

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

"Dating Apps & Pandemic: The use of dating apps to build, end and maintain romantic relationships during the COVID-19 pandemic"

verfasst von / submitted by

Paula Rodríguez Beltrán

angestrebter akademischer Grad / in partial fulfillment of the requirements for the degree of

Master of Science (MSc)

Wien, 2022 / Vienna, 2022

Studienkennzahl It. Studienblatt / degree programme code as it appears on the student record sheet:

UA 066 550

Masterstudium Communication Science

Studienrichtung It. Studienblatt / degree programme as it appears on

the student record sheet:

Betreut von / Supervisor: Univ.-Prof. Sophie Lecheler

TABLE OF CONTENTS

INTRODUCTION	6
THEORETICAL FRAMEWORK	9
Online relationships	9
Love, intimacy, and social networking	10
Dating apps	11
Breaking up strategies	12
COVID-19 pandemic	14
RESEARCH QUESTIONS	16
METHODOLOGY	21
Online survey	21
Sample and Data Collection	23
RESULTS	26
Preliminary analysis	26
1 Sample-demographic information	26
2 Use of dating apps	27
3 Dating apps motivations	30
RQ1	31
RQ2	32
RQ3	35
DISCUSSION AND CONCLUSION	36
REFERENCES	39
APPENDIX	44
QUESTIONNAIRE	50
ABSTRACT/ABSTRAKT	55

INTRODUCTION

The last two decades have become crucial regarding social media development. An extensive number of users have created the widest social network in history along with new technological advances, defining new communication skills and changing the daily routine for many people in addition to the way they are conducting personal relationships. These new connections across social media have created new perspectives concerning the importance of the terms intimacy and friendship, positively they have also spread new forms of social connection, affection, and identity (Chambers, 2013). Media use and new rituals of connection between individuals have changed our entire conceptualization of intimacy, love, and friendship. People share information about personal experiences, private events, and professional success through digital content such as photos, audio recordings, videos, instant text messages, virtual connections, etc. Therefore, social media have provided a completely new direction away from the old traditional face-to-face interaction, which integrates virtual texting within cyberspace to connect people simultaneously regardless of the physical location. (Kappas & Krämer, 2011).

Considering that the advance in technological communication has enabled a new way to connect the whole of humanity around the world, it could be deduced that long exposure to social media platforms has affected the emotional expressivity, integrity, and personality of people (Xueyan, 2019). In the context of the current pandemic, provoked by COVID-19 and the long-term quarantine that governments were forced to implement, the dependence on social media increased as never seen before. Compared with traditional communication, social media has played a lot of positive roles in information exchange during the COVID-19 crisis (Zhao & Zhou, 2020). It has been reported that during a natural disaster, people have relied on their closest relationships or family for support, advice, hope, and intimacy (Williamson, 2020). Due

to the isolation, social media networks were the main options to generate instant communication through different channels, facilitating mutual information and socialization. In addition, social networking provided better mental support to face the isolation and the stress of the lockdown (Singh at., 2020).

In the following pages, I will present the advantages and disadvantages of using dating applications, which have become very popular in recent years with the aim to find new romantic opportunities and achieve intimate necessities (Finke at., 2012). Dating apps are generally known to facilitate new interactions between users to find long-term romantic partners or friendships within a virtual environment. Over the decades, it became the central subject of discussion related to new forms of dating, romance, and intimacy (Portolan & McAlister, 2021). All the studies reviewed so far in the field of social science have focused on the market of love and the conception of love as entertainment through apps. The present study aims to develop a historical framework about love, intimacy, online dating, and socializing on dating apps in the context of the current pandemic.

According to Portolan and McAlister (2021) using dating apps involves starting multiple chats, consequently, users become quickly frustrated due to the process and the difficulty to determine chemistry without physical meetings. For young people, mediated communication involves them in a global digital culture where virtual space is prioritized over physical affection (Rosewarne, 2016). Generations who have grown in an environment of digital media, the Millennials and Z generation, are allowed to create their own digital personalization of the world. Both were able to adapt to new online and digital environments, integrating the internet into their daily life. In general, technology and digital literacies can affect the way these young generations build trust towards people online and the daily life use of dating apps to look for romance, intimacy, and casual sex (Vitelar, 2019).

Dating apps and mobile devices are shaping the nature of the emotions in online relationships and whether these relationships could end successfully or not. Sending a text message to break up a relationship is considered a new relational dissolution inside modern societies, as well as the act of ghosting becoming particularly popular within dating apps.

The current pandemic has impacted the relationships and mental health of millions of people. COVID-19 has generated fear, insecurities, and social distancing in couples (Banerjee, 2020). Dating apps remained crucial for socializing or searching for new romantic opportunities despite the isolation. Therefore, it is important to understand how people managed to succeed in finding these new opportunities or in which form to end the relationships inside a pandemic context.

The purpose of this study is to fill these gaps in the literature by examining the use of online dating applications to maintain, build or end romance expectations. Specifically, it hopes to better understand how successful or not was the user's expectation to find any kind of intimacy during the current pandemic.

THEORETICAL FRAMEWORK

Online relationships

According to Ben-Ze'ev (2009), it is important to understand how technology and mobile devices are shaping the nature of the emotions in online relationships and whether these relationships involve intense emotions. As the author suggested, the emotional involvement behind online relationships can be compared with the offline environment, along with the belief that online connections provide better alternatives. Therefore, it is crucial to examine the characteristics of cyberspace, referred to as the virtual domain where individuals can allocate an imaginary description of their personalities, preferences, and virtues. Some of these dimensions are not limited by physical parameters, but by psychological content, including emotions. Does cyberspace provide the possibility to release new emotions in online relationships? Is it the reason for the last generations to maintain the connection with others more frequently online than offline? When people depend on online relationships, they do not have any kind of information about their new "online friends", they only know positive information from each of them. Furthermore, a continuous online connection can increase the quality of the relationships, providing an easy exchange of information that could sustain friendly or romantic associations. Therefore, Ben-Ze'ev (2009) classifies online romantic relationships into some relevant features, such as "distance and immediacy, lean and rich communication; anonymity and self-disclosure; sincerity and deception; continuity and discontinuity; marginal physical investment and considerable mental investment." (p.27). Chambers (2013) has also questioned the self-representations formed on social media networks. According to the author, personal profiles or avatars are generally constructed to emulate themselves. Thus, social networks attempt as a form of self-impression, which involves an accurate reflection of the social self.

Love, intimacy, and social networking

The revolution in digital media and contemporary communication technologies are contributing to new forms of entertainment and experiences of intimacy, love, and friendship. Based on the theory of "mediated intimacies" by Chambers (2013), the use of social network sites forces us to reconsider the concept of "intimacy" and 'friendship' inside a networked society. Social communication technology is changing traditional face-face relationships while creating a new way of deeper connections through digital media across barriers of distance and time. Furthermore, the rise of the internet recovered the sense of community, contributing to a reconfiguration of intimacy, friendship, and love. For young people, the new communication technologies facilitate digital global interaction, where virtual space prioritizes physical intimacy. The Internet provides a new, more efficient way to socialize, such as finding love or making new friends. The method has changed but the purpose that moves us into the digital environment remains the same (Rosewarne, 2016). As Chambers (2013) suggested, nowadays success in intimate interactions involves more media platforms, channels, and virtual spaces, which allow individuals to build relationships through more than one medium. It is believed that individuals enjoy freely the choice of intimacy by preparing and acting on their own personal desires about friends, romance, sex, and future partners. In general, the modernity around these new relations emphasizes election and compatibility due to the wider choices available. As the author concludes, this indicates that digital communication has developed the ability to manage complex emotions within a virtual sphere. Moreover, the elements that allow these mediated intimacies are formed by highly personalized channels of communication, public networks, multiple mediated environments, digital literacy knowledge, and technological affordance. On the other hand, Brooks (2020) described a new role of love and intimacy created by the impact of social media and new technologies. Digital communications facilitate emerging adults to express their affections or support on social media platforms, which increase the range of choosing a partner along with a more positive attitude towards online dating.

Ben-Ze'ev (2009) is probably the best-known critic of online romantic relationships. He argues that online romance differs completely from offline meetings because of the less interest in external appearance, being verbal communication the most relevant characteristic in order to build new relationships. Moreover, the author defends that online relationships prevent individuals from relying on physical looks while allowing them to get to know each other without facing the beauty stereotype. The less the users show interest in physical appearance, in online relations, the more they are contributing to know someone new from a personal and intimate approach.

Behind the interest of finding love and romance, the internet connects people with different sexual preferences. Online dating not only provides the freedom to decide between a huge number of possible partners, but also the possibility to discover and explore one's own sexuality (Rosewarne, 2016). The Internet encourages flexibility, diversity, and in particular the opportunity to dispose of several options at the same time in different locations (Ben-Ze'ev, 2009). In conclusion, dating online is generating new rules and manners through the new social networking sites. For this reason, communication technologies are capable of leading complex emotions, recognizing people's erotic needs, and selecting intimacy (Chambers, 2013).

Dating apps

As discussed above, the technological revolution has potentiated the romantic and sexual encounters that social networks and algorithms made possible through smartphones. Another significant aspect of this flexibility and multiple connections is the existence of dating websites and apps that became socially acceptable and very advantageous (Hobbs, Owen, & Gerber, 2017).

The most popular tools to manage these multiple connections are the dating apps for smartphones. The use of dating apps is a very popular activity that allows people to find sex and relationship opportunities. Furthermore, they are encouraged to present themselves, making public their individual identities and characteristics that can be relevant to finding future partners. In addition, online dating differs completely from conventional face-to-face dating in the way that the first contact between future partners will be via mediated communication, such as pictures, audio recordings, and text messages. On the other hand, dating apps notify the user and keep them informed about matches, direct text messages, and new conversations, commonly using geolocation to find possible partners in proximity (Vojt at., 2021).

In modern societies, mobile dating apps became very important in order to satisfy sexual needs. The experiences they provide differ from those offered by dating websites, because of the mobility and tactile processing (Hobbs, Owen, & Gerber, 2017). Subsequently, the excessive use of dating apps increases the sexual network and encounters with partners, which can have a negative impact. According to Portolan & McAlister (2021), dating apps have impacted physical and emotional health. The authors conclude that for young generations the excessive use of dating applications leads to a non-real environment, which creates an idealization of romance, love, intimacy, and friendship. A more detailed account of the use of dating apps is given in the following sections.

Breaking up strategies

Moving on now to consider Finkel, at. (2012) findings, one positive side of dating applications is the immediacy of connectivity that offers access to find people who otherwise would have been not accessible to us. Moreover, the ability to connect because of the mediated communications with future partners and to find a good *match* in first encounters, considering

the effectiveness of the matching algorithms. A negative side effect could be the existence of a huge number of profiles combined with multiple simultaneous face-to-face meetings, a problem that is declining successful romantic outcomes. As the author defends, online dating changed completely the rules to seek new romantic partners, altering the dating scene and the quality of romantic compatibility.

As Albury et al. (2019), mentioned by Portolan & McAlister (2021), suggested another significant aspect of the use of dating apps is the new notion of love, relationships, dating, and break up. Dating apps facilitate the continuity in the love and intimacy process while presenting new opportunities for breaking up strategies.

Other authors such as Sprecher, Zimmerman & Abrahams, (2010) questioned the usefulness of breaking up strategies. As concluded, the dissolution strategy "is one of the most painful human experiences" (p. 66). Many scholars hold the view that it is particularly common between emerging adults or unmarried young people to finish a relationship through mediated communications. According to recent reports (Sprecher at., 2010) on relationship dissolution, three features are required to end a relationship: the cause of the breakup, a number of factors involved in ending the relationship, and the final consequences for the breakup.

Social networking and online dating have modified the dissolution process commonly known in past decades, which includes a transformation in people's affection, emotional cognition, and behaviour. Despite the potential advantages that online dating provides over conventional offline dating; new forms of dissolution opportunities have negatively emerged. While previous generations used more traditional face-to-face communication, emerging adults build and maintain all kinds of relationships only via technology. Subsequently, their relationships are delicate, insecure, and easy to terminate. According to LeFebvre, at. (2019), texting instant messages are the most frequent form of breaking up via technology, which helps

to avoid physical confrontation from their partners. In general terms, this means that there is an emerging tendency for individuals to use the technique of *ghosting* ability or vanishing strategy. Sending a text message to end the communication abruptly can be considered extremely cruel. Ansari (2015) proved that an increasing number of emerging adults prefer to break up with someone by text message or social media instead of physically in person or by phone call.

Consequently, *ghosting* became very popular as a new break-up strategy and can be described as the act of disappearing from all communication channels without giving any kind of explanation to friends, family, or intimate partners (LeFebvre at., 2019).

Koessler, at. (2019) differentiated ghosting from other break-up strategies due to the absence of explanations or declarations to the victim. As a result, the experience could be very painful because of the time involved in the relationship, but there are some online relationships that did not develop a deeper connection which facilitates continuing the online dating activity without harder consequences (Timmermans, Hermans & Opree, 2020).

COVID-19 pandemic

The new coronavirus, SARS-CoV-2 (variation from 2019-nCoV) which causes a severe respiratory disease (Zhao & Zhou, 2020), not only has changed the world's lifestyle but the way everyone with access to technology relies on social media.

In the first two years of the pandemic, when "social distancing" became the main rule to stop the spread of the virus, social media emerged as the new 'psychological necessity' (Singh at., 2020). Due to the existing distance measures from 2020, people now are very reliant on media, either to learn the latest news or to maintain connections and socialize. Media platforms have allowed people to remain connected with family and friends, despite the

quarantine and global warming. The limitations in social physical interactions have developed new forms of facing distress caused after several lockdowns. Recent research has suggested that social interaction, intimacy, and relationships have shown to be crucial social factors during these disasters (Banerjee, 2020), which increases indubitably the use of social media and subsequently the use of dating apps.

Portolan & McAlister (2021) classified two key effects on dating users due to the global pandemic. First, it excluded all opportunities for casual sex, and secondly, created emotional uncertainty. Therefore, people who never used these applications started believing that dating apps can assist to find the perfect romantic atmosphere. As the authors remarked, in a period of several lockdowns the desire to look for new love appeared as a feeling of desperation to handle these arduous times when offline dating during a pandemic became not only a challenge but also a romantic gesture.

RESEARCH QUESTIONS

Based on the literature review and the support of different recent studies about dating apps, the following research questions are developed:

RQ1: Why did people use dating applications during the COVID-19 pandemic to find new romantic opportunities?

Dating apps have become very popular in recent years along with technological development. According to Finkel, Eastwick, Karney, Reis & Sprecher (2012) dating apps sites offer "access", "communication" and "matching". The access allows users to expose and analyze potential romantic partners. Communication refers to computer-mediated communication (CMC) which helps to interact between users before a face-to-face meeting. For instance, matching select potential partners based on data collection and algorithm. Dating apps have many benefits and advantages over conventional meetings, such as unlimited access to potential relationships or the way it facilitates instant communication without being in the same location.

Sumter, Vandenbosch, and Ligtenberg (2017) suggested six motivations for people to use Tinder, the most popular dating app. Authors place an emphasis on "love", "casual sex" "ease of communication", "self-worth validation", "thrill of excitement" and "trendiness". According to the authors, these motivations differed by age, gender, needs, and desires. The findings of their study suggested that love had a stronger motivation for users than casual sex, which means that behind the intentions of using dating apps lie emotional purposes Secondly, the ease of communication was related to more social and outgoing people, feeling more comfortable in online dating. The fourth motivation, self-worth validation, reflected the internal necessity of their physical appearance and how to increase self-satisfaction by using

social media. The last motivations, the thrill of excitement and trendiness, were related to entertainment, which conducted users to use the internet for more casual sex and risky offline meetings. The authors conclude that the reasons behind using these dating apps are the fulfilment of the needs of emerging adults.

Different researchers attributed the popularity of dating apps due to the promotion of casual sex. However, as Timmermans and De Caluwé (2017) suggested in their recent study about tinder, there are at least thirteen different motives for using dating apps such as entertainment, social approval, travelling, sexual experience, ex relationships, socializing, distraction, curiosity, social approval, etc. The study supports the assumption that individuals related more to online dating apps to meet new people, and entertainment, rather than a relationship or casual sex.

The isolation during the lockdowns, the global warming, the spread of the virus, and the social distancing has encouraged people to depend more on dating websites than ever before. Portolan and McAlister (2021) discovered in their recent study called "Jagged Love: Narratives of Romance on Dating Apps during COVID-19" that people increased the use of dating apps in 2020 to mitigate loneliness during the lockdown and the anxiety related to engagement in Australia.

RQ2: How successful was the use of dating apps in maintaining or creating new relationships during the pandemic?

Dating apps have altered the context of meeting new potential partners, even more during the COVID-19 pandemic (Portolan & McAlister, 2021). Many authors have examined whether online dating differs from conventional dating and whether these new encounters promote better romantic results. Previous studies have examined the use of dating apps and the meaning of successful and unsuccessful relationships and which factors were involved in both

resolutions. Chan (2017) points out that these resolutions will depend on two different behaviors: looking for a romantic partner and looking for casual sex. The first one is oriented toward a long-term relationship, while the second is more about sexual desire and without commitment. It is believed that in contemporary societies people take part in multiple kinds of romantic relationships, such as casual encounters, friends with benefits, open relationships, etc., which are also valid for users' expectations. According to Hobbs, Owen & Gerber (2017) in the study "Liquid love? Dating apps, sex, relationships and the digital transformation of intimacy", many of the interviewees evidenced that dating apps facilitate finding sexual partners without future social engagement. In addition, these apps allowed them to establish clear boundaries and communication about current desires. The authors conclude that participants admitted having more relationships and wilder options than older generations.

On the other hand, Finkel, Eastwick, Karney, Reis & Sprecher (2012) established nine steps that determine the final resolution in online dating success (seeking information about dating apps, registration, profile creation, initiating contact, receiving an answer, engaging in mediated communication, meet face-to-face, develop the offline relationship). The outcomes for successful matching are related to a romantic interest behind and the implicit assumption that the more the attraction between individuals, the more the success of a long-term relationship. The paper concludes that long-term romantic relationships are predictable by a set of variables and algorithms, such as the forms of communication between couples, the problems' resolution, the support between each other, and the emotional involvement.

RQ3: Which was the most common way of breaking up amongst dating apps users during the pandemic?

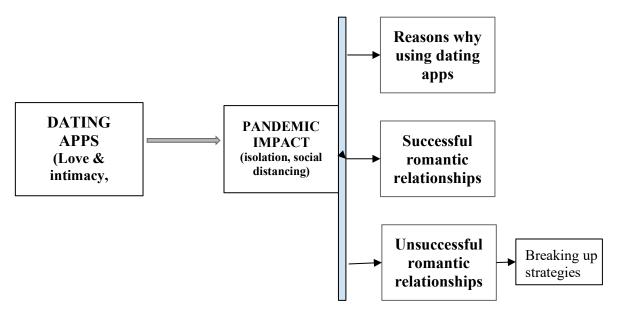
It has commonly been assumed that relational dissolution is a particular moment that most people will experience in a lifetime. Considering Sprecher, Zimmerman, and Abrahams's (2010) research, in the last decade some breakup strategies have appeared along with new technologies' development. Baker (1982) mentioned by Sprecher, Zimmerman, and Abrahams (2010), identified in past research thirty-five different strategies to end relationships divided into four different factors: the withdrawal and avoid contact strategy (more distance, avoidance, and less intimacy), the manipulatory strategy (intentional emotional manipulation using others to facilitate the breakup process), a positive tone strategy (finish the relationship without hurting the feelings and being more empathetic about partner's emotional reaction) and openness strategy (open and clear communication about ending the relationship). LeFebvre et al., (2019) suggested the evidence of a distant/mediated communication strategy, which involves mediated technology for ending the relationships. Dating apps and social media allowed future romantic partners to connect and interact through digital platforms, to create, maintain or end the relationships influenced by technology. Some researchers attribute a new form of dissolution strategy as a consequence of excessive use of media technologies: ghosting. LeFebvre et al., (2019) mentioned by Pancani, Mazzoni, Aureli, and Riva (2021) define ghosting "as the practice of ending a romantic or friendship relationship unilaterally, without giving explanations and ignoring any attempt to communicate by the other person." (p.1988)

Some features of the practice of ghosting correspond to other existing breakup strategies, like the interruption of communication, but make the ghosting strategy more prominent in digital contexts where people can easily block or delete other users with less investment in dating relationships. A very particular digital context for ghosting, which has not

been considered to be a focal point to research in depth, is the use of dating apps. The multiple interactions that allow users to establish control over so many "matches" and for instance, not to compromise or confront, makes ghosting very convenient and practical to end relationships safely, without face-to-face confrontation (Pancani, Mazzoni, Aureli & Riva, 2021). It has been reported that the practice of ghosting in online contexts might be less painful due to less physical contact, but the painful experience increases according to the type of relationship. Ghosting can induce strong emotional and physical reactions, such as anxiety, anger, sadness, loss of appetite, etc. (Timmermans, Hermans & Opree, 2020).

Dating apps afford a very similar variance of breakup strategies, with the prominence of ghosting. But once the relationships drive into a long-term romantic relationship or a short face-to-face meeting, and for any circumstance, a breakup occurs, is it still ghosting the main dissolution strategy? LeFebvre et al., (2019) concluded that relationship dissolution works along with the development of technology and the appearance of very fragile and unstable romantic relationships that often involve actions around ICTs.

METHODOLOGY



Theoretical model

To address the three research questions, an online survey will be developed as a method. The questionnaire will be divided into three sections: reasons why using dating apps, how successful or not was the use of dating apps and the general demographics. The context will remain inside the global pandemic, and the answers will be based on current issues and experiences that people may have found during the social distancing/isolation.

Online survey

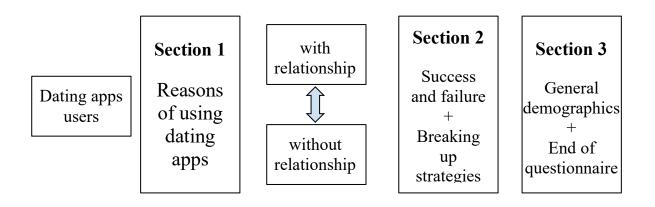


Table 1

The survey design contains three sets of questions which are based on the three research questions and theoretical framework. The questionnaire takes approximately five minutes to complete. The group of participants must be dating app users between the ages of 18 and 40 years old who have been actively using dating applications since the beginning of the COVID-19 pandemic. The reason to limit the age relies on the fact that social media use and age demonstrate evident differences in platform use across generations, particularly between millennials and generation Z (Curtis at., 2019).

The questions and answers followed the steps of some previous studies about dating apps, social media use, and breaking up strategies. In the first section, in order to answer the first research question: Why did people use dating applications during the COVID-19 pandemic to find new romantic opportunities? five questions with their answers were defined based on some studies. Sumter, Vandenbosch & Ligtenberg (2017) identified the main motivations for young adults to use the most popular dating app, Tinder. The final discussion acted as an important reference for this study. The first section will also include some preferences of the online survey that Timmermans & De Caluwé (2017) used to analyze the intentions of using the dating app, Tinder. Finally, for the second and third research questions, <u>how successful</u> was the use of dating apps in maintaining or creating new relationships during the pandemic? Which was the most common way of breaking up through dating apps during the pandemic?, the study of Sprecher, Zimmerman, & Abrahams (2010), provided an accurate definition of the most common breaking up strategies and the following steps for relational dissolutions. In addition, the second section of the questionnaire will divide the participants according to their relationship status. Respondents who are in a relationship will be required to answer if they met before or during the pandemic using dating apps or not. Respondents who are not in a relationship will be able to jump into more accurate questions about dating app satisfaction or breaking up strategies. The last section will provide all the demographic information in order

to find out the age group, gender, education, employment, sexual orientation, and relationship status (see table 1).

Sample and Data Collection

A sample of participants capable of understanding English, between 18 and 40 years old (N=262), preferably single or in a relationship but dating app users, participated in the survey during the month of February 2022. The online questionnaire was developed using the *SoSci Survey platform*, which allowed users to go through <u>www.soscisurvey.de</u>. The survey was shared on different social media channels such as SurveyCircle, LinkedIn, Instagram, Facebook, WhatsApp groups, personal contacts, and the students from the second and third course of audiovisual communication sciences degree at the University Jaume I (Spain) who were able to participate thanks to the assistance of Univ.-Prof Jose Antonio Palao Errando.

As indicated previously, the study was addressed to people from all around Europe, able to understand English and become dating app users. Only responders between 18 and 40 years old were able to participate, in order to find participants from previous generations known as emerging adults. Generations that grew up using new technologies in new forms of socializing, building, and maintaining relationships. Accordingly, inside a sample of 262, where 125 participants were accepted to participate- the users of the dating app- a total of 111 responders indicated age, gender, education, employment status, and sexual orientation. Therefore, 4,5% belonged to the age range: 0-19; 20-25: 27,9%; 26-31: 47,7%; 32-37: 14,4%; 38-40: 5,4%: This shows that the range between 26-31 is the most common for dating users, which can suggest that romantic relationships become more serious during emerging adulthood to find a long-term partner (Sumter, Vandenbosch & Ligtenberg, 2017). In regard to gender, 36% of responders were male, while 61,3% were female. Around 3% did not specify their gender. For sexual orientation, 75,5% proclaimed themselves as heterosexual, while 9,1% were

homosexual and 11,8% bisexual. Another 2,7% did not specify their gender. (see tables 1.1 and 1.2 for age & gender and gender & sexual orientation).

Age & Gender Crosstabulation

				Gen	der		
			Not answered	Male	Female	Other	_ Total
Age (Binned)	14-19	Count	0	2	3	0	5
		% of Total	0,0%	1,8%	2,7%	0,0%	4,5%
	20-25	Count	1	13	17	0	31
		% of Total	0,9%	11,7%	15,3%	0,0%	27,9%
	26-31	Count	1	17	34	1	53
		% of Total	0,9%	15,3%	30,6%	0,9%	47,7%
	32-37	Count	0	7	9	0	16
		% of Total	0,0%	6,3%	8,1%	0,0%	14,4%
	38-43	Count	0	1	5	0	6
		% of Total	0,0%	0,9%	4,5%	0,0%	5,4%
Total		Count	2	40	68	1	111
		% of Total	1,8%	36,0%	61,3%	0,9%	100,0%

Table 1.1 Orientation * Gender Crosstabulation

				Gender					
			Not answered	Male	Female	Other	_ Total		
Orientation	Heterosexual	Count	2	29	52	0	83		
		% of Total	1,8%	26,4%	47,3%	0,0%	75,5%		
	Homosexual	Count	0	6	3	1	10		
		% of Total	0,0%	5,5%	2,7%	0,9%	9,1%		
	Bisexual	Count	0	2	11	0	13		
		% of Total	0,0%	1,8%	10,0%	0,0%	11,8%		
	Other	Count	0	1	2	0	3		
		% of Total	0,0%	0,9%	1,8%	0,0%	2,7%		
	NA	Count	0	1	0	0	1		
		% of Total	0,0%	0,9%	0,0%	0,0%	0,9%		
Total		Count	2	39	68	1	110		
		% of Total	1,8%	35,5%	61,8%	0,9%	100,0%		

Table 1.2

Regarding the level of education, participants emerged as follows: High school: 13,5% - Bachelor's degree; 47,7% - Master's degree: 35,1% - PhD or higher: 2,7%. For instance, 52,3% were full-time employed, 11,7% in part-time, 22,5% students, 9% unemployed and around 4,2% chose not to answer. (see table 1.3)

Education * Employment Crosstabulation

				Employment					
			Not answered	Unemployed	Part-Time	Full-time	Student	NА	_ Total
Education	High school	Count	2	3	2	3	5	0	15
		% of Total	1,8%	2,7%	1,8%	2,7%	4,5%	0,0%	13,5%
	Bachelor's degree	Count	1	4	10	20	16	2	53
		% of Total	0,9%	3,6%	9,0%	18,0%	14,4%	1,8%	47,7%
	Master's degree	Count	0	3	1	31	4	0	39
		% of Total	0,0%	2,7%	0,9%	27,9%	3,6%	0,0%	35,1%
	PhD or higher	Count	0	0	0	3	0	0	3
		% of Total	0,0%	0,0%	0,0%	2,7%	0,0%	0,0%	2,7%
	NA	Count	0	0	0	1	0	0	1
		% of Total	0,0%	0,0%	0,0%	0,9%	0,0%	0,0%	0,9%
Total		Count	3	10	13	58	25	2	111
		% of Total	2,7%	9,0%	11,7%	52,3%	22,5%	1,8%	100,0%

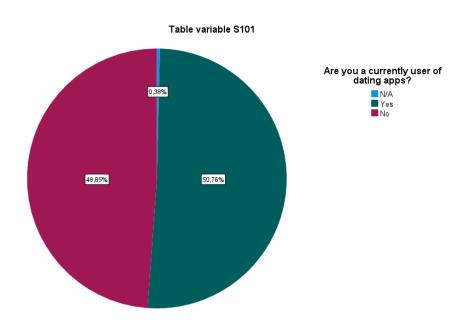
Table 1.3

RESULTS

Preliminary analysis

1. Sample-demographic information

As described in the previous section, responders indicated their age, gender, education, employment status, and sexual orientation. The sampling method was randomly assigned (N=262), with around 125 valid participants who finished the questionnaire. However, 14 responders preferred not to provide demographic information. Dating app users had only access to the online survey by answering yes to the first question, "*Are you a current user of dating apps?*" As the following graphic describes, from 262 participants, 50, 76% answered "yes" as current dating apps users (N=133), while 48,85% (N=128) selected "No" and could not continue participating.



2. Use of dating apps

Participants indicated which dating apps were the most popular among all demographic groups. The multiple response view with a dichotomy group tabulated at value 2 (N=189) showed that Tinder was the most used dating app for responders during the current pandemic with a range of 85,5%. In second place, Bumble with 33,1%, and third was Badoo with 10,5%. (see table 2.1).

The most popular dating apps among users

		Resp	ponses	
	_	И	Percent	Percent of Cases
More popular dating appsª	Tinder	106	56,1%	85,5%
	Badoo	13	6,9%	10,5%
	Lovoo	10	5,3%	8,1%
	Mamba	1	0,5%	0,8%
	Bumble	41	21,7%	33,1%
	Mydates	3	1,6%	2,4%
	Who	1	0,5%	0,8%
	NA	14	7,4%	11,3%
Total		189	100,0%	152,4%

a. Dichotomy group tabulated at value 2.

Table 2.1

Moreover, the comparison between the list of the most popular dating apps and the groups of age and gender (crosstable of multiple answers) showed that Tinder was the most selected dating apps for participants between 32-37 years old (N= 16) with 93,3% of valid percent, followed by participants between 20-25 (N= 31) with 87,1% and 83% for groups between 26-31 (N= 53). Followed by Bumble with 40% of the answers for the 32-37 group, 39,6% for 26-31, and 32,3% for 20-25. (see table 2.2)

	Age (Dimica)										
		14-19		20-25	26-31		3	32-37		38-43	
_		Column Valid N		Column Valid N		Column Valid N		Column Valid N		Column Valid N	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Tinder	5	100,0%	27	87,1%	44	83,0%	14	93,3%	4	66,7%	94
Badoo	0	0,0%	3	9,7%	6	11,3%	1	6,7%	1	16,7%	11
Lovoo	0	0,0%	1	3,2%	5	9,4%	2	13,3%	1	16,7%	9
Mamba	0	0,0%	0	0,0%	0	0,0%	1	6,7%	0	0,0%	1
Bumble	0	0,0%	10	32,3%	21	39,6%	6	40,0%	1	16,7%	38
Mydates	0	0,0%	0	0,0%	2	3,8%	0	0,0%	1	16,7%	3
Who	0	0,0%	0	0,0%	1	1,9%	0	0,0%	0	0,0%	1
NA	0	0,0%	4	12,9%	5	9,4%	2	13,3%	1	16,7%	12
Total	5	100,0%	31	100,0%	53	100,0%	15	100,0%	6	100,0%	110

Age (Binned)

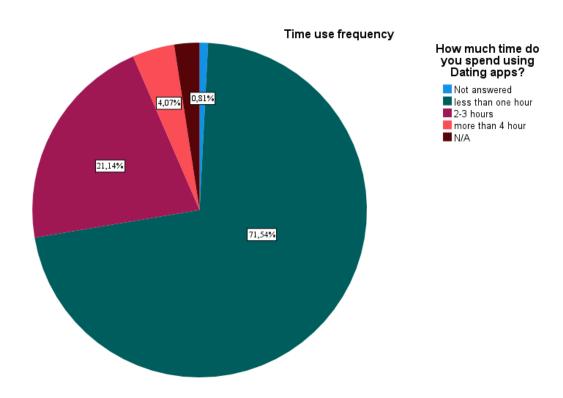
Table 2.2

Concerning gender, Tinder was the most preferred dating app for female participants (N=67) with 89,6% within the different options as well as for males (N=40) with 80%. Followed by Bumble with a range of 37,3% for females and 27,5% for males. (See table 2.3)

					Gender			
	•		Male		Female	Total		
			Column Valid N		Column Valid N		Column Valid N	
		Count	%	Count	%	Count	%	
The most popular dating apps	Tinder	32	80,0%	60	89,6%	92	86,0%	
	Badoo	5	12,5%	6	9,0%	11	10,3%	
	Lovoo	7	17,5%	2 3,0%		9	8,4%	
	Mamba	1	2,5%	0	0 0,0%		0,9%	
	Bumble	11	27,5%	25	37,3%	36	33,6%	
	Mydates	2	5,0%	1	1,5%	3	2,8%	
	Who	1	2,5%	0	0,0%	1	0,9%	
	NA	6	15,0%	5	7,5%	11	10,3%	
	Total	40	100,0%	67	100,0%	107	100,0%	

Table 2.3

Regarding the time use frequency, 71,5% of the participants indicated that they used the dating apps less than one hour per day on a daily basis, 21,1% invested two-three hours per day, while 4.1% more than four hours. Around 3% preferred not to specify. (See graphic below). On the other hand, a comparison between gender, employment status, and time use frequency revealed that males (N=37) who work in a full-time job used dating apps for less than one hour (51,9%) during the pandemic, while females (N=64) 61,2%. (See Appendix)



3. Dating apps motivations

Participants were asked why they decided to use dating apps during the pandemic (S105). A multiple response view (N=390) was created to obtain a comprehensive set of dating apps motive items. These responses were stabilized as follows: 1: To find a romantic relationship, 2: To find someone to have sex with, 3: To make new friends, 4: To have a "one-night stand", 5: To find someone to talk, 6: To pass time, 7: To be able to socialize, 8: Communication is more easily online than offline, 9: To get over a breakup, and 10: N/A. 65,5% of the cases selected to use dating apps for finding a romantic relationship during the pandemic. Followed by "to find someone to have sex with" (47,1%), "to pass time" (45,4%), and "to be able to socialize" (34,5%) as the next motives items. (see table 3)

S105_ Reasons to use Dating Apps

		Responses		
	_	И	Percent	Percent of Cases
Why did you use dating apps?a	Find_romantic_relationship	78	20,0%	65,5%
	Find_Have_Sex	56	14,4%	47,1%
	Make_new_friends	38	9,7%	31,9%
	One_night_stand	28	7,2%	23,5%
	Find_someone_talk	39	10,0%	32,8%
	Pass_time	54	13,8%	45,4%
	Socialize	41	10,5%	34,5%
	Easy_communication	20	5,1%	16,8%
	Over_breakup	35	9,0%	29,4%
	No_answer	1	0,3%	0,8%
Total		390	100,0%	327,7%

a. Dichotomy group tabulated at value 2.

Table 3

4. RQ1: Why did people use dating applications during the COVID-19 pandemic to find new romantic opportunities?

The previous section has shown a preliminary analysis of the data set in order to summarize the features included in the use of dating apps (demographics, time use frequency, and dating apps motives). To answer the first research question, descriptive statistics (see appendix) were run in order to get the overall range of the participants that increased the use of dating apps during the pandemic by responding to the question" did you increase the use of dating apps during the pandemic? (S104)". At least 67,2% (N= 122) answered "yes", 51% were females between 26-31 years old (N=26), while 37,5% were males (N=18) between 20-31 years old. Furthermore, to analyse the average between participants that increased the use of dating apps and the reasons for doing it, a crosstab was formulated (see appendix). The response rate showed that the most popular choices as a reason to increase the use of dating apps were "to find a romantic relationship" (N=73, 76,7%), "to pass the time" (N=52, 67,3%), "to find someone to have sex with" (N=51, 70,6%), "to find someone to talk" (N=38, 73,7%) and "to get over a breakup" (N=32, 81,3%). These motivations are closely related to the limitations that the pandemic has imposed regarding social interactions, intimacy, and the possibility to find long-term relationships (to find a romantic relationship & find someone to have sex with). Secondly, regarding the motives "to pass time" and "to find someone to talk to", is reflected in the urge to socialize due to the isolation and social distancing.

5. RQ2: How successful was the use of dating apps in maintaining or creating new relationships during the pandemic?

To answer the next research questions, the online survey divided the participants into two different groups by answering the question "are you in a relationship of any kind (opened relationship, friends with benefit, casual sex, something formal, etc)?" (S201). Besides, responders were classified based on being in a relationship or not. (See figure 1).

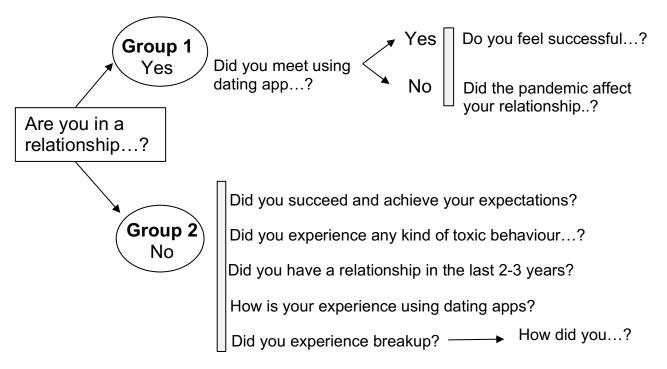


Figure 1

Before exploring the results of both groups, the descriptive statistics showed that 60% of participants (N=75) answered not to be in a relationship, while 32,8% (N=41) proclaimed being in a relationship.

Group 1, people in a relationship (N=41) who met during the pandemic using the dating apps (N=21, 51,2%) felt successful on an average of 85,7% (N=18) (see Appendix). In contrast, people who did not meet using dating apps during the pandemic but still they were being in a

relationship (N=19, 46,3%) mostly were not affected by the pandemic (36%), followed by the ones who had a "bad coexistence during the lockdowns"(24%). (See table 4)

S203 How pandemic affected

		Res	ponses	
	_	И	Percent	Percent of Cases
Did the pandemic affect your	Lockdown_separate_us	5	20,0%	25,0%
relation ^a	Poor_communication	2	8,0%	10,0%
	Hard_coexistence	6	24,0%	30,0%
	Financial_crisis	3	12,0%	15,0%
	Nothing_affected	9	36,0%	45,0%
Total		25	100,0%	125,0%

a. Dichotomy group tabulated at value 2.

Table 4

Group 2, people without a relationship (N=75), were asked about their personal experience using dating apps during the pandemic (how is your experience using dating apps?, S206) through a Likert Scale (1=strongly disagree till 5= strongly agree). The SPSS results showed that "it is very convenient during the pandemic" and "less feeling of loneliness" they were able to score a mean of 3,85 and 3,25 respectively. Followed by a mean of 3,16 and 2,53 in "I feel very comfortable" and "easy to build intimacy" (see table 4.1). The evidence concludes that for single people during the pandemic, the experience of using apps was very convenient for socializing and for dealing with the feeling of loneliness due to the several lockdowns and isolations.

Descriptive Statistics

	И	Minimum	Maximum	Mean	Std. Deviation
S206_Comfortable	73	1	5	3,16	1,028
S206_convenient	73	2	5	3,85	,811
S206_Less_Loneliness	73	1	5	3,25	1,115
S206_easy_intimacy	73	1	5	2,53	1,107
Valid N (listwise)	73				

Table 4.1

On average, based on SPSS descriptives, 61,1% of the participants in group 2 (N=72) did not succeed in using dating apps to achieve their personal purposes, which were previously and

S210_Did you succeed using the dating apps?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not answered	1	,8	1,4	1,4
	Yes	23	18,4	31,9	33,3
	No	44	35,2	61,1	94,4
	NA	4	3,2	5,6	100,0
	Total	72	57,6	100,0	
Missing	System	53	42,4		
Total		125	100,0		

Table 4.2

Finally, comparing the level of success between both groups- variables S204, group 1, and S210, group 2- and running a one-sample T-Test, shows a significant difference in the feeling of success t(71)=9,725, p=<,001 for group 2 and t(20)=14,606, p=<,001 for group 1. It concludes that Group 2 felt less successful on average than group 1 (table in appendix).

6. RQ3: Which was the most common way of breaking up amongst dating apps users during the pandemic?

To answer the last research questions (all tables are found in the Appendix), participants in Group 2 (N=75) were asked whether they experienced a breakup using a dating app during the pandemic. Only 31,9% (N=23) answered "yes", while 68,1% (N=49) confirmed not having one during the pandemic.

The participants who experienced a breakup were directed to answer the question "how did you break up?" and select some of the most popular breakup strategies previously described in the literature review. The multiple response view with a dichotomy group tabulated at value 2 (N=23) showed that the average percentage was equal for "I found a time to talk face to face to end the relationship", "I wrote a text message to end the relationship", "I ghosted/blocked him/her without giving explanations" with 23,8% of the cases. The most selected response was "I ended the relationship on the phone" with 28,6%. For females, ghosting and face-to-face breakup were the most common responses, while for males, writing a text message to end the relationship was the main breakup strategy.

For instance, 65,8% of participants in group 2 specified at the same time that they experienced toxic behaviour while using dating apps such as misleading intentions, dishonesty, stalking, sexual harassment, ghosting, etc. Mostly were more females than males, which experienced toxic behaviour as dating app users.

DISCUSSION AND CONCLUSION

This study examines the transformation of social interaction as a result of several lockdowns and social distancing due to the current pandemic. To my knowledge, this could be the first study to analyse the new social behaviour in the use of dating apps to find new social, romantic, and friendship opportunities during the last two years of the pandemic.

The findings during the data collection and the subsequent analysis of the use of dating apps suggested that these apps increased notably the practice as an alternative to physical meetings, commitment, and loneliness. With regard to the first aim of the study (*RQ1: Why did people use dating applications during the COVID-19 pandemic to find new romantic opportunities?*), the nine motives to use dating apps during the pandemic were closely related to the government imposed limitations. Emerging adults (20-31 years old) affirmed to increase the use of dating apps in order to find new romantic opportunities or to pass the time. The first motivation factor reflected the casual necessity to find long-term committed relationships, including sex and love, very limited factors due to a global pandemic. (Sumter, Vandenbosch & Ligtenberg, 2017).

Secondly, regarding the next research question (RQ2: How successful was the use of dating apps in maintaining or creating new relationships during the pandemic?) participants were divided into two groups. Dating apps users that are involved in a relationship (group 1) and dating apps users without a relationship but actively in dating apps (group 2). The findings suggested that participants in group 1 (32,8%) proclaimed success in finding a new relationship of any kind using these apps during the pandemic, in contrast with participants from group 2 (without relationship) that indicated not to success in the use of dating apps to achieve their personal expectations related to these apps. In addition, their experience using these apps was very convenient during the pandemic to socialize and deal with the feeling of loneliness. There

is some evidence to suggest that dating apps have facilitated social interactions and sexual encounters despite the pandemic, regardless of the less feeling of success for single people.

Concerning the last research question (RQ3: Which was the most common way of breaking up amongst dating apps users during the pandemic?). The study focuses on the most popular breakup strategies to end relationships. Participants were free to select some of the strategies and asked whether they experienced similar behaviour. Surprisingly, the findings showed that for females, ghosting and face-to-face breakup are the most common acts of ending relationships, on the contrary males prefer to write a text message to abruptly finish the communication. Despite the small number of participants that experienced a relational dissolution through dating apps, these results suggest that, in fact, ghosting and writing a message to end a relationship have become the most common breakup strategy in the last few years. As LeFebvre et al., (2019) mentioned, dating apps have a very similar variance of breakup strategies, with the prominence of ghosting. A possible area of future research would be to investigate why ghosting is increasing in popularity along with the rise of mass media technology and the appearance of very fragile and inconstant romantic relationships.

When it comes to the limitation, this study has a few points to discuss. First, the number of participants in this study was very limited. Even though it was aimed to have at least 200 dating app users, only 125 participants were able to continue answering the online survey. Despite the online survey being shared on all social media channels trying to collect the highest number of participants possible, the communication science students from university Jaime I in Spain contributed to achieving a minimum number of valid cases.

Another limitation of our study is the long period of data collection. It was prolonged for a month due to the Omicron variance and the lack of availability of people to admit they are using a dating app to find any kind of relationship. This long period of collecting data could

have changed the attitude of people towards the use of dating apps and the several circumstances they must be found during the current pandemic and the Ukrainian conflict.

Despite that, this study stimulates new areas of investigation. The dating apps scene is developing into a huge variety of individual needs, with new apps released weekly. It will be very interesting to analyse and compare how the old and the new generations may be adapted to the romantic scenario together with new forms of digital interaction. A reasonable approach to tackle this issue could be to find differences between generations.

Considering that the advance in technological communication has enabled a new way to connect people around the world, it could be deduced that this long exposure to social media might affect the emotional expressivity, identity, and personality of people (Xueyan, 2019). Social media use and age demonstrate evident differences in platform use across generations, particularly between millennials and generation Z. Millennials have adopted social media use better than older generations (baby boomers and generation X) (Curtis et al., 2019). On the other hand, Z was born directly into a social media culture, the new digital natives, which seems to be the quickest in searching for relevant information.

Future research should consider the emotional impact of the use of dating apps between both generations and the influence of digital communication on mental health. A deeper understanding of human interaction, technological development, and social cooperation will provide relevant information in the field of social sciences.

REFERENCES

- Ansari, A. (2015). *Modern Romance*. New York. Penguin Books.
- Albury, K. (2019). Safety, risk, and wellbeing on dating apps: final report. *Safety, Risk, and Wellbeing on Digital Dating Apps*. DOI: HTTPS://doi.org/10.25916/5dd324c1b33bb.
- Banerjee D, Rao T S. (2020). Sexuality, sexual wellbeing, and intimacy during COVID-19 pandemic: An advocacy perspective. *Indian J. Psychiatry*. *62*, 418-26.
- Becerra, A. (2018). Generation Z: social media, Influencers, and Brand Loyalty in Entertainment. ProQuest Dissertations Publishing.
- Ben-Ze'ev, Aaron (2004). Love Online: Emotions on the Internet. Cambridge University Press.
- Brooks, A. (2020) *Love and intimacy in <u>contemporary society</u>. Love in an international context.*New York. Routledge.
- Chan, L. S. (2017). Who uses dating apps? Exploring the relationships among trust, sensation-seeking, smartphone use, and the intent to use dating apps based on the Integrative Model.

 Computers in human behavior, 72, 246-258
- Chambers, D. (2013). Social Media and Personal Relationships: Online Intimacies and Networked Friendship. United Kingdom: Palgrave Macmillan.
- Curtis, B. L., Ashford, R. D., Katherine M. I., Ryan-Pettes, S. R. (2019). Comparison of Smartphone Ownership, Social Media Use, and Willingness to Use Digital Interventions Between Generation Z and Millennials in the Treatment of Substance Use: Cross-Sectional Questionnaire Study. *JMIR Publications Inc. Journal of medical Internet research*, 21 (4), e13050-e13050.
- Fincham, F. D., & Cui, M. (2011). Emerging adulthood and romantic relationships: An introduction. *New York, NY: Cambridge University Press*, 3-14.

- Finkel, E., Eastwick, P.W., Karney, B.R., Reis, H.T., & Sprecher, S. (2012). Online Dating: A Critical Analysis from the Perspective of Psychological Science. *Psychological Science in the Public Interest*, 13, 3–66.
- Gershon, I. (2010) The Breakup 2.0: Disconnecting over New Media. Cornell University Press.
- Hobbs, M., Owen, S., & Gerber, L. (2017). Liquid love? Dating apps, sex, relationships, and the digital transformation of intimacy. *Journal of sociology (Melbourne, Vic.)*, 53 (2), 271-284
- Kappas, A. & Krämer, N.C. (2011). Face-to-Face Communication over the Internet: Emotions in a Web of Culture, Language, and Technology. Cambridge University Press.
- Koessler, R., Kohut, T., Campbell, L., Vazire, S., Chopik, W. (2019). When Your Boo Becomes a Ghost: The Association Between Breakup Strategy and Breakup Role in Experiences of Relationship Dissolution. *Collabra. Psychology, 5 (1)*. DOI: http://dx.doi.org/10.1525/collabra.230
- LeFebvre, L.E., Allen, M., Rasner R. D., Garstad, S., Wilms, A., Parrish, C., (2019). Ghosting in Emerging Adults' Romantic Relationships: The Digital Dissolution Disappearance Strategy. *Imagination, Cognition, and Personality: Consciousness in Theory, Research, and Clinical Practice*, 39(2), 125–150.
- LeFebvre, L., Allen, M., Rasner, R. D., Garstad, S., Wilms, A., & Parrish, C. (2019). Ghosting in Emerging Adults' Romantic Relationships: The Digital Dissolution Disappearance Strategy. *Imagination, cognition, and personality, 39 (2),* 125-150.
- Miguel, C. (2016). Visual Intimacy on Social Media: From Selfies to the Co-Construction of Intimacies Through Shared Pictures. *SAGE Publications. Social media* + *society, 2 (2),* p.205630511664170.

- Nan, Z. & Guangyu, Z. (2020). Social Media Use and Mental Health during the COVID-19

 Pandemic: Moderator Role of Disaster Stressor and Mediator Role of Negative effect.

 Applied psychology: Health and well-being, 12, 1019-1038. DOI:10.1111/aphw.12226.
- Ogata, M., Guest, C., Feldmeier, M. L., Lim, Y. J., Nabieva, G., Pataki, C., & Szeftel, R. (2020). Social media use and impact on youth during the COVID-19 pandemic: A novel electronic questionnaire to engage youth about social media use. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59 (10), 255-256.
- Pancani, L., Mazzoni, D., Aureli, N., & Riva, P. (2021). Ghosting and orbiting: An analysis of victims' experiences. *Journal of social and personal relationships*, 38 (7), 1987-2007.
- Portolan, L. & McAlister, J. (2021). Jagged Love: Narratives of romance on dating apps during COVID-19. *Sexuality & Culture*, 1-19.
- Rosewarne, L. (2016). *Intimacy on the Internet: Media Representations of Online Connections*. London: Routledge.
- Ruth, N. B., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Yuliya Komarova, Y. L., & Solnet, D. (2013). Understanding Generation Y and their use of social media: a review and research agenda. *Emerald. Journal of service management*, 24 (3), 245-267.
- Sengupta, D. (2020). The life of Z. Understanding the digital pre-teen and adolescent generation. SAGE Publications.
- Singh, S., Dixit, A., Joshi, G., & Elsevier B.V. (2020). Is compulsive social media use amid COVID-19 pandemic addictive behavior or coping mechanism? *Asian journal of psychiatry*, 54, 102290-102290.

- Sprecher, S., Zimmerman, C., & Abrahams, E. M. (2010). Choosing compassionate strategies to end a relationship: Effects of compassionate love for a partner and the reason for the breakup. *Social psychology, 41 (2),* 66-7.
- 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.
- Sutcliffe, A. G., Binder, J. F., & Robin, D. (2018). Activity in social media and intimacy in social relationships. *I.M. Elsevier BV. Computers in human behavior*, 85, 227-235.
- Timmermans, E. & De Caluwé, E. (2017). To Tinder or not to Tinder, that's the question: An individual differences perspective to Tinder use and motives. *Personality and individual differences*, 110, 74-79.
- Timmermans E., Hermans, A. M., & Opree, S.J (2020). Gone with the wind: Exploring mobile daters' ghosting experiences. *Journal of social and personal relationships*, 1–19. DOI: 10.1177/0265407520970287
- Van den Bergh, J. & Pallini, K. (2018, July 4). Who's up Next? A cross-generational view on marketing and branding. *ISSUU*. https://issuu.com/insitesconsulting/docs/who_s_up_nxt_single_pages
- Van den Bergh, Behrer, M. (2016). *How cool brands stay hot. Branding to Generation Y and Z.* London; Philadelphia; Kogan Page.
- Vitelar, A. (2019). Like Me: Generation Z and the Use of Social Media for Personal Branding.

 Management Dynamics in the Knowledge Economy. 7 (2), 257-268. DOI 10.25019/MDKE/7.2.07.

- Xueyan Li (2019). Exploration of generation Z using social media from an emotional perspective. *ProQuest Dissertations Publishing.* (27668561) University of Arizona.
- Zhao, N. & Zhou, G. (2020). Social Media Use and Mental Health during the COVID-19 Pandemic: Moderator Role of Disaster Stressor and Mediator Role of Negative effect.

 England: Wiley Subscription Services, Inc. Applied psychology: health and well-being, 12 (4), 1019-1038.

APPENDIX

Preliminary analysis: Use of dating apps

					Gen	der			
	_				Ma	ıle			
	_				S103_Time	frequency			
	_	less	than one hour	2	-3 hours	mor	e than 4 hour		Total
	_		Column Valid N		Column Valid N		Column Valid N		Column Valid N
		Count	%	Count	%	Count	%	Count	%
Employment	Unemployed	3	11,1%	0	0,0%	1	25,0%	4	10,8%
	Part-Time	2	7,4%	1	16,7%	0	0,0%	3	8,1%
	Full-time	14	51,9%	4	66,7%	2	50,0%	20	54,1%
	Student	8	29,6%	1	16,7%	1	25,0%	10	27,0%
	Total	27	100,0%	6	100,0%	4	100,0%	37	100,0%

	_				Gen	der						
	_				Fem	ale						
	_		S103_Time_frequency									
	-	less	than one hour	2	2-3 hours	mor	e than 4 hour		Total			
	-		Column Valid N		Column Valid N		Column Valid N		Column Valid N			
		Count	%	Count	%	Count	%	Count	%			
Employment	Unemployed	4	8,2%	1	6,7%	0	0,0%	5	7,8%			
	Part-Time	7	14,3%	2	13,3%	0	0,0%	9	14,1%			
	Full-time	30	61,2%	7	46,7%	0	0,0%	37	57,8%			
	Student	8	16,3%	5	33,3%	0	0,0%	13	20,3%			
	Total	49	100,0%	15	100,0%	0	0,0%	64	100,0%			

S104_Increasing_use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not answered	4	3,2	3,3	3,3
	Yes	82	65,6	67,2	70,5
	No	33	26,4	27,0	97,5
	N/A	3	2,4	2,5	100,0
	Total	122	97,6	100,0	
Missing	System	3	2,4		
Total		125	100,0		

Tables Research Question 1

						(Jender						
]	emale						
						Age	(Binned)						
			14-19		20-25		26-31		32-37		38-43		Total
		Count	Row Valid N %										
S104_Increasing_use	Yes	3	5,9%	11	21,6%	26	51,0%	6	11,8%	5	9,8%	51	100,0%
	No	0	0,0%	6	46,2%	5	38,5%	2	15,4%	0	0,0%	13	100,0%

						(Gender						
							Male						
						Age	(Binned)						
			14-19		20-25		26-31		32-37		38-43		Total
		Count	Row Valid N %										
S104_Increasing_use	Yes	2	8,3%	9	37,5%	9	37,5%	4	16,7%	0	0,0%	24	100,0%
	No	0	0,0%	4	30,8%	6	46,2%	2	15,4%	1	7,7%	13	100,0%

				Did you incr	ease the use of DA?		
	_		Yes		No		Total
	-	Count	Row Valid N %	Count	Row Valid N %	Count	Row Valid N %
Why did you use dating apps	Easy_communication	15	75,0%	5	25,0%	20	100,0%
during the pandemic?	Find_Have_Sex	36	70,6%	15	29,4%	51	100,0%
	Find_romantic_relationship	56	76,7%	17	23,3%	73	100,0%
	Find_someone_talk	28	73,7%	10	26,3%	38	100,0%
	Make_new_friends	25	67,6%	12	32,4%	37	100,0%
	One_night_stand	18	66,7%	9	33,3%	27	100,0%
	Over_breakup	26	81,3%	6	18,8%	32	100,0%
	Pass_time	35	67,3%	17	32,7%	52	100,0%
	Socialize	26	65,0%	14	35,0%	40	100,0%
	Total	80	72,1%	31	27,9%	111	100,0%

Tables Research Question 2

\$201_Are you in a relationship of any kind?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	32,8	35,3	35,3
	No	75	60,0	64,7	100,0
	Total	116	92,8	100,0	
Missing	System	9	7,2		
Total		125	100,0		

\$204_Did you feel succesful using dating apps?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	14,4	85,7	85,7
	No	3	2,4	14,3	100,0
	Total	21	16,8	100,0	
Missing	System	104	83,2		
Total		125	100,0		

\$201_Are you in a relationship of any kind?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	32,8	35,3	35,3
	No	75	60,0	64,7	100,0
	Total	116	92,8	100,0	
Missing	System	9	7,2		
Total		125	100,0		

 $S202_Did$ you meet using dating apps?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not answered	1	,8	2,4	2,4
	Yes	21	16,8	51,2	53,7
	No	19	15,2	46,3	100,0
	Total	41	32,8	100,0	
Missing	System	84	67,2		
Total		125	100,0		

One-sample T-Test

One-Sample Statistics

	И	${ m M}$ ean	Std. Deviation	Std. Error Mean
S210_succeed_B	72	1,58	1,381	,163
S204_succesful_A_YES	21	1,14	,359	,078

One-Sample Test

		Test $Value = 0$								
-			Signif	icance		95% Confidenc Diffe	e Interval of the rence			
	t	df	One-Sided p	Two-Sided p	Mean Difference	Lower	Upper			
S210_succeed_B	9,725	71	<,001	<,001	1,583	1,26	1,91			
S204_succesful_A_YES	14,606	20	<,001	<,001	1,143	,98	1,31			

One-Sample Effect Sizes

				95% Confid	ence Interval
		Standardizer ^a	Point Estimate	Lower	Upper
S210_succeed_B	Cohen's d	1,381	1,146	,846	1,442
	Hedges' correction	1,396	1,134	,837	1,426
S204_succesful_A_YES	Cohen's d	,359	3,187	2,111	4,250
	Hedges' correction	,373	3,066	2,031	4,088

The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation.

Hedges' correction uses the sample standard deviation, plus a correction factor.

Tables Research Question 3

Break Up_Strategy Frequencies

		Responses		
	-	И	Percent	Percent of Cases
How did you break up?ª	S209_Face_to_face	5	23,8%	26,3%
	S209_By_phone	6	28,6%	31,6%
	S209_Text_message	5	23,8%	26,3%
	S209_Ghosting	5	23,8%	26,3%
Total		21	100,0%	110,5%

^{a.} Dichotomy group tabulated at value 2.

\$208_Did you experience a breakup?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	18,4	31,9	31,9
	No	49	39,2	68,1	100,0
	Total	72	57,6	100,0	
Missing	System	53	42,4		
Total		125	100,0		

					Gender		
	•	Male		Female		Total	
	•	Count	Row Valid N %	Count	Row Valid N %	Count	Row Valid N %
How did you break up?	S209_Face_to_face	0	0,0%	5	100,0%	5	100,0%
	S209_By_phone	2	33,3%	4	66,7%	6	100,0%
	S209_Text_message	3	60,0%	2	40,0%	5	100,0%
	S209_Ghosting	0	0,0%	5	100,0%	5	100,0%
	Total	5	26,3%	14	73,7%	19	100,0%

S207_Did you experience toxic behaviour?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I felt misleading intentions, dishonesty, stalking, sexual harassment, ghosting, etc.	48	38,4	65,8	65,8
	No	25	20,0	34,2	100,0
	Total	73	58,4	100,0	
Missing	System	52	41,6		
Total		125	100,0		

QUESTIONNAIRE

SECTION 1: USE OF DATING APPS DURING PANDEMIC.

RQ1: Why did people use dating applications during the COVID-19 pandemic to find new

romantic opportunities?
S101- Are you a current user of dating apps?
-Yes
-No
(If the answer is "no" they will leave the questionnaire)
S102- Which social dating apps do you have, or you currently use? You can select multiple options.
- Tinder
- Badoo
- LOVOO
Mamba
- Bumble
- MyDates
- Who
- N/A
S103- How much time do you spend using dating apps per day?
- less than one hour
- 2-3 hours
- more than 4 hour
-N/A
S104- Did you increase the use of dating apps during the pandemic?
-Yes -No -N/A

S105- Why do you use dating apps? You can select multiple options.

- To find a romantic relationship

- To find someone to have sex with

- To make new friends

- To have a "one-night stand"

- To find someone to talk

- To pass the time

-To be able to socialize

-Communication is more easily online than offline

- To get over a breakup

-N/A

SECTION 2: SUCCESS AND FAILURE

RQ2: How successful was the use of dating apps in maintaining or creating new relationships

during the pandemic? / RQ3: Which was the most common way of breaking up through dating

apps during the pandemic?

S201- Are you in a relationship of any kind (opened relationship, friends with benefit, casual

sex, something formal, etc)?

-YES: JUMP TO S202/A

-NO: JUMP TO S205/B

-N/A

S202/A- Did you meet using a dating app during the pandemic?

-YES: JUMP TO S204/A/YES

-NO: JUMP TO S203/A/NO

-N/A

51

S203/A/NO- How do you think the pandemic affected your relationship? You can select
multiple options.
Lookdown congreted us
-Lockdown separated us -Poor communication
-Hard coexistence during the lockdown
-Financial crisis
-Nothing affected our relationship
-N/A
S204/A/YES- Do you feel successful with the expectations and your new relationship thanks
to the dating apps?
-Yes
-No
-N/A
Jump to DEMOGRAPHICS
S205/B- Did you have a relationship in the last two-three years?
-Yes
-No
-N/A
S206/B- How is your experience using dating apps?
-I feel very comfortable
-It is very convenient during the pandemic
-Less feeling of loneliness
-Easy to build intimacy

-N/A
S207/B- Did you experience any kind of toxic behavior using dating apps?
-Yes, I felt misleading intentions, dishonesty, stalking, sexual harassment, ghosting
-No
-N/A
S208/B- Did you experience a relationship breakup during the pandemic after using dating
apps?
- YES: JUMP TO S209/B/YES
-NO
- N/A
S209/B/YES- How did you break up? You can select multiple options.
-I found a time to talk face to face to end the relationship
•
-I ended the relationship on the phone
-I wrote a text message to end the relationship
-I ghosted/blocked him/her without giving explanations
-N/A
S210/B- Did you succeed and achieve your expectations using dating apps?
-Yes
-No
- N/A

SECTION 3: GENERAL QUESTIONS/DEMOGRAPHICS

S301-	What is your age? (box)
S302-	What gender do you identify as?
	-Male -Female (short answer space) -N/A
S303-	What is the highest degree or level of school you have completed?
	-High school
	-Bachelor's degree
	-Master's degree
	-PhD or higher
	-N/A
S304-	What is your employment status?
	-Unemployed
	-Part-Time
	-Full-time
	-Student
	-N/A
S305-	What is your sexual orientation?
	-Heterosexual
	-Homosexual
	-Bisexual
	(short answer space)
	-N/A

ABSTRACT

The use of dating apps has increased considerably in the last decade due to social media development and has changed increasingly the way that people meet with each other. At the same time, an extraordinary event came to change the life of millions of people till now. The pandemic changed the way people used to communicate, behave, socialize, work, learn and find romantic opportunities. Therefore, dating apps played an important role in socializing or searching for interaction in the middle of a global pandemic. Due to the current popularity in the use of dating apps, this study aimed to explore and analyse the use of these apps to maintain, build or end romantic relationships during the isolation and the fear caused by the COVID-19. Specifically, it hopes to better understand how successful or not was the user's expectation to find any kind of intimacy during the current pandemic.

A quantitative research method using an online survey was applied to examine the final study sample, (N=262). The final survey contained three sets of questions based on the three research questions and theoretical framework. The final data was based on the answers of participants who recognize themselves as dating app users, between 18-40 years old, and actively using these apps in the context of the global pandemic.

The study results showed that the use of dating apps and their practice increased notably during the pandemic as an alternative for physical meetings, commitment, and loneliness. The group aged between 20 and 31 years old preferably used the dating apps to find new romantic opportunities and to pass the time, showing the necessity to find commitment, very limited due to the global pandemic. On the other hand, evidence suggested that dating apps have facilitated social interactions and sexual encounters despite the pandemic and the advantages for people who experience prolonged isolation.

In conclusion, the study considers that technological communication has helped to connect people to maintain social interactions during the pandemic without serious consequences, but prolonging the dependence on social media and technology.

Keywords:

Dating apps, pandemic, relationships, breakup strategies, online relationships, love

ABSTRAKT

Die Nutzung von Dating-Apps hat in den letzten zehn Jahren aufgrund der Entwicklung der sozialen Medien erheblich zugenommen und verändert zunehmend die Art und Weise, wie Menschen sich treffen. Gleichzeitig kam es zu einem außergewöhnlichen Ereignis, das das Leben von Millionen von Menschen bis heute verändert hat. Die Pandemie hat die Art und Weise verändert, wie Menschen kommunizieren, sich benehmen, Kontakte knüpfen, arbeiten, lernen und romantische Gelegenheiten finden. Daher spielten Dating-Apps eine wichtige Rolle, um inmitten einer globalen Pandemie Kontakte zu knüpfen oder nach Interaktionen zu suchen. Aufgrund dieser derzeitigen Popularität bei der Verwendung von Dating-Apps zielte diese Studie darauf ab, die Verwendung dieser Apps zu untersuchen und ihre Auswirkungen zu analysieren, um romantische Beziehungen während der Isolation und der durch COVID-19 verursachten Angst aufrechtzuerhalten, aufzubauen oder zu beenden. Insbesondere hofft sie, besser zu verstehen, wie erfolgreich oder nicht die Erwartung des Benutzers war, während der aktuellen Pandemie irgendeine Art von Intimität zu finden.

Eine quantitative Forschungsmethode unter Verwendung einer Online-Umfrage wurde angewendet, um die endgültige Studienstichprobe (N = 262) zu untersuchen. Die abschließende Umfrage enthielt drei Fragenkomplexe, die auf den drei Forschungsfragen und dem theoretischen Rahmen basierten. Die endgültigen Daten basierten auf den Antworten von TeilnehmernInnen, die sich als Nutzer von Dating-Apps zwischen 18 und 40 Jahren erkennen und diese Apps im Kontext der globalen Pandemie aktiv nutzen.

Die Studienergebnisse zeigten, dass die Nutzung von Dating-Apps und deren Praxis während der Pandemie als Alternative zu physischen Treffen, Bindung und Einsamkeit deutlich zugenommen hat. Die Gruppen von Personen im Alter zwischen 20 und 31 Jahren nutzten die Dating-Apps bevorzugt, um neue romantische Gelegenheiten zu finden und sich

die Zeit zu vertreiben, was die Notwendigkeit zeigt, Engagement zu finden, das aufgrund der globalen Pandemie sehr begrenzt ist. Andererseits deuteten Beweise darauf hin, dass Dating-Apps trotz der Pandemie und der Vorteile für Menschen, die längere Isolationen erleben, soziale Interaktionen und sexuelle Begegnungen erleichtert haben.

Stichwörter:

Dating-Apps, Pandemie, Beziehungen, Trennungsstrategien, Online-Beziehungen, Liebe