Lauk, 2016). Like Facebook, Instagram users can choose whether their data is shared publicly or kept private by agreeing to the terms of service. The Instagram data analyzed for this research has been retrieved from public accounts, which means that the data can be copied or distributed. Therefore, confidentiality and anonymity of the data were ensured as the research materials solely include anonymized screenshots of Grindr conversations. Additionally, the data is safely stored as long as the researcher requires it, after which the data will be deleted.

### *3.7. Summary*

The research design chapter aimed to outline the research materials and research methods applied to answer the research question. After the dataset and sampling method were described, concepts of masculinity and concepts for the analysis were operationalized. The sampling method of purposive sampling used for the research has been discussed in selecting the data for the analysis that relates to the research question. The concepts of masculinity have been operationalized as dominant, confident, competitive, and homophobic behavior. Additionally, the toxic masculine behavior was



operationalized as sexualizing, racist, objectifying, and aggressive behavior. In order to analyze the data, the qualitative method of thematic analysis was used and explained step by step. A combination of inductive and deductive coding was applied to get a complete understanding of the topic. Subsequently, the thematic analysis method has coded and grouped the data in the dataset consisting of 200 Instagram posts that display Grindr conversations. This way, the researcher was able to group the codes into themes that demonstrate a more detailed description of the data. After grouping the codes into themes, the themes were tested, reviewed, and redefined to ensure that the codes were correctly assigned. Finally, the analysis results were structured and presented in an academic report which will be demonstrated in the next chapter.

#### 4. Results and Discussion

This chapter will present the results of the thematic analysis that has been conducted for this project. The results found in the analysis will be interpreted and connected to the research questions and the literature. The research question aimed to answer examines how masculine behavior is displayed on Grindr. The sub-questions explore how masculinity and toxic masculinity are portrayed on Grindr, the main communication patterns of masculinity, and how masculinity on Grindr correlates to previous research about dating app behavior.

The three overarching themes derived from the analysis were *communicative patterns related to masculinity*, *display of toxic masculinity*, and *comparability to previous studies about dating app behavior*. The first theme that emerged from the analysis describes the communicative patterns of Grindr conversations, and explores the first sub-question, which seeks to examine the communicative patterns that relate to the concept of masculinity. Forms of masculinity were operationalized as dominant, confident, competitive, and homophobic behavior. The sub-themes explored are humor to reject sexual proposals, the use of compliments and emojis to indicate intentions, deceptive self-presentation caused by insecurity, and lastly the focus on hookups as indicated by sexual language and images.

The second theme, *Display of toxic masculinity*, explores how toxic masculinity is shown throughout the Grindr conversations in the sample. Forms of toxic masculine behavior were operationalized as sexualizing, racist, objectifying, and aggressive behavior. This theme relates to the second sub-question and discusses sub-themes such as using critical tones to promote racism and homophobia, preferences based on appearance and race, persuading others to engage in sexual behavior by acting dominant, and judgment and rejection of anonymity and effeminacy.

The third theme that emerged from the analysis relates to the *Comparability to previous studies about dating app behavior*. The section describes the current analysis of the literature that was employed for the comparison framework. Included are Hess and Flores (2016) study and the study of Filice and colleagues (2019). This comparison section discusses differences and similarities between the current study and previous research about dating app behavior. In the following sections, the major themes are grouped and discussed based upon their connections to other themes and the literature discussed in the theoretical framework and the literature from the comparison framework. After the themes have been discussed, the results will be compared with the theory for the comparison framework related to dating app behavior. All the examples of Grindr conversations mentioned in this chapter can be found in Appendix A.

Table 2. Themes and subthemes found in the sample of the thematic analysis

Themes	Sub-themes
Communicative patterns related to masculinity	The use of humor to reject sexual proposals The use of compliments and emojis to indicate intentions Deceptive self-presentation caused by insecurity The focus on hookups is indicated by sexual language and images
Display of toxic masculinity	The use of critical tones to promote racism and homophobia Preferences are indicated based on appearance and race Persuading others to engage in sexual behavior by acting dominant Judgment and rejection of anonymity and effeminacy
<b>Theme:</b> Comparability to previous studies about dating app behavior	
Sub-Themes for Filice and colleagues (2019)	Similarities include emphasize on appearance, sexual objectification and social comparison collectively caused by user attitude, behavior, and Grindr affordances
	Differences include the focus on how body image is affected, weight, protective factors, coping strategies, and the comparison with non-dating platforms Facebook and Twitter
Sub-Themes for Hess and Flores (2016)	Similarities include pointing out and shaming toxic masculine behavior, using humor and emojis as a response, sexualizing and objectifying behavior, and the use of Instagram posts
	Differences include the observed dating apps, gender and sexual orientation of users, Foucauldian notions, misogyny, interpreting comments of the Instagram audience, and the role of silence

#### 4.1. Communicative patterns related to masculinity

This section of the results chapter tries to answer the first sub-question that examines the main communicative patterns related to masculinity. Therefore, this section will discuss different patterns observed in the analysis that relate to masculine communication. Included are patterns such as humor to reject sexual proposals, how compliments and emojis are used to indicate intentions, how insecurity leads to deceptive self-presentation, and how the focus on hookups of the Grindr platform is indicated by sexual language and images.

##### 4.1.1. The use of humor to reject sexual proposals

The first phenomenon that occurred in the analysis included humor and emojis to reject the other person, including sexual proposals. Conversations, including rejections, appeared several times in the analysis (N=44). For instance, an example of rejection has been found in image 64. Here one

person describes their proximity to the other person and the other replies with “I wasn’t inviting you anyway ;)” (@scruffongrindr). Often, conversations that included rejections were observed to be paired with sexual proposals as well as humor. The rejection of sexual proposals occurred several times in the dataset (N=28), as illustrated by image 134: “Hi mate. U keen for a blowjob and ass rimming / I prefer a romantic dinner as a date, grab some drinks after, see the sunset, talk to know each other ...” (@mygrindrhistory). Another similar example of using humor to reject sexual proposals was found in image 188 (@str8boikiller):

P1: Wanna hookup

P2: Thanks, but I’m saving myself until I get raped.

P1: I could do that

P2: Well, rape needs to be unexpected. So you’d have to follow me until I’m alone and then make a move. Which means you might have to stalk me. That requires a lot of time, effort and the big “c” word, commitment. So, you’ll need to be committed to this. You know what, I’m actually looking for commitment, thanks though.

These two examples confirm how the rejection of sexual proposals is often paired with humor and a description of sexually aggressive acts and serious intentions. Possibly more people on Grindr are seeking serious commitments than would be expected, as Blackwell and colleagues (2014) have indicated how Grindr users are mentioning different intentions on their profiles compared to private chat conversations. Multiple scholars have found how dating behavior is adjusted to the expectations and behavior of others (Blackwell and colleagues, 2014; Ward, 2016-b). Adjustment of behavior is shown in the first example as the first person mentions being willing to perform a sexually aggressive act as requested by the other person.

These reconstructions of user identity and intentions would be expected as Jaspal (2016) reported how Grindr users are commonly ignored, judged, or blocked when mentioning serious intentions instead of sexual motives. With this sexualizing and objectifying toxic masculine behavior shown, the notion that Grindr mainly focuses on hookups is reinforced. The first example includes a sexually aggressive act which is likely an example of humorous responses to sexual messages. They allow people to point out and shame failed displays of objectifying and sexualizing messages. Hess and Flores (2016) found similar behavior when examining toxic masculine behavior on Tinder and indicated how women use different responses to sexual pick-up lines and toxic masculinity. The outcomes of this study will be compared with the current analysis in section 4.3.2.

Where the study by Hess and Flores (2016) examined Tinder, Filice and colleagues (2019) have examined Grindr. Correspondingly, they identified that objectifying and hypersexual messages are some of the critical elements commonly found on Grindr (Filice and colleagues, 2019). This behavior was operationalized earlier as toxic masculine behavior. This behavior possibly originates from the sexualizing and objectifying images of the gay community shown in the media and Grindr

affordances, including the ‘looking for’ and filter options based on appearance and sex reinforcing this conception (Anderson and colleagues, 2018).

The Grindr filter options also include different sexual roles, which were discussed in the theoretical framework. As most Grindr users have not fully explored their sexuality yet, users need to explore their identity by fulfilling sexual desires (Jaspal, 2016). This need for fulfilling sexual desires has resulted in sending objectifying, sexualized messages and proposals, as shown in the previous example. The previous examples paired with Hess and Flores’ (2016) study illustrate how men objectify and sexualize other people by demanding sexual proposals to fulfill their desires. Thereby reinforcing the perception of Landovitz and colleagues (2012) that Grindr mainly facilitates users to seek quick and shallow hook-ups. Some of the sexual proposals did not consider the intentions of others. These selfish patterns are likely based on masculine values, as Sattel and colleagues (1978) have described masculine values to refrain from considering the opinion of others. When we connect this theme to the research question, it is shown how rejections of sexual proposals use humor to shame and point out potentially toxic masculine behavior in the form of sexual proposals. It is hoped that by identifying toxic masculine behavior on dating apps, conversations allow men to opt for healthier forms of masculinity, as described by Waling (2019).

#### *4.1.2. The use of compliments and emojis to indicate intentions*

Additionally, the analysis has found how compliments and emojis have been used in Grindr conversations to indicate user intentions and pursue their purpose for using Grindr. This use of compliments and emojis relates to masculinity as the examples demonstrate sexually suggestive emojis to indicate intentions. Such behavior can be perceived as sexualizing and objectifying, therefore toxic masculine behavior. Additionally, Gesselman and colleagues’ (2019) study has indicated how emoji use is linked to establishing successful connections, thereby creating more opportunities for sexual engagement. As sex on the Grindr app is seen as a competition, emojis and compliments are used to fulfill sexual aspirations relating to the masculine value of competition. Conversations involving compliments were numerous shown in the analysis (N=26). Grindr user motives have also been repeatedly mentioned in the dataset (N=36). An example of a conversation where compliments are paired with intentions has been found in example 146 (@mygrindrhistory):

P1: I don’t really meet your criteria upon inspection but I liked your assertiveness and look

P1: I’m well, man

P2: Why don’t you meet my criteria?

P1: I’m not looking for a relationship and I do hook up, mostly raw so I don’t want to mislead you

This example of a compliment paired with intentions displays how intentions are not aligning as the first person states to be looking for a hook-up, while the other person is possibly looking for a more serious commitment. This difference in Grindr intentions has been mentioned by Blackwell and colleagues (2014), who noted how Grindr affordances could make it challenging to determine user motives. The previous example further adds to how Grindr user motives are likely based on casual hook-ups instead of a more serious commitment, as has been described by Landovitz and colleagues (2012). Moreover, responses that are used to express user intentions were also shown to be paired with emojis. The use of emojis was the most recurring pattern in the dataset (N=100). In the analysis, the two most displayed emojis were the smiling face (N=17) and the winking face (N=20), indicating flirting behavior. An example of the use of emojis paired with compliments and the mentioning of intentions was observed in image 41: “Your fckin sexy / ;) I am. / So what are you looking for? / Fwb. Consistent fun. Consistent orgasms. / Only.thing better would be a non stop orgasm ;) / Yeah that sounds like a medical condition 😊” (@unmusemexoxo).

Gesselman and colleagues (2019) examined emoji use in romantic and sexual interactions related to the current Grindr analysis. Their research found how emojis can establish a more effective interpersonal relationship (Gesselman and colleagues, 2019). Van Berlo (2019) has further linked emoji use to gender differences and self-presentation in the context of online dating. Some of the patterns that can be distinguished are the use of emojis to indicate and assure interest by using provocative emojis to check the interest and intention of the other person (Nexø and Strandell, 2020). An example of this use of provocative emojis was found in image 182: “🍌 😊 / U want to offer me a banana for breakfast, how sweet of u. Always the healthy choice / LOL!!!” (@briandivacox). This example shows how a banana emoji paired with a winking emoji indicates sexually suggestive notions. This association between food and sex emphasizes how men are likely to engage in objectifying behavior, as was mentioned by the literature and operationalized as a form of toxic masculine behavior (Anderson and colleagues, 2018; Hess and Flores, 2016).

The analysis shows how emojis and compliments are deemed as practical tools to indicate interest and user motives. When both people retaliate this pattern of emoji use, chemistry can be created. Additionally, it was revealed how emojis could be used to respond to counter-discipline sexual messages of men on Grindr, as was discussed by Nexø and Strandell (2020). Using compliments and emojis to indicate intentions displays how Grindr users are likely to apply multiple communicative approaches to indicate intentions and interest, while simultaneously objectifying and sexualizing the other person to fulfill their sexual desires. This sub-theme relates to the research question and the concepts of masculinity and toxic masculinity in the sense that compliments and emoji use are shown to be used as approaches to fulfill sexual desires by indicating user intentions. The examples also included toxic masculinity displays in the form of objectifying and sexualizing behavior as associations between food and sex were made by using provocative emojis.

#### 4.1.3. *Deceptive self-presentation caused by insecurity*

Furthermore, the analysis has shown how insecurity can lead to deceptive self-presentation. Jaspal (2016) has mentioned deceptive self-presentation in the display of overconfidence. As confident behavior has been operationalized as masculine behavior, the following examples relate to masculinity. In the sample, expressions of confident behavior were observed several times (N=14). An example of display of confidence in Grindr conversations was found in image 78: “I think I won’t disappoint you” (@scruffongrindr). The literature has indicated how dating applications allow for a more deceptive self-presentation than in offline dating, as dating app profiles and pictures can be designed and nuanced (Hall and colleagues, 2010). Consequently, displays of confidence found in the sample are likely exaggerated forms of self-presentation, as also perceived by Guadagno and colleagues (2012). Hall and colleagues (2010) study further explored how women are more eager to misrepresent traits such as weight. On the other hand, men are more likely to exaggerate traits associated with their belongings, dating app motives, ambitions and characteristics (Hall and colleagues, 2010).

Grindr users expect to be perceived as more socially desirable by their conversational partner by presenting a more confident identity. An example of confidence relating to appearance was found in image 41: “Your fckin sexy. / ;) I am.” (@unmusemexoxo). And additionally, in example 174: “You look great and all, but do you know what really looks good on you? / Yeah? / Me” (@grindrfails.me). Grindr allows people to establish a more attractive identity, enhancing people’s self-presentation and generating self-esteem. However, when a more confident image is portrayed on the Grindr platform, the expectations of others caused by this can be challenging to maintain in an offline environment, as argued by Jaspal (2016). Self-confident behavior relates to confidence and sexual identity, as sexual statements are put in Grindr profiles, and sexual images are shared in the chat, which is addressed in the next subchapter.

On the other hand, conversations displaying insecurity were less frequently shown in the dataset (N=6). Interestingly, examples of insecurity often mention physical characteristics. Filice and colleagues (2019) display how Grindr influences body image, leading to insecurity as they compare themselves with others. Grindr might be perceived as a competitive space, as the literature has described how the performance of sex might be perceived as a competition (Bird, 1996). An example of insecurity was found in image 77, where someone indicates to be “not hung enough” (@scruffongrindr). With this, the person is referring to their genital size. Insecurity about genital size is likely originated from the sexualized image and standards of the non-straight community suggested by pornography (Mowlabocus, 2010).

The concept of confidence and insecurity connecting to deceptive self-presentation can be linked to the research questions and the main concepts of masculinity and toxic masculinity. As Leaper (1995) suggested, masculine values include confidence, independence, and assertiveness. Moreover, the act of exaggerating confidence to be perceived as more socially desirable is validated by Kimmel (2001) who acknowledges how masculinity depends on the approval of manhood by the

confirmation of other men. It can be concluded that the mentioned examples demonstrate how insecurity based on competition and comparison is shown to be the main reason for deceptive self-presentation on Grindr. This insecurity possibly originates from both the Grindr affordances and masculine values and the need to be perceived as desirable to validate masculinity.

#### *4.1.4. The focus on hookups indicated by sexual language and images*

Another theme shown in the analysis included the focus on hookups, as shown by the display of sexual language (N=88). The mentioning of sexual proposals (N=44) and sexual preferences (N=48) were most generally paired with sexual language. One example of sexual language can be found in image 107: “Don’t cuddle me, just fuck me hard” (@mygrindrhistory). Another example of sexual language was found in image 194: “Wanna lick your smelly armpit” (@grindrfails.me). Anderson and colleagues (2018) have explored how Grindr users seeking sex are inclined to show themselves in a sexually suggestive, body-focused way compared to men seeking a more serious relationship.

These previous examples confirm how there is a focus on hookups, as explicit sexual messages and preferences are mentioned in the analyzed Grindr conversations. This occurrence of sexual messages could be expected, as the literature has emphasized how Grindr is mainly used for sexual gratifications instead of dating, friendship, or serious relationships (Landovitz and colleagues, 2012; Rice and colleagues, 2012). Accordingly, it can be challenging to indicate user intentions, as differences are shown between the profile of Grindr users and private conversations (Blackwell and colleagues, 2014).

Another pattern that occurred and can be linked to the use of sexual language is the sharing of images (N=42). These conversations found in the analysis could include sexual images (N=10) such as body pictures and pictures involving genitals. The sending of sexual images is commonly not appreciated, as was shown in example 36 (@unmusemexoxo):

P1: You didn’t have my consent to send me nsfw pics. You cockblocked yourself. Which is sad because I’m a very hot fuck

P2: Im sorry

P2: Please forgive me please

P1: No. I don’t ever take consent violations lightly. You absolutely lost any chance you might have had.

P1: Do better

In this example, there is a discussion about the sharing of sexual pictures, also referred to as Not Safe For Work (NSFW). It can be assumed that before this first message shown in the example, the person has sent a sexual image without the consent of the other person. The example shows how this violation of consent regarding sexual images leads to rejection and an argument about consent. A



different example of the sending of unwanted sexual images was found in example 12: “Unsolicited pics aren’t really what we call decent here buddy.” (@grindrchronicles). Studies have already indicated how receiving unwanted sexual images is one of the dating risks for people on online dating platforms, especially for non-straight users (Brown, 2020; Temple and colleagues, 2015).

This sending of sexual images does relate to the concept of toxic masculinity, in the sense that forms of sexualizing and objectifying behavior were operationalized as toxic masculinity. The amount of sexual language and images found in the analysis further adds to the notion that Grindr is mainly focused on appearance (Anderson and colleagues, 2018; Filice and colleagues, 2019) and achieving sexual desires (Jaspal, 2016; Mowlabocus, 2010). This focus on appearance is possibly caused by a combination of appearance-based Grindr affordances and masculine values and perceptions of the gay community portrayed by society. Lastly, the theme relates to masculinity because achieving possible sexual desires might not always consider approval of others, as masculine values defined by Sattel and colleagues (1978), indicate.

#### *4.2. Display of toxic masculinity*

This next section will discuss the theme of displays of toxic masculinity in the Grindr analysis, providing an answer to the second sub-question. It includes how critical tones promote racism and homophobia, how preferences are indicated based on appearance and race, how impatience and violent sexual messages can indicate dominance, how effeminate and anonymous behavior is judged, and persuasion to engage in risky sexual behavior.

##### *4.2.1. The use of critical tones to promote racism and homophobia*

The analysis has shown that critical tones characterized as lecturing were used to promote racism and homophobia (N=44). An example of this use of critical tones can be found in image 190 where one person says “Guys like you defame gay community by acting girlish. Shame!!!” (@karanpatade). Correspondingly, the description of the Instagram posts mentions: “#morninghate There’s poison inside as much as outside the community. Sigh.” (@karanpatade). These two specific examples of rejecting effeminate behavior illustrate how there might be forms of homophobia within the queer community. Although homophobic behavior would not be expected as the non-straight community is perceived as more inclusive it is possible that this is caused by deeply rooted traditional masculine values. This kind of homophobic behavior is explained by Sattel and colleagues (1978), who affirm that masculine behavior expects men to refrain from acting too feminine, or as the example from the analysis describes it, ‘girlish’. Another form of prejudice could be seen in dialogues involving racism. In example 162, one person starts the conversation with “Age colour”, after which the other person replies with “Colour? Seriously?”. This example displays how racist behavior is shown and pointed out in Grindr conversations. Additionally, it links to the mentioning of preferences based on race, which will be further discussed in the following subchapter.

Another example that was shown in image 81 and involved a negatively framed question about heritage: “So are you local ? / Yes I am. / But you don’t look chinese though. / Singapore isn’t just chinese. Haven’t figured that out after six years here huh? ;)” (@scruffongrindr). This example illustrates how users are likely to make assumptions and prejudice based on heritage, which the other person then points out. The analysis has further shown how discussions including race and heritage are often paired with assumptions or stereotypes about cultures. An example of this was found in example 65: “U like not proud of yr race leh / I’m Punjabi / Oic / Know anything about us? :) / Nope / So how now? Can’t stereotype me in any way huh? ;)” (@scruffongrindr). These examples from the analysis are aligned with the issues regarding race and race-filtering affordances of Grindr, which were mentioned by the literature (Van Kessel, 2021; Shield, 2019). Additionally, these instances can trace back to the concept of hegemonic masculinity (Connell 1987, 2005), as different forms of masculine behavior are aimed at assuring dominance through oppression.

#### *4.2.2 Indicating preferences based on appearance and race*

The analysis showed how opinions and preferences were linked to the appearance and race of the other person. The mentioning of appearance was often shown in the dataset (N=88). A remarkable occurrence within these conversations relating to appearance was making suggestions for the other person’s appearance, demonstrating how it was mentioned that a person should change their looks to meet the standards of the other. An example where suggestions for appearance were mentioned was found in image 54: “Actually you have a cute face. Need to build some muscle mass. It will be good / Thanks but I’m happy with how I look now :)” (@scruffongrindr). This example reveals how the person starts the conversation by giving a compliment, and then suggests the other person to build muscle mass. The other person then continues by mentioning how he is already pleased with his appearance. An additional example was found in image 193: “We can do something else. Shave your body hairs”. This example mentions another suggestion for appearance, namely shaving body hair.

The findings emphasize how there are certain expectations and preferences relating to appearance within the Grindr community. It could be expected, as some of the scholarly work discussed in the earlier subsections have pointed out how the Grindr community and some of the affordances influence the non-straight male body image (Filice and colleagues, 2019). As the literature depicts, Grindr influences body image in weight stigma, sexual objectification, and social comparison. This objectifying body-focused approach stems from the image painted by sexualized displays of gay men and advertisements focusing on the male body (Anderson and colleagues, 2018). As non-straight communities are still underrepresented in society, non-straight people base their examples on online platforms, including pornography (Mowlacobus, 2010), which could lead to certain expectations concerning body image and sex, as suggested in the examples.

Not only were there cases of judgment and preferences based on appearance related to hair and body type. Race is a topic that repeatedly occurs in the Grindr chat sample (N=34), as mentioned in the previous subchapter. This topic of race is discussed to the extent of people indicating racial preference in the Grindr conversations. An example of this was found in image 163: “I want north Indian people” (@mrgatsbybrown). This example reveals a specific demand for a particular race or heritage indicated, namely north Indian people. The north Indians, also known as Indo-Aryans, make up the majority of the Indian population. Scholars have attempted to investigate how particular Grindr affordances allowed users to search and filter based on ethnicity (Miles, 2021; Shield, 2019). Additionally, Wei Ang and colleagues (2021) have described how race plays a significant role in Grindr conversations as users reveal how they categorize themselves and others into predetermined categories related to racial stereotypes. As a result, a hierarchical structure based on race is developed, perceiving the ethnic majority of a country as favorable and ethnic minorities as unfavorable. This preference for ethnicity is shown in the previous examples as Grindr users openly discuss their preference regarding race, likely to be ethnic majorities, as was the case in example 163.

Conclusively, these examples relate to the research questions and concepts of masculinity and toxic masculinity as they portray sexualized, objectifying, and dominant behavior based on race and appearance. This particular behavior was earlier operationalized as toxic masculine behavior. The examples relating to sexualizing and objectifying behavior were possibly developed from a combination of Grindr affordances based on appearance and the image and expectations of the non-straight communities. According to scholars, this image was set by the media, advertisements, and pornography (Anderson and colleagues, 2018; Mowlabocus, 2020). Likewise, the examples of toxic behavior related to race and heritage possibly originated from the combination of Grindr affordances that filter on race and appearance as well as stereotyping behavior and assumptions of non-straight people caused by media and upbringing (Miles, 2021; Shield, 2019; Wei Ang and colleagues, 2021).

#### *4.2.3. Persuading others to engage in sexual behavior by acting dominant*

Another occurrence found in the analysis includes how impatience and dominance can persuade others to participate in sex. Dominance was operationalized as masculine behavior, violent and sexualizing behavior was operationalized as toxic masculinity. Impatience was shown multiple times in the analysis (N=2) and paired with violent messages as the examples include violent behavior. Such as for image 179, where one person starts by describing a sexually aggressive act: “I want ur clock rammed down my throat. Now” (@\_jvd\_). After which, the person sends a picture of his scantily dressed body. The other person responds with a joke: “That could be a problem I’ve got one of those cuckoo clocks :/” (@\_jvd\_). This example can also be linked to the rejection of sexual proposals, discussed in subsection 4.1.4.

Furthermore, an example of sexually violent behavior linked to dominance was found in image 20, which includes another violent sexual act: “Hi / Hey / Fist my hole? / Well that escalated quickly” (@zachnoetowers). This example displays how sexually violent acts are suggested without

any introduction. These sexually violent acts are in line with the research mentioned in subsection 4.1.4. that suggested how Grindr is largely based on achieving sexual desires paired with the masculine value of not considering other people's opinions (Jaspal, 2016; Sattel and colleagues, 1978). Yet another example describes a violent response to a sexual proposal for money in image 181: "raymond here. Needa rim? 20 bucks / Needa be punched in the mouth? Free" (@dakotacarter93). This example illustrates how a violent response is given to a violent sexual offer. Again, a concept also pointed out by masculine literature, as Connell (1987) described masculine values to include performances of intermale dominance.

A similar concept that connects patterns of dominance and sex is the persuasion to perform unsafe sex, as was found in image 147: "Why don't you want to Fuck raw ? / I love my life darling / You won't die from fucking me without a condom ...sweetheart / I don't wanna get any STI" (@mygrindrhistory). Even though this example does not mention a specific sexual act, aggression, or dominance, it can be noticed how it is tried to convince the other to engage in unsafe sex. This convincing of people to participate in unsafe sex can be perceived as toxic masculine behavior because such behavior sexualizes and objectifies the other person to fulfill their own sexual needs. Noticeable is that besides mentioning sexually transmitted infections in this example, there was no mention of the Human Immunodeficiency Virus (HIV) or Acquired Immunodeficiency Syndrome (AIDS). This not mentioning of sexually transmitted infections was unexpected, as the literature pointed out how the Grindr community is particularly vulnerable to HIV infection and transmission (Hoenigl and colleagues, 2019; Landovitz and colleagues, 2012; Rogge and colleagues, 2019).

The examples illustrated above reinforce toxic masculinity. The impatient and violent responses were linked to the display of dominance as Connell (1987, 2005) describes how masculinity encourages men to behave in a sexually aggressive manner and express dominance and control and display intermale dominance. Additionally, sexualization and objectification were defined as typically toxic masculine behavior by scholars indicating how forms of toxic masculine behavior can include the display of dominance, control, violence, and sexually aggressive messages (Filice and colleagues, 2019; Hess and Flores 2016). Therefore, it might be concluded that these examples of toxic masculine, dominant behavior regarding sexual messages originate from the need for the Grindr community to accomplish sexual desires (Jaspal, 2016). Additionally, the image painted in the society of the non-straight community, and some of the Grindr affordances might contribute to this behavior (Anderson and colleagues, 2018; Mowlabocus, 2020). Lastly, this behavior may originate from masculine values that encourage intermale dominance and sexualizing and objectifying behavior (Connell, 1987, 2005).

#### *4.2.4. The judgment and rejection of anonymity and effeminacy*

Another concept in the analysis included the display of judgment and rejection based on effeminacy and anonymity. One example of this was found in image 177 when a person describes his effeminate appearance: "I have a hairy chest and body, but that apparently doesn't make me manly

enough to the gays” (@dalami\_81). The other person responds with: “That probably won’t get me hard :()”, indicating how an effeminate appearance is not attractive or appealing to them. This example of rejection based on effeminacy can be linked to the literature. Sattel and colleagues (1978) and Kimmel (2001) have suggested how masculine values expect men to refrain from being perceived as effeminate by being non-straight or acting too feminine. These values that reject effeminacy have likely caused patterns of homophobia and anonymity within the non-straight community. The need for anonymity has also been mentioned by Blackwell and colleagues (2014), who indicate that Grindr users participate in tactics to mask their identity to control their self-disclosure. Though users want to be seen by other Grindr users, they also want to maintain some control over their privacy, as the app allows not only to see nearby users but also to be seen by possible acquaintances.

As suggested by masculine work, the concept of homophobia originates from men fearing that their true identities, being they are not as manly as they want to be perceived, will be revealed (Kimmel, 1997). The research of García-Gómez (2020) mentions similar concepts as femmephobia is explored, also known as the hate or fear for femme, feminine or effeminate people. Homophobia was mentioned in the context of the example too. The description of the Instagram post of example 177 states: “Seriously, get the fuck over your internalized homophobia” (@dalami\_81). The quote illustrates how Grindr users perceive and confirm that their own, non-straight community displays homophobic notions. As mentioned in section 4.2.1. homophobic behavior is deeply rooted within masculine values, encompassing the non-straight community too.

As been mentioned, homophobia and femmephobia have likely caused non-straight people to prefer anonymity, observed in the Grindr conversations to be referred to as ‘discreet’ (N=7). The term discreet has been used to describe gay or bi men in the situation where they have not come out as gay yet to friends and family (Jaspal, 2016). This way, it allows non-straight people to keep their heterosexual privilege in front of peers while exploring their genuine sexual desire on Grindr. An example of the mentioning of discreet paired with rejection was found in example 51 (@cannabinoidcultura):

P1: Looking for discreet

P2: What does that mean

P2: I don’t know your mum and I’m not on Instagram

P2: To be honest it’s just an irritating term that means fuck all

P1: Fair point

P2: If it’s a fair point why use it

P1: Because life

P2: Bollocks

This example shows how there follows a discussion after one person states to be looking for a discreet engagement. The other person shows irritation regarding this specific term. This concept of Grindr users wanting to remain in control relating to privacy and self-disclosure has already been mentioned by the literature (Blackwell and colleagues, 2014; Jaspal, 2016). This need for anonymity is possibly caused by oppression, as the literature has noted how coming out in countries where non-straight people are oppressed can be fatal (Steinfeld, 2020). Accordingly, Connell (1987, 2005) described how hegemonic masculinity is influenced by the stigmatization of homosexuality which might cause non-straight men to prefer anonymity. Furthermore, anonymity can be caused by insecurity, as the literature has described how Grindr is primarily focused on appearance (Filice and colleagues, 2019). In turn, this could lead to deceptive self-presentation, as was mentioned in section 4.1.3. Lastly, Jaspal (2016) illustrated how Grindr users might not have fully developed their non-straight identity yet, therefore preferring an anonymous position as a safe space. This anonymity could also be paired with the fear of responses from friends and family.

Conclusively, this section discussed the judgment and rejection of effeminacy and anonymity. Effeminacy links to masculinity and toxic masculinity as masculine values reject effeminate behavior, expecting men to refrain from acting feminine (Sattel and colleagues, 1978). The rejection of effeminacy has caused a fear of effeminate and non-straight people, known as femmephobia and homophobia (García-Gómez, 2020; Kimmel, 1997). Because of this fear and oppression, men on Grindr likely want to remain anonymous. Anonymity relates to masculinity and toxic masculinity as anonymity is likely caused by homophobia originating from masculine values, the disapproval of friends and family, and the focus on appearance of the Grindr platform.

#### *4.3. Comparability to previous research about dating app behavior*

This comparison section explores the similarities and differences between the current analysis and the literature employed for the comparison framework. It is tried to examine how masculinity on Grindr correlates to previous research about dating app behavior. For this comparison, two studies were employed including the research of Filice and colleagues (2019), and Hess and Flores' (2016) study. After conducting the analysis and comparing the findings to previous research about dating app behavior, it has been found that the outcomes of the analysis do predominantly align with these two studies that were conducted to examine masculinity and toxic masculinity in dating applications. In the following sections, a comparison of the two earlier mentioned studies with the current analysis outcomes will be provided.

##### *4.3.1. Comparison to the study of Filice and colleagues (2019)*

Firstly, the study that will be used for the comparison framework is that of Filice and colleagues (2019), which examines the influence of Grindr on body image of non-straight males. When the current study results are being compared to that of Filice and colleagues (2019), it is found that sexual objectification, images, and social comparison correspond with the themes relating to

toxic masculine behavior. In this subsection, the similarities and the differences between both studies will be identified and discussed. Examples of sexual objectification in the analysis included emojis, sexual proposals, and images. Different examples of images were mentioned in section 4.1.4. and included objectifying body pictures as well as sexual images involving genitals.

Possibly, this objectification stems from Grindr affordances and the body-focused image set for the non-straight community in society in media, advertisements and pornography (Anderson and colleagues, 2018). Likewise, examples of social comparison were discussed in section 4.2.2. as suggestions for appearance were made in private conversations mentioning muscle mass and body hair. Additionally, preferences regarding race were shown in the analysis as well as the mentioning of skin color. This concept of social comparison traces back to masculine literature, as it was described how men need to validate their masculinity by the approval of other men (Kimmel, 2001). This need for comparison possibly stems from the competitive nature of men described by Bird (1996) which perceives sex as a competition. Grindr might therefore be perceived as a competitive space, pressuring men to perform toxic masculine behavior.

Furthermore, the current analysis found that Grindr conversations frequently included sexual language, sexual images, or the mentioning of appearance. This sexual and appearance-focused language reinforces the notion that Grindr is primarily focused on sex and appearance, as was already depicted by literature employed for the theoretical framework (Blackwell and colleagues, 2014). Similarly, Filice and colleagues (2019) found how Grindr contemplates facilitating casual sex, thereby primarily focusing on body image. As filtering options on Grindr let the user filter on specific types or categories of people based on race and appearance do not include a 'fat' category for their labeling and search options, this appearance stigma is reinforced. Especially when comparing the platform to other social media platforms such as Twitter or Facebook, Grindr is showing an increase in users describing sexual objectification and stigma relating to appearance (Anderson and colleagues, 2018; Filice and colleagues, 2019).

To summarize, the current analysis has confirmed the study of Filice and colleagues of how non-straight male communication on Grindr emphasizes appearance, sexual objectification, and social comparison. Comparison on Grindr likely stems from men's competitive nature which perceives sex as a competition (Bird, 1996). Grindr might be perceived as a competitive space, pressuring men to perform toxic masculine behavior. The analysis found different toxic masculine behavior such as objectification, sexualization and racism, possibly caused by a combination of Grindr affordances, masculine values and expectations of the non-straight community set by society. Some of the differences between the study of Filice and colleagues and the current analysis include the focus of the study, as Filice and colleagues mainly focused on how Grindr use is related to body image, body satisfaction, and weight.

Additionally, the study of Filice and colleagues considered how body image was affected, protective factors, and coping strategies of Grindr users. Furthermore, the current analysis has not compared the Grindr conversations to other social media platforms, including Facebook and Twitter.

Contrarily, this study explored the concepts of masculinity, toxic masculinity, and patterns of Grindr communication not explicitly related to the topic of body image. Lastly, the current study's findings were compared to dating app behavior instead of additional social media platforms.

#### 4.3.2. Comparison to the study of Hess and Flores (2016)

Comparing the analysis results to Hess and Flores's (2016) study examining toxic masculinity on Tinder demonstrated how similarities were found across conversations on Tinder and non-straight behavior on Grindr. In this subsection, the similarities and the differences between both studies will be identified and discussed. Firstly, the use of emojis as a response was one of the similarities found in the current analysis and the research of Hess and Flores. In Hess and Flores' (2016) study, emojis have been used as a communication tool that allows improvising when responding to sexual messages. In the current analysis, the use of emojis was discussed in section 4.1.2. where example 182 illustrated provocative emoji use. This example of emoji use included food consumption metaphors which were also discussed in Hess and Flores' study. The connection between food and sex was also mentioned by feminist literature as associations between food and sex emphasize sexual desire and objectifying behavior (Bird, 1998). Such sexualizing and objectifying behavior have been operationalized as toxic masculine behavior and were found in the sample. Showing how toxic masculine behavior is found on straight dating apps like Hess and Flores' study and non-straight dating apps such as Grindr.

Correspondingly, another similarity between both studies includes how hypersexual elements within dating app conversations are observed. Hess and Flores found these elements in unsuccessful pick-up lines, sexualizing behavior, and objectification associated with food. Though there were not many pick-up lines observed in the analysis of the current study, there were patterns that included sexualizing behavior and objectification. Examples related to sexualizing behavior, including sexual language and images, were found and discussed in section 4.1.4. Examples of persuading others to engage in sexual behavior were mentioned in section 4.2.4. In addition, the concept of objectification has been discussed in section 4.2.2. as this section found the mentioning of preferences based on appearance and race. Moreover, Hess and Flores (2016) examined the responses to sexual proposals, a theme that occurred within the current analysis as. Within the study of Hess and Flores, two primary approaches for responses to sexual messages were distinguished. Where one group displays strategic silence, others respond with funny, improvisational responses. In the current analysis, it was found that responses to sexual proposals could include emojis, silence, or witty responses too. Some examples of these responses were discussed in section 4.1.1.

Another similarity includes that Instagram pages have been examined for Hess and Flores' (2016) study and the current study. The study of Hess and Flores included images of the Instagram page *Tinder Nightmares*, the current study employed similar accounts, including *mygrindrhistory* and *scruffongrindr*. Both studies examined anonymized dating app conversations shared by Instagram pages aiming to call out particular masculine behavior on dating apps. By posting a screenshot of



dating app conversations, these Instagram pages encourage users to publicly shame men who display toxic masculine behavior, as observed in the current analysis.

Contrarily, there were some differences found between the study of Hess and Flores and the current study. These differences included how the study of Hess and Flores focused on Tinder conversations while the current study aimed to analyze Grindr conversations. This difference between dating platforms also relates to the sexual orientation of the dating app users as Tinder was designed for the straight community and Grindr for the non-straight community. An additional difference includes how Hess and Flores have considered the accompanying captions and comments of the Instagram posts, interpreting audience responses. The last difference between both studies shows how Hess and Flores have included other concepts such as Foucauldian notions, misogyny, and the role of silence which were not considered for the current study. To summarize, the current analysis has confirmed Hess and Flores' outcomes that indicate how masculine communication on dating apps includes different responses to toxic masculine behavior. Included were humor and emojis as a response to sexual messages and objectifying and sexualizing behavior shown by food consumption metaphors.

#### *4.4. Summary*

The themes and findings derived from the thematic analysis generally align with the literature employed for the theoretical framework. The toxic masculine behavior analyzed in the sample is conceivably caused by traditional gender norms reinforced by society and upbringing, as was confirmed by the employed literature (Connell 1987, 2005; Kimmel, 2001). Thus, toxic behavior, including objectification, sexualization, and racism found in the analysis, possibly stems from traditional gender norms. Additionally, it stems from Grindr affordances, masculine values, and expectations of the non-straight community set by the society (Anderson and colleagues, 2018; Mowlabocus, 2020).

Conclusively, it has been observed how toxic masculinity reinforces concepts such as homophobia, femmephobia, and racism, even within the non-straight and inclusive LGBTQ+ community that Grindr seeks to accommodate with their platform (García-Gómez, 2020). The analysis results have affirmed how modern dating apps designed for the non-straight community reinforce traditional norms and roles rooted in society and male behavior. Additionally, the studies employed for the comparison framework aligned with the current analysis. Similarities with Filice and colleagues' (2019) study included the emphasize on appearance, sexual objectification, social comparison that are collectively caused by user attitude and behavior and Grindr affordances. Similarities with Hess and Flores' (2016) study included identifying and shaming toxic masculine behavior, using humor and emojis as a response, sexualizing and objectifying behavior, and the use of Instagram posts. The following chapter will continue by elaborating on the study's findings with the literature limitations of the research and providing several suggestions for further research.

## 5. Conclusion

This study has tried to explore toxic masculinity in the context of non-straight dating application Grindr. A qualitative thematic analysis conducted with the coding program ATLAS.ti attempted to answer how masculinity is displayed on online dating platforms. More specifically, it aimed to answer the research question of how toxic masculinity is portrayed on the non-straight dating application Grindr. The accompanying sub-questions asked what the main communicative patterns of masculinity are, how toxic masculinity is portrayed on Grindr, and how masculinity on Grindr correlates to previous research on dating app behavior. Thematic analysis intended to answer this research question and sub-questions by analyzing Instagram images of Grindr conversations. The analysis of 200 Instagram posts has displayed different forms of masculinity and toxic masculinity in conversations between non-straight males on the Grindr platform. Before the analysis, the concepts of masculinity and toxic masculinity were operationalized based on the literature. Masculinity includes dominant, confident, competitive, and homophobic behavior. Toxic masculine behavior included sexualizing, racist, objectifying, and aggressive behavior.

The analysis found three themes related to the research question and sub-questions: *communicative patterns related to masculinity*, *display of toxic masculinity*, and *comparability to previous research about dating app behavior*. The sub-themes of communicative patterns related to masculinity included humor to reject sexual proposals, compliments, and emojis to indicate intentions, deceptive self-presentation caused by insecurity, and the focus on hookups indicated by sexual language and images. The sub-themes that displayed toxic masculinity in the analysis included using critical tones to promote racism and homophobia, indicated preferences based on appearance and race, the persuading of others to engage in sexual behavior by acting dominant, and judgment and rejection of anonymity and effeminacy.

Before the analysis, it was expected to find minor displays of toxic masculinity in the inclusive queer community as it would be perceived as more acceptable for minorities than the straight community. Nevertheless, example 190 found in the analysis recalls: “There’s poison inside as much as outside the community. Sigh.”. The example illustrates how non-straight people perceive their community as toxic. The toxic masculine displays shown in the analysis are likely established based on deeply rooted masculine values, as was declared by the work of scholars (Connell 1987, 2005; Kimmel, 2001). Additionally, the literature has mentioned how the image painted in the society of the non-straight community, and some of the Grindr affordances might further contribute to the observed sexualizing and objectifying behavior (Anderson and colleagues, 2018; Mowlabocus, 2020). By pointing out patterns of toxic masculinity, perhaps men might shift into healthier forms of masculinity.

Additionally, the study explored how the findings correlate to previous research conducted on dating applications. The comparison framework utilized two studies by Filice and colleagues (2019) and Hess and Flores (2016) to validate the conducted thematic analysis. Comparing the results of these studies with the current analysis, aimed to find out how masculinity on Grindr

correlates to other research on dating app behavior. When the findings from the analysis are compared with previous work about dating platforms for the comparison framework, it was found that the current analysis and the studies by Filice and colleagues (2019) and Hess and Flores (2016) shared similarities and differences. The similarities with Filice and colleagues' study included the emphasize on appearance, sexual objectification and social comparison collectively caused by user attitude, behavior and Grindr affordances. The differences included: the focus on how body image is affected, weight, protective factors, coping strategies as well as the comparison with non-dating platforms Facebook and Twitter. The similarities with Hess and Flores' study included pointing out and shaming toxic masculine behavior, using humor and emojis as a response, sexualizing and objectifying behavior, and using Instagram posts. The differences included: the observed dating apps, gender and sexual orientation of users, Foucauldian notions, misogyny, interpreting comments of the Instagram audience, and the role of silence.

All in all, when comparing the literature from the theoretical framework and the literature employed for the comparison framework with the analysis results, it can be concluded that the findings broadly align as men are displaying deeply rooted masculine and toxic masculine behavior collectively created on the Grindr platform.

### *5.1 Academic and social implications*

As has been mentioned, the research project has tried to fill a gap in research relating to gender behavior on non-straight dating platforms. Earlier literature has examined online dating behavior in the context of dating risks, body image, and self-presentation (Couch and colleagues, 2012; Filice and colleagues, 2019; Guadagno and colleagues, 2012). This analysis critically examined the concept of masculinity and toxic masculinity on Grindr, contributing to scholarly discussions about dating apps and gender performance. The results build on existing evidence that Grindr is mainly based on appearance and sex (Anderson and colleagues, 2018). The show of masculine and toxic masculine values in sexualizing and objectifying behavior in the analysis added to the literature supporting this notion. Outcomes contributed a clearer understanding of the main communicative patterns related to masculinity, toxic masculinity in the context of the Grindr app. However, the analysis reported that people were ignored, judged, and blocked when more serious intentions instead of seeking sex were mentioned (Jaspal, 2016). Additionally, dating app motives are hard to depict as users are likely misrepresenting their intentions, and dating behavior is altered according to the expectations of others (Blackwell and colleagues, 2014). Therefore, these results should be taken into account when considering dating motivations and responses. Further research is needed to establish a more comprehensive image of Grindr user intentions.

### *5.2. Limitations and Recommendations*

Some of the research limitations include little diversity, as only English Grindr conversations were analyzed for the current study. As particular language and behavior on online dating platforms

can differ between cultures and ethnicities, it would be advised to consider other ethnicities to give a more comprehensive image of Grindr behavior across different cultures, mainly as race numerously occurred in the analysis. Correspondingly, dating behavior presumably differs between platforms. Thus, it would be suggested to expand the research by exploring other straight and non-straight dating platforms and their communities. Additionally, it would be suggested that future lines of research consider other minority groups within the LGBTQ+ community. Finally, as the research has found, there are numerous tribes and subcultures within the Grindr community, making it challenging to generalize results (Clay, 2018; Filice and colleagues, 2019).

Based on the sample used for the analysis, it would be advised to incorporate other data sources. For example, Instagram might not be perceived as the most suitable platform to obtain research data as data does not come from the Grindr platform itself but instead consists of screenshots of conversations posted on Instagram. Therefore, it might be challenging to interpret conversations as they cannot be perceived in their original context. Additionally, the accounts and hashtags that have been utilized for the analysis share Grindr conversations to emphasize that males who display toxic masculine behavior should be publicly criticized. Therefore, they might give a wrong perception of Grindr, as these pages mainly portray bad cases and examples of conversations on the platform.

Additionally, audience responses on Instagram might be considered to interpret different responses and sentiments of the Grindr community relating to displays of toxic masculinity. Lastly, there is a need for quantitative research on Grindr conversations. This way, the amount of toxic masculinity and its additional effect on dating behavior, responses, and perceptions can be further measured. As was considered, it has not been found that the reposting of Grindr conversations found on Instagram was ethically harmful to those mentioned in the images from the dataset. For the sake of keeping their original style, all quotations that are mentioned were taken verbatim, including errors.

### *5.3. Reflexivity*

This section attempts to critically reflect on the researcher's role throughout the research process. Reflexivity attempts to let the researcher critically reflect on their role in the research process (Dodgson, 2019). Reflexivity is essential, seeing that the researcher's race, ethnicity, class, and gender are all factors that need to be considered to affect the interpretation of the results (Brennen, 2017). For example, as the researcher does not identify as a member of the LGBTQ+ community, there might be a different angle or bias towards the non-straight community. Likewise, as the researcher does not identify as a male, concepts such as masculinity and toxic masculinity might be perceived differently by the female gaze instead of the non-straight male gaze.

However, as the researcher is not part of the non-straight community, it was enabled to analyze from a neutral position. Possibly, this female gaze of the non-straight male community has resulted in different perspectives. In order to confirm this, other scholars are invited to conduct a

similar analysis. Furthermore, the context of the images from the dataset is hard to evaluate as they were retrieved on another platform without their original context. Therefore, it would be advised to operate alternative research methods to perceive Grindr conversations in their original context. Finally, acquiring further details of the Grindr users from the dataset and their respective experiences, backgrounds, classes, and gender is challenging, as the conversations were posted anonymously to secure anonymity.

## 6. References

- Allen, M. (2017). *The SAGE encyclopedia of communication research methods*. Thousand Oaks, Canada: SAGE Publications.
- Anderson, E. (2011). *Inclusive Masculinity* (1st ed.). Abingdon, United Kingdom: Taylor & Francis.
- Anderson, E., & McCormack, M. (2016). Inclusive Masculinity Theory: Overview, reflection and refinement. *Journal of Gender Studies*, 27(5), 547–561. DOI: 10.1080/09589236.2016.1245605
- Anderson, M., Vogels, E. A., & Turner, E. (2020, February 6). The virtues and downsides of online dating. *Pew Research Center*. Retrieved from: <https://www.pewresearch.org/internet/2020/02/06/the-virtues-and-downsides-of-online-dating/>
- Anderson, J. R., Holland, E., Koc, Y., & Haslam, N. (2018). iObjectify: Self- and other-objectification on Grindr, a geosocial networking application designed for men who have sex with men. *European Journal of Social Psychology*, 48(5), 600–613. DOI: 10.1002/ejsp.2350
- ATLAS.ti Scientific Software Development GmbH. (n.d.). ATLAS.ti: The Qualitative Data Analysis & Research Software. Retrieved 2021, from <https://atlasti.com/>
- Babbie, E. R. (2014). *The basics of social research*. Sixth edition. Belmont, CA: Wadsworth, Cengage Learning.
- Baggs, B. M. (2018, September 19). #KindrGrindr: Gay dating app launches anti-racism campaign. Retrieved from <https://www.bbc.com/news/newsbeat-45573611>
- Baker, P., & Balirano, G. (2017). *Queering masculinities in language and culture (Palgrave studies in language, gender and sexuality)* (1st ed. 2018 ed.). London, United Kingdom: Palgrave Macmillan. DOI: 10.1057/978-1-349-95327-1
- Baym, N. K. (2010). *Personal connections in the digital age*. Hoboken, NJ, United States: Wiley.
- Bird, S. (1996). Welcome to the Men's Club: Homosociality and the Maintenance of Hegemonic Masculinity. *Gender and Society*, 10(2), 120-132. Retrieved from <http://www.jstor.org/stable/189829>
- Bird, D. (1998). Bodily Desires and Narrative Pleasures — Food and Feminism in Two Contemporary Australian Novels. *Antipodes*, 12(2), 95-99. Retrieved from <http://www.jstor.org/stable/41956861>
- Blackwell, C., Birnholtz, J., & Abbott, C. (2014). Seeing and being seen: Co-situation and impression formation using Grindr, a location-aware gay dating app. *New Media & Society*, 17(7), 1117–1136. DOI: 10.1177/1461444814521595
- Boehmer, U. (2002). Twenty years of public health research: Inclusion of lesbian, gay, bisexual, and transgender populations. *American Journal of Public Health*, 92(7), 1125–1130. DOI: 10.2105/ajph.92.7.1125
- Boeije, H. R. (2009). *Analysis in Qualitative Research*. Thousand Oaks, Canada: SAGE Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in*

- Psychology*, 3(2), 77–101. DOI: 10.1191/1478088706qp063oa
- Brennen, B. (2017). *Qualitative Research Methods for Media Studies* (2nd ed.). Abingdon, United Kingdom: Routledge.
- Brown, A. (2020, 9 April). *Lesbian, gay and bisexual online daters report positive experiences – but also harassment*. Retrieved from <https://www.pewresearch.org/fact-tank/2020/04/09/lesbian-gay-and-bisexual-online-daters-report-positive-experiences-but-also-harassment/>
- Buchbinder, D. (1994). *Masculinities and Identities*. Amsterdam, Netherlands: Amsterdam University Press.
- Burke, M., Kraut, R., & Marlow, C. (2011). Social capital on Facebook: Differentiating uses and users. *Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems - CHI '11*, 571–580. DOI: 10.1145/1978942.1979023
- Butler, J. (1999). *Gender Trouble*. Abingdon, United Kingdom: Taylor & Francis.
- Carrigan, T., Connell, B., & Lee, J. (1985). Toward a new sociology of masculinity. *Theory and Society*, 14(5), 551–604. DOI: 10.1007/bf00160017
- Carter, J. M. (2018, August 1). The problem with LGBTQ underrepresentation. Retrieved from <https://www.asbmb.org/asbmb-today/opinions/080118/the-problem-with-lgbqt-underrepresentation>
- Cheung, A. S. (2014). Location privacy: The challenges of mobile service devices. *Computer Law & Security Review*, 30(1), 41–54. DOI: 10.1016/j.clsr.2013.11.005
- Clay, S. (2018). The (Neo)Tribal nature of Grindr. *Neo-Tribes*, 235–251. DOI: 10.1007/978-3-319-68207-5\_15
- Connell R.W. (1987) *Gender and Power: Society, the Person and Sexual Politics*. Stanford, CA: Stanford University Press.
- Connell, R.W. (2005) *Masculinities* (2nd Edition). Berkeley, CA: University of California.
- Corriero, E. F., & Tong, S. T. (2015). Managing uncertainty in mobile dating applications: Goals, concerns of use, and information seeking in Grindr. *Mobile Media & Communication*, 4(1), 121–141. DOI: 10.1177/2050157915614872
- Couch, D., Liamputtong, P., & Pitts, M. (2012). What are the real and perceived risks and dangers of online dating? Perspectives from online daters. *Health, Risk & Society*, 14(7–8), 697–714. DOI: 10.1080/13698575.2012.720964
- Curry, D. (2021, 25 January). *Dating app revenue and usage statistics (2021)*. Retrieved from <https://www.businessofapps.com/data/dating-app-market/>
- De Boise, S. (2019). Editorial: is masculinity toxic? *NORMA*, 14(3), 147–151. DOI: 10.1080/18902138.2019.1654742
- Dodgson, J. E. (2019). Reflexivity in qualitative research. *Journal of Human Lactation*, 35(2), 220–222. DOI: 10.1177/0890334419830990
- Dowsett, G. W. (1993). I'll show you mine, if you'll show me yours: Gay men, masculinity research,

- men's studies, and sex. *Theory and Society*, 22(5), 697–709. DOI: 10.1007/bf00993543
- Edwards, T. (2006). *Cultures of Masculinity*. Abingdon, United Kingdom: Routledge.
- Fadzil, M. F. A., & Dato' Haji Abdul Hamid, B. (2020, June 30). A Linguistic Study Of Image And Language Of Self-Presentation Of Men On Grindr, A Gay Networking App. *Jurnal Wacana Sarjana*, 4(3), 1- 21. Retrieved from <http://spaj.ukm.my/jws/index.php/jws/article/view/322>
- Finkel, E. J., Eastwick, P. W., Karney, B. R., Reis, H. T., & Sprecher, S. (2012). Online dating. *Psychological Science in the Public Interest*, 13(1), 3–66. DOI: 10.1177/1529100612436522
- Filice, E., Raffoul, A., Meyer, S. B., & Neiterman, E. (2019). The influence of Grindr, a geosocial networking application, on body image in gay, bisexual and other men who have sex with men: An exploratory study. *Body Image*, 31, 59–70. DOI: 10.1016/j.bodyim.2019.08.007
- García-Gómez, A. (2020). Discursive representation of masculinity and femininity in Tinder and Grindr: Hegemonic masculinity, feminine devaluation and femmephobia. *Discourse & Society*, 31(4), 390–410. DOI: 10.1177/0957926520903523
- Gesselman, A. N., Ta, V. P., & Garcia, J. R. (2019). Worth a thousand interpersonal words: Emoji as affective signals for relationship-oriented digital communication. *PLOS ONE*, 14(8), e0221297. DOI: 10.1371/journal.pone.0221297
- Gibson, J. J. (1979). *The ecological approach to visual perception*. New York, NY: Houghton Mifflin.
- Gibson, W., & Brown, A. (2009). *Working with qualitative data*. London: SAGE.
- Goffman, E. (1978). *The presentation of self in everyday life* (p. 56). London: Harmondsworth.
- Greenwood, S., Perrin, A., & Duggan, M. (2016). Social media update 2016. *Pew Research Center*, 11(2), 1-18.
- Grindr. (2013, October 1). The new Grindr: Zero feet away. Retrieved from <https://www.prnewswire.com/news-releases/the-new-grindr-zero-feet-away-225991411.html>
- Grindr. (2018). Kindr. Retrieved from <https://www.kindr.grindr.com/>
- Grov, C., Breslow, A. S., Newcomb, M. E., Rosenberger, J. G., & Bauermeister, J. A. (2014). Gay and bisexual men's use of the internet: Research from the 1990s through 2013. *The Journal of Sex Research*, 51(4), 390–409. DOI: 10.1080/00224499.2013.871626
- Guadagno, R. E., Okdie, B. M., & Kruse, S. A. (2012). Dating deception: Gender, online dating, and exaggerated self-presentation. *Computers in Human Behavior*, 28(2), 642–647. DOI: 10.1016/j.chb.2011.11.010
- Haider, S. (2016). The shooting in Orlando, terrorism or toxic masculinity (or both?). *Men and Masculinities*, 19(5), 555–565. DOI: 10.1177/1097184x16664952
- Hall, J. A., Park, N., Song, H., & Cody, M. J. (2010). Strategic misrepresentation in online dating: The effects of gender, self-monitoring, and personality traits. *Journal of Social and Personal Relationships*, 27(1), 117–135. DOI: 10.1177/0265407509349633



- Harrington, D. C. (2020). What is “Toxic masculinity” and why does it matter? *Men and Masculinities*, 1097184X2094325. DOI: 10.1177/1097184x20943254
- Hennelly, S. (2010). Public space, public morality: The media construction of sex in public places. *Liverpool Law Review*, 31(1), 69–91. DOI:10.1007/s10991-010-9073-x
- Hess, A., & Flores, C. (2016). Simply more than swiping left: A critical analysis of toxic masculine performances on Tinder Nightmares. *New Media & Society*, 20(3), 1085–1102. DOI: 10.1177/1461444816681540
- Hoenigl, M., Little, S. J., Grelotti, D., Skaathun, B., Wagner, G. A., Weibel, N., . . . Smith, D. M. (2019). Grindr users take more risks, but are more open to human immunodeficiency virus (HIV) pre-exposure prophylaxis: Could this dating app provide a platform for HIV prevention outreach? *Clinical Infectious Diseases*, 71(7), e135–e140. DOI: 10.1093/cid/ciz1093
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online readings in psychology and culture*, 2(1), 2307-0919. <http://scholarworks.gvsu.edu/orpc/vol2/iss1/8>
- Hwang, S. (2007). Utilizing qualitative data analysis software. *Social Science Computer Review*, 26(4), 519–527. DOI: 10.1177/0894439307312485
- Instagram. (n.d.-a). #bestofgrindr. Retrieved 2021, from <https://www.instagram.com/explore/tags/bestofgrindr/>
- Instagram. (n.d.-b). #grindrchat. Retrieved 2021, from <https://www.instagram.com/explore/tags/grindrchat/>
- Instagram. (n.d.-c). #grindrfail. Retrieved 2021, from <https://www.instagram.com/explore/tags/grindrfail/>
- Jaspal, R. (2016). Gay men’s construction and management of identity on Grindr. *Sexuality & Culture*, 21(1), 187–204. DOI: 10.1007/s12119-016-9389-3
- Kalia, A. (2020, 29 April). *Newly single? A beginner’s guide to the best dating apps*. Retrieved from <https://www.theguardian.com/lifeandstyle/2019/dec/02/newly-single-a-beginners-guide-to-the-best-dating-apps>
- Kimmel, M. S. (1997). *Masculinity as homophobia: Fear, shame and silence in the construction of gender identity*. In M. M. Gergen & S. N. Davis (Eds.), *Toward a new psychology of gender* (p. 223–242). Taylor & Frances/Routledge.
- Kimmel, M. S. (2001). Masculinity as homophobia: fear, shame, and silence in the construction of gender identity. In: Whitehead SM and Barrett FJ (eds) *The Masculinities Reader*. Cambridge: Polity Press, 266–287.
- King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 257–270). London, UK: Sage. Chapter DOI: <http://dx.doi.org.eur.idm.oclc.org/10.4135/9781446280119.n21>
- Kunst, A. (2019, December 20). Online dating site and app usage in the UK June 2017, by sexual orientation. *Statista*. Retrieved from <https://www.statista.com/statistics/714934/online->

- dating-site-and-app-usage-in-the-united-kingdom/
- Kupers, T. A. (2005). Toxic masculinity as a barrier to mental health treatment in prison. *Journal of Clinical Psychology, 61*(6), 713–724. DOI: 10.1002/jclp.20105
- Laestadius, L. (2016). Instagram. *The SAGE Handbook of Social Media Research Methods, 573–592*. <https://doi.org/10.4135/9781473983847.n34>
- Landovitz, R. J., Tseng, C. H., Weissman, M., Haymer, M., Mendenhall, B., Rogers, K., . . . Shoptaw, S. (2012). Epidemiology, sexual risk behavior, and HIV prevention practices of men who have sex with men using GRINDR in Los Angeles, California. *Journal of Urban Health, 90*(4), 729–739. DOI: 10.1007/s11524-012-9766-7
- Leaper, C. (1995). The use of masculine and feminine to describe women’s and men’s behavior. *The Journal of Social Psychology, 135*(3), 359–369. DOI: 10.1080/00224545.1995.9713965
- Licoppe, C., Rivière, C. A., & Morel, J. (2016). Grindr casual hook-ups as interactional achievements. *New Media & Society, 18*(11), 2540–2558. DOI: 10.1177/1461444815589702
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Miles, S. (2021). Let’s (not) go outside: Grindr, hybrid space, and digital queer neighborhoods. *The Life and Afterlife of Gay Neighborhoods, 203–220*. DOI: 10.1007/978-3-030-66073-4\_9
- Mowlabocus, S. (2010). *Gaydar culture: Gay men, technology and embodiment in the digital age* (1st ed.). Burlington, VT: Routledge.
- Nexø, L. A., & Strandell, J. (2020). Testing, filtering, and insinuating: Matching and attunement of emoji use patterns as non-verbal flirting in online dating. *Poetics, 83*, 101477. DOI: 10.1016/j.poetic.2020.101477
- Pearson, E. (2019). Extremism and toxic masculinity: The man question re-posed. *International Affairs, 95*(6), 1251–1270. DOI: 10.1093/ia/iiz177
- PettyJohn, M. E., Muzzey, F. K., Maas, M. K., & McCauley, H. L. (2019). #HowIWillChange: Engaging men and boys in the #MeToo movement. *Psychology of Men & Masculinities, 20*(4), 612–622. DOI: 10.1037/men0000186
- Posadas, J. (2017). Teaching the Cause of Rape Culture: Toxic Masculinity. *Journal of Feminist Studies in Religion, 33*(1), 177-179. DOI: 10.2979/jfemistudreli.33.1.23
- Smith, A., & Duggan, M. (2013). Online dating & relationships. *Pew Internet & American Life Project*. Retrieved from <https://www.pewresearch.org/internet/2013/10/21/online-dating-relationships/>
- Race, K. (2014). Speculative pragmatism and intimate arrangements: Online hook-up devices in gay life. *Culture, Health & Sexuality, 17*(4), 496–511. DOI: 10.1080/13691058.2014.930181
- Ramos, R., & Mowlabocus, S. (2020). *Queer sites in global contexts*. Abingdon, United Kingdom: Taylor & Francis.
- Rice, E., Holloway, I., Winetrobe, H., Rhoades, H., Barman-Adhikari, A., Gibbs, J., . . . Dunlap, S. (2012). Sex risk among young men who have sex with men who use grindr, a smartphone

- geosocial networking application. *Journal of AIDS & Clinical Research*, 01(S4), 1-6.  
DOI: 10.4172/2155-6113.s4-005
- Rogge, R. D., Crasta, D., & Legate, N. (2019). Is Tinder–Grindr use risky? Distinguishing venue from individuals’ behavior as unique predictors of sexual risk. *Archives of Sexual Behavior*, 49(4), 1263–1277. DOI: 10.1007/s10508-019-01594-w
- Rosenfeld, M. J., & Thomas, R. J. (2012). Searching for a mate. *American Sociological Review*, 77(4), 523–547. DOI: 10.1177/0003122412448050
- Rowse, J., Bolt, C., & Gaya, S. (2020). Swipe right: the emergence of dating-app facilitated sexual assault. A descriptive retrospective audit of forensic examination caseload in an Australian metropolitan service. *Forensic Science, Medicine and Pathology*, 16(1), 71–77. DOI: 10.1007/s12024-019-00201-7
- Safronova, V. (2021, 10 January). *Sex and dating in the Coronavirus pandemic*. Retrieved from <https://www.nytimes.com/2021/01/10/style/coronavirus-sex-hookups-dating.html>
- Sallee, M. W., & Harris, F. (2011). Gender performance in qualitative studies of masculinities. *Qualitative Research*, 11(4), 409–429. DOI: 10.1177/1468794111404322
- Sattel, J. W., David, D. S., & Brannon, R. (1978). The Forty-Nine percent majority: The male sex role. *Teaching Sociology*, 5(4), 482. DOI: 10.2307/1317288
- Scannell, M. J. (2019). Online dating and the risk of sexual assault to college students. *Building Healthy Academic Communities Journal*, 3(1), 34. DOI: 10.18061/bhac.v3i1.6688
- Schreiber, M. (2017). Audiences, aesthetics and affordances analysing practices of visual communication on social media. *Digital Culture & Society*, 3(2), 143–164. DOI: 10.14361/dcs-2017-0209
- Shield, A. D. (2019). “White is a color, middle eastern is not a color”: Drop-Down menus, racial identification, and the weight of labels. *Immigrants on Grindr*, 185–225.  
DOI: 10.1007/978-3-030-30394-5\_6
- Silverman, D. (2011). *Interpreting Qualitative Data*. Thousand Oaks, Canada: SAGE Publications.
- Smith, A., & Duggan, M. (2013, October 21). Online dating & relationships. Retrieved from <https://www.pewresearch.org/internet/2013/10/21/online-dating-relationships/>
- Sormanen, N., & Lauk, E. (2016). Issues of ethics and methods in studying social media. *Media and Communication*, 4(4), 63–65. DOI: 10.17645/mac.v4i4.793
- Steinfeld, J. (2020). Forced out of the closet: As people live out more of their lives online right now, our report highlights how LGBTQ dating apps can put people’s lives at risk. *Index on Censorship*, 49(2), 101–104. DOI: 10.1177/0306422020935360
- Stets, J. E., & Burke, P. J. (2000). Femininity/masculinity. *Encyclopedia of sociology*, 2, 997-1005.
- Stoller, R. J. (2020). *Sex and gender: The development of masculinity and femininity*. Routledge.
- Sumter, S. R., Vandenbosch, L., & Ligtenberg, L. (2017). Love me Tinder: Untangling emerging adults’ motivations for using the dating application Tinder. *Telematics and Informatics*, 34(1), 67–78. DOI: 10.1016/j.tele.2016.04.009

- Tankovska, H. (2021, February 8). Instagram: Distribution of global audiences 2021, by age and gender. *Statista*. Retrieved from <https://www.statista.com/statistics/248769/age-distribution-of-worldwide-Instagram-users/#:%7E:text=As%20one%20of%20the%20biggest,second%20to%20Snapchat%20and%20TikTok>.
- Temple, J. R., Choi, H. J., Brem, M., Wolford-Clevenger, C., Stuart, G. L., Peskin, M. F., & Elmquist, J. (2015). The temporal association between traditional and cyber dating abuse among adolescents. *Journal of Youth and Adolescence*, *45*(2), 340–349. DOI: 10.1007/s10964-015-0380-3
- The Guardian. (2018, April 3). Grindr shared information about users' HIV status with third parties. *The Guardian*. Retrieved from <https://www.theguardian.com/technology/2018/apr/03/grindr-shared-information-about-users-hiv-status-with-third-parties>
- Ting, H., Ming, W. W. P., de Run, E. C., & Choo, S. L. Y. (2015). Beliefs about the use of Instagram: An exploratory study. *International Journal of business and innovation*, *2*(2), 15–31.
- Tong, S. T., Corriero, E. F., Wibowo, K. A., Makki, T. W., & Slatcher, R. B. (2019). Self-presentation and impressions of personality through text-based online dating profiles: A lens model analysis. *New Media & Society*, *22*(5), 875–895. DOI: 10.1177/1461444819872678
- Treharne, G. J., & Riggs, D. W. (2015). Ensuring quality in qualitative research. *Qualitative Research in Clinical and Health Psychology*, *57*–73. DOI: 10.1007/978-1-137-29105-9\_5
- Truong, K. (2018, July 17). *Asian-American man plans lawsuit to stop “sexual racism” on Grindr*. Retrieved from <https://www.nbcnews.com/feature/nbc-out/asian-american-man-threatens-class-action-discrimination-suit-against-grindr-n890946>
- Valkenburg, P. M., & Peter, J. (2007). Who visits online dating sites? Exploring some characteristics of online daters. *CyberPsychology & Behavior*, *10*(6), 849–852. DOI: 10.1089/cpb.2007.9941
- Van De Wiele, C., & Tong, S. T. (2014). Breaking boundaries. *Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, 619–630. DOI: 10.1145/2632048.2636070
- Van Kessel, L. (2021). Immigrants on Grindr. Race, sexuality and belonging online. *Tijdschrift Voor Genderstudies*, *24*(1), 70–74. DOI: 10.5117/tvgn2021.1.006.vank
- Waldman, A. E. (2019). Law, privacy, and online dating: “Revenge porn” in gay online communities. *Law & Social Inquiry*, *44*(04), 987–1018. DOI: 10.1017/lsi.2018.29
- Waling, A. (2019). Problematising ‘Toxic’ and ‘Healthy’ masculinity for addressing gender inequalities. *Australian Feminist Studies*, *34*(101), 362–375. DOI:10.1080/08164649.2019.1679021
- Ward, J. (2016a). Swiping, matching, chatting: Self-presentation and self-disclosure on mobile dating apps. *Human IT: Journal for Information Technology Studies as a Human Science*, *13*(2), 81–95. Retrieved from: <https://humanit.hb.se/article/view/516/579>

- Ward, J. (2016b). What are you doing on Tinder? Impression management on a matchmaking mobile app. *Information, Communication & Society*, 20(11), 1644–1659. DOI: 10.1080/1369118x.2016.1252412
- Warner, M., Gutmann, A., Sasse, M. A., & Blandford, A. (2018). Privacy unraveling around explicit HIV status disclosure fields in the online geosocial hookup app Grindr. *Proceedings of the ACM on Human-Computer Interaction*, 2(CSCW), 1–22. DOI: 10.1145/3274450
- Weaver-Hightower, M. (2003). The “Boy turn” in research on gender and education. *Review of Educational Research*, 73(4), 471–498. DOI: 10.3102/00346543073004471
- Wei Ang, M., Tan, J. C. K., & Lou, C. (2021). Navigating sexual racism in the sexual field: Compensation for and disavowal of marginality by racial minority Grindr users in Singapore. *Journal of Computer-Mediated Communication*. Published. DOI: 10.1093/jcmc/zmab003
- West, C. & Zimmerman, D. H. (1987). Doing gender. *Gender & Society* 1(2): 125–151. DOI: 10.1177/0891243287001002002
- Wilken R., Burgess J., & Albury K (2019). “Dating Apps and Data Markets: A Political Economy of Communication Approach.” *Computational Culture* 7. Retrieved from: <http://computationalculture.net/dating-apps-and-data-markets-a-political-economy-of-communication-approach/>
- Zimmer, M. (2010). “But the data is already public”: On the ethics of research in Facebook. *Ethics and Information Technology*, 12(4), 313–325. DOI: 10.1007/s10676-010-9227-5

## 7. Appendix A - References dataset

1 – 25/1/20	<a href="https://www.instagram.com/p/B7v1YHxHB18/">https://www.instagram.com/p/B7v1YHxHB18/</a>
2 - 17/11/19	<a href="https://www.instagram.com/p/B49O7HVF5Jc/">https://www.instagram.com/p/B49O7HVF5Jc/</a>
3 - 19/12/20	<a href="https://www.instagram.com/p/CI-TONtnpW8/">https://www.instagram.com/p/CI-TONtnpW8/</a>
4 - 2/4/21	<a href="https://www.instagram.com/p/CNJY4RiHAeW/">https://www.instagram.com/p/CNJY4RiHAeW/</a>
5 - 1/4/21	<a href="https://www.instagram.com/p/CNHAES-HRLh/">https://www.instagram.com/p/CNHAES-HRLh/</a>
6 - 30/3/21	<a href="https://www.instagram.com/p/CNBtK9iH9YA/">https://www.instagram.com/p/CNBtK9iH9YA/</a>
7 - 23/3/21	<a href="https://www.instagram.com/p/CMvk5L1nX_J/">https://www.instagram.com/p/CMvk5L1nX_J/</a>
8 - 23/3/21	<a href="https://www.instagram.com/p/CMvksNSHyKa/">https://www.instagram.com/p/CMvksNSHyKa/</a>
9 – 18/3/21	<a href="https://www.instagram.com/p/CMjloh7LAXr/">https://www.instagram.com/p/CMjloh7LAXr/</a>
10 – 5/3/21	<a href="https://www.instagram.com/p/CMCjkQfnOPP/">https://www.instagram.com/p/CMCjkQfnOPP/</a>
11 - 25/2/21	<a href="https://www.instagram.com/p/CLseyUtnCUK/">https://www.instagram.com/p/CLseyUtnCUK/</a>
12 – 21/2/21	<a href="https://www.instagram.com/p/CLiXgWDLMDr/">https://www.instagram.com/p/CLiXgWDLMDr/</a>
13 - 20/2/21	<a href="https://www.instagram.com/p/CLgyFOmH5Zt/">https://www.instagram.com/p/CLgyFOmH5Zt/</a>
14 – 6/2/21	<a href="https://www.instagram.com/p/CK9aObSFjhR/">https://www.instagram.com/p/CK9aObSFjhR/</a>
15 - 5/2/21	<a href="https://www.instagram.com/p/CK6aiT3JSQy/">https://www.instagram.com/p/CK6aiT3JSQy/</a>
16 – 2/2/21	<a href="https://www.instagram.com/p/CKyrtwZF9gY/">https://www.instagram.com/p/CKyrtwZF9gY/</a>
17 – 31/1/21	<a href="https://www.instagram.com/p/CKs9ROwliWo/">https://www.instagram.com/p/CKs9ROwliWo/</a>
18 – 2/5/20	<a href="https://www.instagram.com/p/B_sR5TXhHD1/">https://www.instagram.com/p/B_sR5TXhHD1/</a>
19 – 30/9/19	<a href="https://www.instagram.com/p/B3C6QpWhVIO/">https://www.instagram.com/p/B3C6QpWhVIO/</a>
20 – 13/9/19	<a href="https://www.instagram.com/p/B2XWTb9BdBV/">https://www.instagram.com/p/B2XWTb9BdBV/</a>
21 – 28/1/21	<a href="https://www.instagram.com/p/CKmhQdmHOH7/">https://www.instagram.com/p/CKmhQdmHOH7/</a>
22 – 27/1/21	<a href="https://www.instagram.com/p/CKjBoYTn5cP/">https://www.instagram.com/p/CKjBoYTn5cP/</a>
23 – 12/4/19	<a href="https://www.instagram.com/p/BwKVvfhnqx0/">https://www.instagram.com/p/BwKVvfhnqx0/</a>
24 – 18/1/21	<a href="https://www.instagram.com/p/CKLt5TJn0CN/">https://www.instagram.com/p/CKLt5TJn0CN/</a>
25 – 16/1/21	<a href="https://www.instagram.com/p/CKHSmEBnXSj/">https://www.instagram.com/p/CKHSmEBnXSj/</a>
26 – 16/1/21	<a href="https://www.instagram.com/p/CKGNJLBiReo/">https://www.instagram.com/p/CKGNJLBiReo/</a>
27 – 30/8/18	<a href="https://www.instagram.com/p/BnHKNZBAx_b/">https://www.instagram.com/p/BnHKNZBAx_b/</a>
28 – 14/1/21	<a href="https://www.instagram.com/p/CKBlfL5FGbU/">https://www.instagram.com/p/CKBlfL5FGbU/</a>

29 – 14/1/21	<a href="https://www.instagram.com/p/CKBkSWaleoG/">https://www.instagram.com/p/CKBkSWaleoG/</a>
30 – 13/1/21	<a href="https://www.instagram.com/p/CJ93RDoL64b/">https://www.instagram.com/p/CJ93RDoL64b/</a>
31 – 13/1/21	<a href="https://www.instagram.com/p/CJ9ukaqHgZl/">https://www.instagram.com/p/CJ9ukaqHgZl/</a>
32 – 11/1/21	<a href="https://www.instagram.com/p/CJ5n72UHJSw/">https://www.instagram.com/p/CJ5n72UHJSw/</a>
33 – 11/1/21	<a href="https://www.instagram.com/p/CJ5DZaVncrd/">https://www.instagram.com/p/CJ5DZaVncrd/</a>
34 – 9/1/21	<a href="https://www.instagram.com/p/CJ0i0qjpOql/">https://www.instagram.com/p/CJ0i0qjpOql/</a>
35 – 8/1/21	<a href="https://www.instagram.com/p/CJxRJh2nCa5/">https://www.instagram.com/p/CJxRJh2nCa5/</a>
36 – 6/1/21	<a href="https://www.instagram.com/p/CJr2Tzfp-O2/">https://www.instagram.com/p/CJr2Tzfp-O2/</a>
37 – 3/1/21	<a href="https://www.instagram.com/p/CJITghRnKTx/">https://www.instagram.com/p/CJITghRnKTx/</a>
38 – 30/12/20	<a href="https://www.instagram.com/p/CJam3YTjXnV/">https://www.instagram.com/p/CJam3YTjXnV/</a>
39 – 27/12/20	<a href="https://www.instagram.com/p/CJTh9K2FksS/">https://www.instagram.com/p/CJTh9K2FksS/</a>
40 – 27/12/20	<a href="https://www.instagram.com/p/CJR87exHn86/">https://www.instagram.com/p/CJR87exHn86/</a>
41 – 24/12/20	<a href="https://www.instagram.com/p/CJLgYgZpi5P/">https://www.instagram.com/p/CJLgYgZpi5P/</a>
42 – 24/12/20	<a href="https://www.instagram.com/p/CJLgHbwpPjw/">https://www.instagram.com/p/CJLgHbwpPjw/</a>
43 – 23/12/20	<a href="https://www.instagram.com/p/CJHk58GAlmQ/">https://www.instagram.com/p/CJHk58GAlmQ/</a>
44 – 23/12/20	<a href="https://www.instagram.com/p/CJHkxDWA2KK/">https://www.instagram.com/p/CJHkxDWA2KK/</a>
45 – 21/12/20	<a href="https://www.instagram.com/p/CJCKXTcHAyT/">https://www.instagram.com/p/CJCKXTcHAyT/</a>
46 – 19/12/20	<a href="https://www.instagram.com/p/CI-Q70pne8l/">https://www.instagram.com/p/CI-Q70pne8l/</a>
47 – 18/12/20	<a href="https://www.instagram.com/p/CI9FEwCg1g5/">https://www.instagram.com/p/CI9FEwCg1g5/</a>
48 – 18/12/20	<a href="https://www.instagram.com/p/CI9EkMKApu6/">https://www.instagram.com/p/CI9EkMKApu6/</a>
49 – 18/12/20	<a href="https://www.instagram.com/p/CI9ER5kg81v/">https://www.instagram.com/p/CI9ER5kg81v/</a>
50 – 18/12/20	<a href="https://www.instagram.com/p/CI8717_FSvZ/">https://www.instagram.com/p/CI8717_FSvZ/</a>
51 – 17/12/20	<a href="https://www.instagram.com/p/CI5UmXfFZGI/">https://www.instagram.com/p/CI5UmXfFZGI/</a>
52 – 17/12/20	<a href="https://www.instagram.com/p/CI5NAHHL_5J/">https://www.instagram.com/p/CI5NAHHL_5J/</a>
53 – 17/12/20	<a href="https://www.instagram.com/p/CI5BN8LIYpA/">https://www.instagram.com/p/CI5BN8LIYpA/</a>
54 – 12/12/20	<a href="https://www.instagram.com/p/CI5XlCYNtnF/">https://www.instagram.com/p/CI5XlCYNtnF/</a>
55 – 8/12/20	<a href="https://www.instagram.com/p/CIiUIivnLgg/">https://www.instagram.com/p/CIiUIivnLgg/</a>
56 – 2/12/20	<a href="https://www.instagram.com/p/CITw24opdpN/">https://www.instagram.com/p/CITw24opdpN/</a>
57 – 7/11/20	<a href="https://www.instagram.com/p/CHRwewuHqVs/">https://www.instagram.com/p/CHRwewuHqVs/</a>
58 – 5/11/20	<a href="https://www.instagram.com/p/CHNrEQXHd8M/">https://www.instagram.com/p/CHNrEQXHd8M/</a>

59 – 28/10/20	<a href="https://www.instagram.com/p/CG41-o6naXK/">https://www.instagram.com/p/CG41-o6naXK/</a>
60 - 10/10/20	<a href="https://www.instagram.com/p/CGI_HcMH-8o/">https://www.instagram.com/p/CGI_HcMH-8o/</a>
61 – 5/10/20	<a href="https://www.instagram.com/p/CF9vzCCo5Wj/">https://www.instagram.com/p/CF9vzCCo5Wj/</a>
62 – 22/9/20	<a href="https://www.instagram.com/p/CFcGhA8Hr2V/">https://www.instagram.com/p/CFcGhA8Hr2V/</a>
63 – 16/9/20	<a href="https://www.instagram.com/p/CFLMqAonkx0/">https://www.instagram.com/p/CFLMqAonkx0/</a>
64 – 14/9/20	<a href="https://www.instagram.com/p/CFGqiy7H2db/">https://www.instagram.com/p/CFGqiy7H2db/</a>
65 – 27/8/20	<a href="https://www.instagram.com/p/CEYJ3VVnOUo/">https://www.instagram.com/p/CEYJ3VVnOUo/</a>
66 – 27/8/20	<a href="https://www.instagram.com/p/CEYJgAjHsR2/">https://www.instagram.com/p/CEYJgAjHsR2/</a>
67 – 18/8/20	<a href="https://www.instagram.com/p/CECl1bynP41/">https://www.instagram.com/p/CECl1bynP41/</a>
68 – 2/8/20	<a href="https://www.instagram.com/p/CDXzbW_HpoD/">https://www.instagram.com/p/CDXzbW_HpoD/</a>
69 – 24/7/20	<a href="https://www.instagram.com/p/CDBUB49n4TI/">https://www.instagram.com/p/CDBUB49n4TI/</a>
70 – 21/7/20	<a href="https://www.instagram.com/p/CC5VXTNoNgN/">https://www.instagram.com/p/CC5VXTNoNgN/</a>
71 – 20/7/20	<a href="https://www.instagram.com/p/CC2z4oJoIaA/">https://www.instagram.com/p/CC2z4oJoIaA/</a>
72 – 16/7/20	<a href="https://www.instagram.com/p/CCrs5t3nO0u/">https://www.instagram.com/p/CCrs5t3nO0u/</a>
73 – 15/7/20	<a href="https://www.instagram.com/p/CCpo4o1HkPK/">https://www.instagram.com/p/CCpo4o1HkPK/</a>
74 – 5/7/20	<a href="https://www.instagram.com/p/CCQEyJPl6xF/">https://www.instagram.com/p/CCQEyJPl6xF/</a>
75 – 1/7/20	<a href="https://www.instagram.com/p/CCFiGJxHoHg/">https://www.instagram.com/p/CCFiGJxHoHg/</a>
76 – 29/6/20	<a href="https://www.instagram.com/p/CAz1YYnBC_/">https://www.instagram.com/p/CAz1YYnBC_/</a>
77 – 25/6/20	<a href="https://www.instagram.com/p/CB1vIPIHKv7/">https://www.instagram.com/p/CB1vIPIHKv7/</a>
78 – 23/6/20	<a href="https://www.instagram.com/p/CBwcYQZH_Yp/">https://www.instagram.com/p/CBwcYQZH_Yp/</a>
79 – 22/6/20	<a href="https://www.instagram.com/p/CBt73TqHEuL/">https://www.instagram.com/p/CBt73TqHEuL/</a>
80 – 21/6/20	<a href="https://www.instagram.com/p/CBrW-uiHiGE/">https://www.instagram.com/p/CBrW-uiHiGE/</a>
81 – 20/6/20	<a href="https://www.instagram.com/p/CBoxunJH3S5/">https://www.instagram.com/p/CBoxunJH3S5/</a>
82 – 18/6/20	<a href="https://www.instagram.com/p/CBjklTYpY58/">https://www.instagram.com/p/CBjklTYpY58/</a>
83 – 16/6/20	<a href="https://www.instagram.com/p/CBfvsQxj-wZ/">https://www.instagram.com/p/CBfvsQxj-wZ/</a>
84 – 14/6/20	<a href="https://www.instagram.com/p/CBZcYE-J-mW/">https://www.instagram.com/p/CBZcYE-J-mW/</a>
85 – 14/6/20	<a href="https://www.instagram.com/p/CBZbvbdPlwd/">https://www.instagram.com/p/CBZbvbdPlwd/</a>
86 – 14/6/20	<a href="https://www.instagram.com/p/CBZbhJLpFiQ/">https://www.instagram.com/p/CBZbhJLpFiQ/</a>
87 – 13/6/20	<a href="https://www.instagram.com/p/CBXLekip6Hy/">https://www.instagram.com/p/CBXLekip6Hy/</a>
88 – 13/6/20	<a href="https://www.instagram.com/p/CBXLKlJJK37/">https://www.instagram.com/p/CBXLKlJJK37/</a>



89 – 13/6/20	<a href="https://www.instagram.com/p/CBXHmVnpWaX/">https://www.instagram.com/p/CBXHmVnpWaX/</a>
90 – 12/6/20	<a href="https://www.instagram.com/p/CBUMVZgpHVo/">https://www.instagram.com/p/CBUMVZgpHVo/</a>
91 – 12/6/20	<a href="https://www.instagram.com/p/CBUMEXXp8kE/">https://www.instagram.com/p/CBUMEXXp8kE/</a>
92 – 12/6/20	<a href="https://www.instagram.com/p/CBUK_WMJt9o/">https://www.instagram.com/p/CBUK_WMJt9o/</a>
93 – 9/6/20	<a href="https://www.instagram.com/p/CBOmmcEH5Og/">https://www.instagram.com/p/CBOmmcEH5Og/</a>
94 – 28/5/20	<a href="https://www.instagram.com/p/CAvfLhFnRUK/">https://www.instagram.com/p/CAvfLhFnRUK/</a>
95 – 28/5/20	<a href="https://www.instagram.com/p/CAuZFi-F9N2/">https://www.instagram.com/p/CAuZFi-F9N2/</a>
96 – 28/5/20	<a href="https://www.instagram.com/p/CAuY3GLIB_8/">https://www.instagram.com/p/CAuY3GLIB_8/</a>
97 – 24/5/20	<a href="https://www.instagram.com/p/CAk1sCEF8Wp/">https://www.instagram.com/p/CAk1sCEF8Wp/</a>
98 – 19/5/20	<a href="https://www.instagram.com/p/CAYcVMXnJO9/">https://www.instagram.com/p/CAYcVMXnJO9/</a>
99 – 21/3/20	<a href="https://www.instagram.com/p/B-AXH_qHALX/">https://www.instagram.com/p/B-AXH_qHALX/</a>
100 – 15/3/20	<a href="https://www.instagram.com/p/B9vQY4HIMnu/">https://www.instagram.com/p/B9vQY4HIMnu/</a>
101 – 15/3/20	<a href="https://www.instagram.com/p/B9vQXc0FdR8/">https://www.instagram.com/p/B9vQXc0FdR8/</a>
102 – 15/3/20	<a href="https://www.instagram.com/p/B9vPbm8lRoe/">https://www.instagram.com/p/B9vPbm8lRoe/</a>
103 – 15/3/20	<a href="https://www.instagram.com/p/B9vPZ7gFWH1/">https://www.instagram.com/p/B9vPZ7gFWH1/</a>
104 – 15/3/20	<a href="https://www.instagram.com/p/B9vPX5qFhaC/">https://www.instagram.com/p/B9vPX5qFhaC/</a>
105 – 11/3/20	<a href="https://www.instagram.com/p/B9m8imXlxn9/">https://www.instagram.com/p/B9m8imXlxn9/</a>
106 – 8/3/20	<a href="https://www.instagram.com/p/B9eGKXfn7Lj/">https://www.instagram.com/p/B9eGKXfn7Lj/</a>
107 – 3/3/20	<a href="https://www.instagram.com/p/B9QmXlnHEL0/">https://www.instagram.com/p/B9QmXlnHEL0/</a>
108 – 26/2/20	<a href="https://www.instagram.com/p/B9A2tYMno25/">https://www.instagram.com/p/B9A2tYMno25/</a>
109 – 24/2/20	<a href="https://www.instagram.com/p/B89uwpUHDYF/">https://www.instagram.com/p/B89uwpUHDYF/</a>
110 – 17/2/20	<a href="https://www.instagram.com/p/B8rX6gsHiDU/">https://www.instagram.com/p/B8rX6gsHiDU/</a>
111 – 10/2/20	<a href="https://www.instagram.com/p/B8Yp39snXy-/">https://www.instagram.com/p/B8Yp39snXy-/</a>
112 – 10/2/20	<a href="https://www.instagram.com/p/B8YAB5lnDVB/">https://www.instagram.com/p/B8YAB5lnDVB/</a>
113 – 7/2/20	<a href="https://www.instagram.com/p/B8RXtvDFzyC/">https://www.instagram.com/p/B8RXtvDFzyC/</a>
114 – 26/1/20	<a href="https://www.instagram.com/p/B7yJN-qn_fN/">https://www.instagram.com/p/B7yJN-qn_fN/</a>
115 – 25/1/20	<a href="https://www.instagram.com/p/B7vCNNPnsIX/">https://www.instagram.com/p/B7vCNNPnsIX/</a>
116 – 21/1/20	<a href="https://www.instagram.com/p/B7l6nC5FqWD/">https://www.instagram.com/p/B7l6nC5FqWD/</a>
117 – 19/1/20	<a href="https://www.instagram.com/p/B7ezNfAnlnH/">https://www.instagram.com/p/B7ezNfAnlnH/</a>
118 – 18/1/20	<a href="https://www.instagram.com/p/B7ciuWH0n6/">https://www.instagram.com/p/B7ciuWH0n6/</a>

119 – 14/1/20	<a href="https://www.instagram.com/p/B7TV77fHopr/">https://www.instagram.com/p/B7TV77fHopr/</a>
120 – 11/1/20	<a href="https://www.instagram.com/p/B7MGtcHB5Wo/">https://www.instagram.com/p/B7MGtcHB5Wo/</a>
121 – 10/1/20	<a href="https://www.instagram.com/p/B7J2e7-nHLc/">https://www.instagram.com/p/B7J2e7-nHLc/</a>
122 – 7/1/20	<a href="https://www.instagram.com/p/B7BA_GOFkrL/">https://www.instagram.com/p/B7BA_GOFkrL/</a>
123 – 6/1/20	<a href="https://www.instagram.com/p/B6_kLmUnqjO/">https://www.instagram.com/p/B6_kLmUnqjO/</a>
124 – 5/1/20	<a href="https://www.instagram.com/p/B664h18Hzew/">https://www.instagram.com/p/B664h18Hzew/</a>
125 – 2/1/20	<a href="https://www.instagram.com/p/B6z_n48HDYw/">https://www.instagram.com/p/B6z_n48HDYw/</a>
126 – 1/1/20	<a href="https://www.instagram.com/p/B6x_JFdH9Sn/">https://www.instagram.com/p/B6x_JFdH9Sn/</a>
127 – 30/12/19	<a href="https://www.instagram.com/p/B6rgFXanh8a/">https://www.instagram.com/p/B6rgFXanh8a/</a>
128 – 26/12/19	<a href="https://www.instagram.com/p/B6jZATrnG4Z/">https://www.instagram.com/p/B6jZATrnG4Z/</a>
129 – 8/12/19	<a href="https://www.instagram.com/p/B5zx-KWHQ3x/">https://www.instagram.com/p/B5zx-KWHQ3x/</a>
130 – 3/12/19	<a href="https://www.instagram.com/p/B5m6jK3HiH2/">https://www.instagram.com/p/B5m6jK3HiH2/</a>
131 – 30/11/19	<a href="https://www.instagram.com/p/B5fC2K_Hao-/">https://www.instagram.com/p/B5fC2K_Hao-/</a>
132 – 23/11/19	<a href="https://www.instagram.com/p/B5OTbowHp2v/">https://www.instagram.com/p/B5OTbowHp2v/</a>
133 – 21/11/19	<a href="https://www.instagram.com/p/B5IES0kHCdX/">https://www.instagram.com/p/B5IES0kHCdX/</a>
134 – 18/11/19	<a href="https://www.instagram.com/p/B5AUtr8n45-/">https://www.instagram.com/p/B5AUtr8n45-/</a>
135 – 13/11/19	<a href="https://www.instagram.com/p/B40I19k13FD/">https://www.instagram.com/p/B40I19k13FD/</a>
136 – 7/11/19	<a href="https://www.instagram.com/p/B4kxFVGI1tZ/">https://www.instagram.com/p/B4kxFVGI1tZ/</a>
137 – 2/11/19	<a href="https://www.instagram.com/p/B4XSTmNHRHY/">https://www.instagram.com/p/B4XSTmNHRHY/</a>
138 – 2/11/19	<a href="https://www.instagram.com/p/B4WDIJ4HJUD/">https://www.instagram.com/p/B4WDIJ4HJUD/</a>
139 – 31/10/19	<a href="https://www.instagram.com/p/B4SloApF9pD/">https://www.instagram.com/p/B4SloApF9pD/</a>
140 – 31/10/19	<a href="https://www.instagram.com/p/B4QtAHpnVgH/">https://www.instagram.com/p/B4QtAHpnVgH/</a>
141 – 30/10/19	<a href="https://www.instagram.com/p/B4QZNW6nhd6/">https://www.instagram.com/p/B4QZNW6nhd6/</a>
142 – 29/10/19	<a href="https://www.instagram.com/p/B4Nzud-n9yU/">https://www.instagram.com/p/B4Nzud-n9yU/</a>
143 – 29/10/19	<a href="https://www.instagram.com/p/B4NRRPfn2Ag/">https://www.instagram.com/p/B4NRRPfn2Ag/</a>
144 – 16/10/19	<a href="https://www.instagram.com/p/B3qK0UhnSUn/">https://www.instagram.com/p/B3qK0UhnSUn/</a>
145 – 10/10/19	<a href="https://www.instagram.com/p/B3bPoD-Hq_3/">https://www.instagram.com/p/B3bPoD-Hq_3/</a>
146 – 9/10/19	<a href="https://www.instagram.com/p/B3Zesl3HJFH/">https://www.instagram.com/p/B3Zesl3HJFH/</a>
147 – 30/9/19	<a href="https://www.instagram.com/p/B3CU4uyH44j/">https://www.instagram.com/p/B3CU4uyH44j/</a>
148 – 30/9/19	<a href="https://www.instagram.com/p/B3A_ZBHH4RJ/">https://www.instagram.com/p/B3A_ZBHH4RJ/</a>

149 – 20/3/19	<a href="https://www.instagram.com/p/BvN8-gQgBBT/">https://www.instagram.com/p/BvN8-gQgBBT/</a>
150 – 24/2/19	<a href="https://www.instagram.com/p/BuQ8jVgHkED/">https://www.instagram.com/p/BuQ8jVgHkED/</a>
151 – 22/2/19	<a href="https://www.instagram.com/p/BuL52ypngeX/">https://www.instagram.com/p/BuL52ypngeX/</a>
152 – 3/2/19	<a href="https://www.instagram.com/p/BtbhIeHmzS/">https://www.instagram.com/p/BtbhIeHmzS/</a>
153 – 2/2/19	<a href="https://www.instagram.com/p/BtYOFJQnFND/">https://www.instagram.com/p/BtYOFJQnFND/</a>
154 – 29/1/19	<a href="https://www.instagram.com/p/BtNqDOGnbTi/">https://www.instagram.com/p/BtNqDOGnbTi/</a>
155 – 17/1/19	<a href="https://www.instagram.com/p/BsvFhYkHj3i/">https://www.instagram.com/p/BsvFhYkHj3i/</a>
156 – 15/1/19	<a href="https://www.instagram.com/p/BsqqyVXn_T7/">https://www.instagram.com/p/BsqqyVXn_T7/</a>
157 – 13/1/19	<a href="https://www.instagram.com/p/BskLlErHIS3/">https://www.instagram.com/p/BskLlErHIS3/</a>
158 – 10/1/19	<a href="https://www.instagram.com/p/BscCg7WhR_P/">https://www.instagram.com/p/BscCg7WhR_P/</a>
159 – 30/11/18	<a href="https://www.instagram.com/p/Bq0IIMrgEsS/">https://www.instagram.com/p/Bq0IIMrgEsS/</a>
160 – 4/11/18	<a href="https://www.instagram.com/p/BpxU_w8l9aU/">https://www.instagram.com/p/BpxU_w8l9aU/</a>
161 – 4/11/18	<a href="https://www.instagram.com/p/BpvMdTnF193/">https://www.instagram.com/p/BpvMdTnF193/</a>
162 – 6/7/18	<a href="https://www.instagram.com/p/BmI_sdABiu1/">https://www.instagram.com/p/BmI_sdABiu1/</a>
163 – 13/5/18	<a href="https://www.instagram.com/p/BiuJ3_mB6ga/">https://www.instagram.com/p/BiuJ3_mB6ga/</a>
164 – 24/4/18	<a href="https://www.instagram.com/p/Bh8dTmSBYyL/">https://www.instagram.com/p/Bh8dTmSBYyL/</a>
165 – 17/4/18	<a href="https://www.instagram.com/p/BhriZp0Bk71/">https://www.instagram.com/p/BhriZp0Bk71/</a>
166 – 17/4/18	<a href="https://www.instagram.com/p/BhfrBTkhORb/">https://www.instagram.com/p/BhfrBTkhORb/</a>
167 – 31/8/18	<a href="https://www.instagram.com/p/BnJwPy4njix/">https://www.instagram.com/p/BnJwPy4njix/</a>
168 – 26/7/18	<a href="https://www.instagram.com/p/BltlhDmgtGL/">https://www.instagram.com/p/BltlhDmgtGL/</a>
169 – 24/7/18	<a href="https://www.instagram.com/p/Bll1HTcn7Dz/">https://www.instagram.com/p/Bll1HTcn7Dz/</a>
170 – 23/6/18	<a href="https://www.instagram.com/p/BkXRAoiAb5i/">https://www.instagram.com/p/BkXRAoiAb5i/</a>
171 – 22/5/18	<a href="https://www.instagram.com/p/BjD9FXihYhx/">https://www.instagram.com/p/BjD9FXihYhx/</a>
172 – 9/2/18	<a href="https://www.instagram.com/p/Be_A99blyOn/">https://www.instagram.com/p/Be_A99blyOn/</a>
173 – 9/8/17	<a href="https://www.instagram.com/p/BXjl0RJBYf9/">https://www.instagram.com/p/BXjl0RJBYf9/</a>
174 – 29/10/16	<a href="https://www.instagram.com/p/BMKNP79BTiM/">https://www.instagram.com/p/BMKNP79BTiM/</a>
175 – 1/10/16	<a href="https://www.instagram.com/p/BLAwew_hdA2/">https://www.instagram.com/p/BLAwew_hdA2/</a>
176 – 4/6/14	<a href="https://www.instagram.com/p/ozLGzutM64/">https://www.instagram.com/p/ozLGzutM64/</a>
177 – 17/5/14	<a href="https://www.instagram.com/p/oG9WyfTMil/">https://www.instagram.com/p/oG9WyfTMil/</a>
178 – 7/3/14	<a href="https://www.instagram.com/p/IPXghTysbk/">https://www.instagram.com/p/IPXghTysbk/</a>

179 – 27/2/13	<a href="https://www.instagram.com/p/WPRei2DPmU/">https://www.instagram.com/p/WPRei2DPmU/</a>
180 – 4/8/12	<a href="https://www.instagram.com/p/N6WXrhrAq8/">https://www.instagram.com/p/N6WXrhrAq8/</a>
181 – 2/3/15	<a href="https://www.instagram.com/p/ztzQuFwF2t/">https://www.instagram.com/p/ztzQuFwF2t/</a>
182 - 3/5/15	<a href="https://www.instagram.com/p/2PEUP4pNCs/">https://www.instagram.com/p/2PEUP4pNCs/</a>
183 - 9/7/15	<a href="https://www.instagram.com/p/46l-VKvBdv/">https://www.instagram.com/p/46l-VKvBdv/</a>
184 – 15/7/15	<a href="https://www.instagram.com/p/5KXZ_iPBX0/">https://www.instagram.com/p/5KXZ_iPBX0/</a>
185 – 4/8/15	<a href="https://www.instagram.com/p/59dDozvBZ1/">https://www.instagram.com/p/59dDozvBZ1/</a>
186 - 19/8/15	<a href="https://www.instagram.com/p/6i2N8fPBUK/">https://www.instagram.com/p/6i2N8fPBUK/</a>
187 – 4/9/15	<a href="https://www.instagram.com/p/7OUA_qrOQG/">https://www.instagram.com/p/7OUA_qrOQG/</a>
188 - 29/9/15	<a href="https://www.instagram.com/p/8OVzdmPOgL/">https://www.instagram.com/p/8OVzdmPOgL/</a>
189 - 4/10/15	<a href="https://www.instagram.com/p/8ZRNgOpNDU/">https://www.instagram.com/p/8ZRNgOpNDU/</a>
190 – 9/12/15	<a href="https://www.instagram.com/p/_DxkvjKu5p/">https://www.instagram.com/p/_DxkvjKu5p/</a>
191 – 27/3/16	<a href="https://www.instagram.com/p/BDdd6ZPLgoF/">https://www.instagram.com/p/BDdd6ZPLgoF/</a>
192 – 23/4/16	<a href="https://www.instagram.com/p/BEjUpZargs7/">https://www.instagram.com/p/BEjUpZargs7/</a>
193 – 15/9/16	<a href="https://www.instagram.com/p/BKYjI8gh09U/">https://www.instagram.com/p/BKYjI8gh09U/</a>
194 – 15/9/16	<a href="https://www.instagram.com/p/BKYjhNpBp4-/">https://www.instagram.com/p/BKYjhNpBp4-/</a>
195 – 6/2/18	<a href="https://www.instagram.com/p/Be1dhZaB-bX/">https://www.instagram.com/p/Be1dhZaB-bX/</a>
196 - 31/1/18	<a href="https://www.instagram.com/p/BeoOSzHAWgd/">https://www.instagram.com/p/BeoOSzHAWgd/</a>
197 – 26/2/18	<a href="https://www.instagram.com/p/BfpObbnAFeS/">https://www.instagram.com/p/BfpObbnAFeS/</a>
198 – 2/4/18	<a href="https://www.instagram.com/p/BhFJgbaDffj/">https://www.instagram.com/p/BhFJgbaDffj/</a>
199 – 13/4/18	<a href="https://www.instagram.com/p/Bhf8C59BIUE/">https://www.instagram.com/p/Bhf8C59BIUE/</a>
200 – 7/6/18	<a href="https://www.instagram.com/p/BjtasVPhomV/">https://www.instagram.com/p/BjtasVPhomV/</a>

## Appendix B – Coding tree

