

**Just a Swipe Away: Navigating the Motivations Behind Downloading and Using Mobile  
Dating Applications During a Global Pandemic**

Blake Klinsky

A Dissertation Submitted to the Faculty of  
The Chicago School of Professional Psychology  
In Partial Fulfillment of the Requirements  
For the Degree of Doctor of Clinical Psychology

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2022

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### **Dedication**

I dedicate this dissertation to my late grandparents. My grandpa, Charles Siegal, provided me with wisdom to think outside of the box and appreciate the sweet things in life. My papa, Marvin Klinsky, and my nana, Sharon Klinsky, taught me the importance of human connection, the power of laughter, and spreading kindness to every individual. They inspired me to create meaningful and safe environments for others, where they feel supported, validated, heard, and empowered. They will forever be remembered and missed. May their memories be a blessing.

### **Abstract**

The purpose of this study was to explore the underlying motivations behind downloading or reopening mobile dating applications (MDAs) during a global pandemic. Additional objectives of this study were to explore the lived experiences of heterosexual, cisgender women mobile dating application users, investigate how mobile dating has changed since March of 2020, and analyze research from dating before COVID-19 compared to dating during COVID-19. At the time of the study, there was little research that addressed the motivations of using MDAs during a pandemic, as well as the experiences of women who were navigating dating in a socially distant world. For these reasons, this study aimed to (1) analyze the motivations behind downloading MDAs during the COVID-19 pandemic, (2) explore the lived experiences of women who used MDAs during the COVID-19 pandemic, (3) investigate how mobile dating has changed since March 2020, and (4) compare pre-COVID-19 and current COVID-19 dating experiences. This study employed a qualitative method of phenomenology and investigated the lived experiences of eight women, 20 to 29 years old, who used mobile dating applications during COVID-19. The results of the coding process produced nine areas of focus, 22 major themes, and three minor themes. Furthermore, a discussion of implications for clinicians and mental health professionals working with individuals who have used MDAs were explored.

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## Chapter 1: Nature of the Study

*Happiness could just be one swipe away with a simple download of a mobile application.*

### Background

The dating world has evolved tremendously over recent years and has experienced technological advancements that have changed how people start romantic relationships (Smith, 2016). Mobile dating has become increasingly common within the past 10 years for adults, as dating applications have allowed people to connect with a potential partner. Mobile dating applications (MDAs) have become a resourceful platform where initial contacts can be made for individuals to connect with casual and romantic partners. Thus, MDAs have become a popular tool to use when adult individuals are looking to find potential partners for a variety of reasons.

There are multiple successful MDAs, such as Tinder, Grindr, Bumble, OkCupid, Happn, Coffee Meets Bagel, and Hinge (Sumter & Vandenberg, 2019). Around a quarter of the users of these mobile dating applications are young adults. In fact, a study by Smith (2016) showed that 27% of primary users are between the ages of 18 and 24. Additionally, they found that 15% of Americans have tried some form of online dating either via the Internet or on an MDA (Smith, 2016). This was a substantial increase in dating application usage compared to research performed in 2013, which showed that only 3% of Americans reported using a MDA (Smith, 2016).

Over the years, there has been an increase in the usage of MDAs that changed the dynamics of dating in a personalized way. One of the first location-based mobile dating applications, Grindr, was introduced in 2009 (Burrell et al., 2012). Shortly after, Tinder was created, altering the landscape of mobile dating, as it was the first mobile application to establish the “swiping” feature (LeFebvre, 2018). The physical swipe feature allows a user to “swipe

right,” which means that they accept someone as a match, while the “swipe left” feature means that they reject them as a match. Generally, a user has to download the specific application on a mobile device and create a profile. Then, the user has to upload pictures of themselves, and they can add as much or little detail about themselves for other users to see when they are swiping on the application. Specific details that users might share on the various applications are their religion, height, political stance, pet preferences, thoughts on children, sexually explicit activities, drinking habits, and substance usage. Users also have the ability to create a short bio that describes their various interests or answer multiple questions that are selected from a list of potential openers (Levy et al., 2019). Some of the mobile applications connect users based on a set geographical location proximity; the users select their preference between a 1-mile radius and a 100-mile radius. Various apps allow the users to change their location to see other users in a specified area. Based on the location of the user, individuals are able to match with other users who are within their chosen location proximity.

Online dating offers an increased means of accessing, communicating, and matching with other individuals. The term *access* refers to the ability to evaluate potential dating partners that users would have probably never encountered otherwise. Many applications have thousands of users who are accessing their sites within the mobile world. In theory, users have access to many potential partners; however, it is not likely that every potential partner will respond and initiate a conversation with each match that they get (Alexopoulos et al., 2020). Additionally, some users experience difficulties with matching on dating applications, which could be a reason that leads them to delete the application (LeFebvre, 2018). While mobile dating has the potential to increase access to and awareness of the availability of other potential partners, this does not guarantee relationship success. Users on MDAs are able to interact with one another without

having to physically meet face-to-face first. Most of the applications offer an “in-app” messaging communication service, in addition to some offering phone and video calling. As such, users can swipe right in their own living space and do not have to travel to another location to meet other individuals in person; this is one of the motivations that entice individuals to use MDAs (Sumter et al., 2017).

Psychologists and researchers have studied MDA users’ motivations as it relates to the ways that people connect and interact with one another to form interpersonal relationships (Solis & Wong, 2019; Sumter & Vandebosch, 2019; Tanner & Huggins, 2018). These platforms serve as a primary way for adults across the lifespan to interact with one another, whether that is to seek a friendship, romantic relationship, or sexual encounter. Research shows that 54% of U.S. citizens believe that developing a romantic relationship with someone online may be just as successful long-term as having a relationship with someone where the couple met organically in person (Vogels, 2020). Thus, mobile dating can provide information on human behavior, especially since our lives have become increasingly mobile and our means of communicating have shifted drastically towards electronic platforms, particularly in the dating world.

However, mobile dating has changed since the start of coronavirus disease 2019 (COVID-19). Individuals were instructed to follow the *Centers for Disease Control and Prevention* (CDC) guidelines, which ultimately changed many people’s lives. The novel coronavirus is an infectious disease, and individuals who are infected may experience mild to severe respiratory illness symptoms such as fever, cough, shortness of breath, fatigue, headache, runny nose, nausea, or sore throat (CDC, 2020). Furthermore, the general public was advised to take extra precautions to stop the spread of the virus by handwashing with soap for 20 seconds, wearing face masks that cover the mouth and nose when outside in public, and keeping a

distance of 6 feet with others. According to a Pew Research Center survey, many U.S. adults have stated that their quality of life has significantly decreased since the start of COVID-19, and 51% expect these changes to be permanent (Barroso, 2020). Overall, many individuals' lives have been affected financially, emotionally, mentally, physically, spiritually, and relationally due to COVID-19. Likewise, COVID-19 has substantially altered dating and the ways in which adults form intimate relationships. The impact of forced distanced dating has caused a surge in mobile dating—a topic sorely in need of research.

### **Purpose Statement**

This study examined user experiences as they navigated dating in a newly socially distant world. The main objectives of this study were to analyze the rationale(s) for downloading an MDA during a pandemic, explore the lived experiences of MDA users, investigate how mobile dating has changed since March 2020, and compare pre-COVID-19 and current COVID-19 dating experiences. Data collected from this study informs the general public on the attitudes, behaviors, and motivations as they relate to MDA users during a pandemic. Additionally, this study will serve as a helpful resource for clinicians who work with adults who are navigating dating during or after COVID-19.

The study used a qualitative method of a phenomenological theoretical approach. The phenomenological theory explored participants' responses regarding their lived experiences with MDAs during COVID-19. The sample of the study included heterosexual, cisgender women, who were between the ages of 20 and 29, and had downloaded at least one mobile dating application since March 11, 2020.

### **Definitions of Key Terms**

The following terms were used within this study and are defined alphabetically:

*Coronavirus disease 2019.* Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and is referred to as COVID-19 (Mayo Clinic, 2022).

*Match.* When two users on a mobile dating application swipe right or otherwise indicate interest in each other.

*Mobile dating applications.* A wide range of applications located on a cellular device that connect users who are looking for various types of relationships.

*Online dating.* Dating while using an Internet-based application.

*Potential partner.* Individuals who use mobile dating applications and who are located within a specified proximity.

### **Outline of Remaining Chapters**

Chapter 2 is a review of the existing literature on MDAs and COVID-19. The literature review includes an analysis of mobile dating, such as the history of mobile dating applications, COVID-19, and motivations for using mobile dating applications. Chapter 3 discusses the research design and model of the study. Chapter 4 proposes the results and findings of the study. Lastly, Chapter 5 examines conclusions and limitations of the research.

## **Chapter 2: Literature Review**

### **Mobile Dating Applications (MDAs)**

#### **History of Computerized Matchmaking and Dating**

Prior to the invention of MDAs, the first well-known, computer matching service was invented in 1959 by Jim Harvey and Phil Fialer (Gilimor, 2007). Harvey and Fialer were students at Stanford University and were both enrolled in a course entitled “Math 139: Theory of Operation of Computing Machines.” During class, they completed a project that involved using the IBM 650 Magnetic Drum Data-Processing Machine. The IBM 650, a medium-scale device that was manufactured by the International Business Machines Corporation, was one of the first computers located at several schools, namely, Stanford University, University of Texas, Rensselaer Polytechnic Institute, and University of Kansas (Glascock, 1960). The computer allowed students to write programs after they viewed demonstrations of “how-to-program” in class.

Furthermore, the project, Happy Families Planning Service, encompassed creating a matchmaking questionnaire that was distributed to Stanford students and a few individuals located in the Northern California Los Trancos Woods area with the hopes of pairing couples for marriage. The matching worked by comparing one member of a class (males) to the entire other class (females), and a “difference” score was calculated by comparing the responses from each class. After comparing the classes, the lowest difference scoring couple was matched first, and then all the other couples followed with increasing difference scores. They were able to gather 98 participants who completed the questionnaire, which included 49 men and 49 women. The IBM 650 computer analyzed the results of each individual’s questionnaire once they were inputted into the device, which resulted in a total of 49 matched couples. The participants met at a

gathering hosted by the researchers, and it allowed the pairings to meet face-to-face. However, none of the participants in the project ended up together.

In 1963, a “dance mixer” was organized at Iowa State University, and the attendees had to fill out a questionnaire prior to entering (Slater, 2014). The attendees were matched with dates after the IBM computer calculated the pairing results from the questionnaire. One of the creators of the matching project, Ed Lewis, developed the programming part of the process. The project was able to obtain 500 male and 500 female subjects, and the computer matched individuals based on their height, sex, and personality. The main purpose of the project was to initiate romantic relationships.

A year later, Joan Ball started the St. James Computer Dating Service in England, which became the Computer Dating Services Ltd. in 1965 (Hicks, 2016). The company name was shortened to “Com-Pat,” which was short for computerized compatibility. Ball’s business was the first matchmaking company that generated matches on a computer by using punch cards to pair individuals.

Simultaneously, Operation Match, which was created by undergraduate students, Jeff Tarr and Vaughan Morill, was launched in 1965 at Harvard University (Mathews, 1965). They used a computerized questionnaire that cost \$3 to match students who were seeking dates as opposed to marriage. After 6 months of launching, Tarr and Morill received over 90,000 questionnaires. Operation Match was the first computerized dating service offered in the United States. At the same time, David Dewan, who graduated from Massachusetts Institute of Technology (MIT), created his own computerized dating questionnaire by using the Honeywell 200 computer with the hopes of starting his own business that was called Eros (Slater, 2013). Dewan’s questionnaire was \$4 and included personal questions that assessed civil rights views,

race, and politics. Dewan's questionnaire differed from Operation Match in that he included personal questions about values and beliefs.

In the late 1960s, another computerized matching service that was called Data-Mate emerged from MIT (Krakauer, 2014). One individual's subjective experience described only using this service as it came from MIT. However, it should be noted that the literature does not present substantial information on this particular service.

In 1976, there was a major shift in dating services when Jeffrey Ullman created his own business called Great Expectations (Wallace, 1994). This business connected its members, who were singles, to potential matches. Members would visit the main office building and fill out a "member profile" that included information such as height, eye color, hair color, and religious and racial dating preferences. Following this, members were directed toward a room where a Great Expectations employee recorded a brief interview. Afterwards, members received an invitation by mail to come back to the office to view other interested members' videos.

Similarly, there was another shift in 1986 when Jon Boede and Scott Smith launched a social network called the Matchmaker Electronic Pen-Pal Network (Slater, 2014). This network used an online bulletin board system that allowed members to electronically share information about local events or personal requests. The Matchmaker Network was initially free for 3.5 hours, with a fee of \$50 for 100 additional hours. Users were able to choose between the "platonic" or "romantic" mode.

Another dating platform that was called Telepersonals was introduced in Canada in 1987, and it was a telephone dating system ("Timeline of Online Dating Services," 2021). An ad appeared for the service on the back of a magazine, and users were able to call in and record their voice for \$15, which essentially conveyed their personality to other interested callers who would

phone into the service. This network was catered towards singles, couples, heterosexual identified individuals, and non-heterosexual identified individuals who were looking for a variety of relationship types, such as long-term, casual, friendship, sexual fantasy, and telephone companions.

The first dating website, kiss.com, was launched in 1994 by Duane Dahl and was later sold to Match.com in 2002 (Crunchbase, n.d.). Likewise, in 1995, Gary Kremen launched Match.com, an online dating platform that required a subscription (Match, n.d.). This service was tailored towards single individuals, including members who had diverse sexual orientations. Match.com allowed users to create profiles that would enable them to search for other singles in their area.

Subsequently, some examples of other dating websites that were created and tailored to specific users included: JDate, a dating site for Jewish singles; eHarmony, a dating site for singles looking for long-term relationships; Christian Mingle, a dating site for Christian singles; Ashley Madison, a dating site for individuals who are married or in relationships; and SeekingArrangement, a sugar baby and sugar daddy website. The online dating websites were used by a plethora of individuals for many years until MDAs were introduced, shifting the way that people date, communicate, and match with each other.

### **History of MDAs**

The invention of MDAs has changed the dating world. One of the leading manufacturers of smartphones, Apple Inc., created the App Store on July 10, 2008 (Apple, 2020). The App Store serves as a platform for individuals to browse and download applications such as MDAs. The introduction of mobile applications changed the way individuals communicate, work, meet, and travel (Finkel et al., 2012). In 2009, the first MDA, Grindr, was introduced (Skeaff, 2020).

This free application (app) was tailored to individuals who identified as gay, bisexual, transgender, or queer. It was also the first location-based dating platform. After users create a profile, the Grindr app displays how far away users are from one another. Users are able to see others on the app by looking through a grid of photos. Application users are able to click on another user's specific photo, which takes them to that user's personal profile, where there is an option to send a message. Users' profiles do not provide a substantial amount of personal information and mostly include a physical description of themselves and their sexual preferences. Grindr is commonly known as an MDA that is focused on hooking up, sex, and dating.

The creator of Grindr, Joel Simkhai, designed another MDA called Blendr in 2011 (PR Newswire, 2012). The purpose of this application was to connect like-minded individuals who were in close proximity. While Grindr was used primarily for sexual purposes, Blendr's goal was to attract users who were interested in meeting new people and creating meaningful friendships. Users of this MDA filled out a survey that inquired about their hobbies and interests, which allowed the app to match users with similar interests. User profiles consisted of a picture and brief description, and it portrayed a list of selected interests.

One year later, Highlight was introduced as another location-based MDA (Lawler, 2012). This MDA differentiated itself from previous MDAs, as it allowed users to share information about their hometowns, university, and relationship status in their profile. Compared to previous vertical scrolling options, Highlight created a horizontal scrolling platform that allowed users to swipe left and right. Additionally, it created a "high five" ability, so users were able to display their interest in someone by clicking this feature.

One of the most popular MDAs, Tinder, was launched in 2012 (Empson, 2013). This was one of the first MDAs to cater to heterosexual-identified individuals (Ranzini & Lutz, 2017). This application uses a Facebook-based profile, which requires a user to have an activated account that displayed users' social connections (e.g., mutual friends on Facebook). Originally, the application was solely designed for iPhone users, and it displayed photographs of other users based on their geographical location and mutual interests. When a potential-match user was displayed on the device, the primary user was able to "like" or "pass" the individual. If users "liked" each other on the application, then there was a chat option to start conversing. During that time, Tinder was commonly known as the "hook up" application, and it was primarily used to meet others and participate in sexual activities.

Another MDA, Hinge, was designed in 2013 and used swipe features that were similar to the swiping features of Tinder. However, it differed from Tinder, as Hinge's goal was to pair individuals for dating purposes and was akin to other dating services, such as Match.com, eHarmony, and OkCupid (Constine, 2013). When users joined Hinge, they had to sign in through their Facebook account and select their preferences, such as maximum matching distance, sexual orientation, and age (Studeman, 2014). Hinge used a similar matching model as Tinder in that it required users to connect their Facebook. However, Hinge users were only matched if they had mutual friends on Facebook, whereas Tinder allowed users to match with complete strangers. At the time, Hinge gave matched users potential matches' contact information, full name, and occupation.

Meanwhile, a niche MDA, Jswipe, was created by David Yarus for Jewish millennials in 2014. Within a year, there were over 375,000 users who downloaded Jswipe. This was a particularly helpful dating application for Jewish singles, as it narrowed down the potential

match pool for individuals who identified within the Jewish religion. It was extremely successful, as it created over 10 million matches, distributed 40 million messages, and had 800 million swipes (Yarus, 2015). It differed from the matchmaking website, JDate, in that it was tailored to younger Jewish singles.

Another niche MDA, Bristlr, was created that same year and was geared toward men who had beards and women who had an interest in chatting with bearded men. When a user created their account, they had the option to upload a profile photo, generate a username, write a brief biography in the “about you” section, and design a personalized message that was only seen by matches. Additionally, users had to answer personalized questions that discussed the types of users they wanted to meet, as well as hopes and expectations when meeting potential matches (Fayvinova, 2015).

Following this, another interest-specified MDA, 3nder, was created. This MDA was intended for individuals who had a variety of sexual preferences, such as kink, swinging, and polyamory (Bondi, 2014). 3nder was a sex-positive application that focused on connecting individuals who were looking for threesomes and offering a space for individuals to feel comfortable communicating their sexual desires.

A few months after 3nder was created, another MDA, Spoonr, was designed. Spoonr connected individuals who lived within walking distance from each other and were looking to cuddle (“Spoonr,” 2022). The motto of this MDA was to provide individuals with safe, consensual, communicative, and spontaneous activities that involved physical affection. The app displayed the number of minutes it would take to walk to meet another user under that specific user’s profile picture (Mueller, 2014).

Alternatively, a unique MDA, Bumble, was created in 2014 by a previous employer of Tinder, Whitney Wolfe, and this MDA only allowed women to initiate conversations with their matches (Yashari, 2015). The design of the application was similar to Tinder, as seen in user profile pages, settings, and the “swipe” feature. However, Bumble differed from all other MDAs, as it required women to make the first move with their match; otherwise, the match would be deleted after 24 hours (Crook, 2014; Griffin, 2018). Men were not allowed to send a message first; however, they did have the opportunity to extend their match for an additional 24 hours if the female user did not start a conversation within the initial allotted time. On the other hand, individuals who chose same-sex preferences did not have a rule as to who messaged first. Bumble provided basic user information such as the college attended, current occupation title, and the name of the company an individual works for. Subsequently, other MDAs (e.g., OkCupid, Plenty of Fish, Zoosk, Coffee Meets Bagel, Match, Happn, Her, Christian Mingle, Jack’d, Hornet, Manhunt, and Adam4Adam) were created and have undergone drastic changes throughout the years (Miller & Behm-Morawitz, 2016; Sumter & Vandenbosch, 2019).

### **Current Data for MDAs**

Research has shown that around 85% of adults in America own smartphone devices (Pew Research Center, 2021). The percentage of U.S. adult smartphone users and owners has been increasing every year (Griffin, 2018). Smartphone users rely on technology to communicate with others by making phone calls, sending text messages, browsing the Internet, downloading various mobile applications, and running software programs. This technology has directly influenced the lives of U.S. children, adolescents, and adults, particularly in regard to their social life (Livingston & Caumont, 2017).

Since the inception of Grindr and the increased usage of smartphones over the years, MDAs have transformed and have become a commonplace way for individuals to connect. According to Smith (2016), 60% of adults between the ages of 18 and 24 in America have met another individual who has used dating applications, and 46% of them reported knowing someone who pursued a long-term relationship with an MDA user. Research has shown that dating applications are extremely common amongst young adults. Data have demonstrated that the primary users of MDAs are young adults (Sumter & Vandebosch, 2019). Young adults are inclined to use MDAs, as they are easily accessible, popular, and economical (Griffin, 2018). While a number of MDAs are tailored towards young adults, there are a variety of different MDAs that exist for users across all ages (Levy et al., 2019).

Research has also demonstrated that there are user differences regarding gender on MDAs, as more men use dating websites compared to women (Valkenburg & Peter, 2007). When men are searching for potential partners, it is likely that they will initiate conversations more often than women (Kreager et al., 2014). Even though men are more likely to start a conversation, doing so opens up the possibility for increased rejection. According to a study conducted by the Pew Research Center, around 57% of men thought that they did not receive an adequate number of messages from other users compared to 24% of women (Anderson et al., 2020). However, Anderson et al. (2020) found that 30% of women believed they were sent too many messages compared to 6% of men.

The algorithms on MDAs have evolved from matching users at random, and they now show likely matches on the explore page of the application (Levy et al., 2019). This enables users to have an increased opportunity to match with other potential partners. It is also common for MDAs to be connected to social media accounts (e.g., Facebook, Instagram, Spotify). Social

media platforms are used to obtain information from users' social accounts that is then added to their MDA user profile (Griffin, 2018). Additionally, connecting one's social media to a dating platform allows other users to see certain characteristics about a person (e.g., their liked pages on Facebook, Instagram photos or video posts, and artists listened to on Spotify). There are specific MDAs, such as Hinge, that require users to login via a social media platform like Facebook. MDAs have different viewing and matching functionalities as well. Tinder uses the "swipe" feature, whereas other MDAs use swiping methods and the ability to "like" particular sections of a user's profile. For example, users on Hinge are able to "like" and comment on certain pictures or respond to given prompts. Bumble has a feature that allows users to select a certain reaction to a specific part of a user's profile, such as a photo, their bio, or a response to a selected prompt.

### **Risks**

There are potential risks with using MDAs. Just under half of adults in the United States believe that MDAs are not a safe place to meet other individuals (Anderson et al., 2020). One study found that 1.7% of men and 19.3% of women have reported being raped, and 43.9% of women and 23.4% of men have reported experiencing sexual violence, such as unwanted sexual contact and/or coercion from MDAs (Breiding et al., 2014; Scannell, 2019). A primary risk of using the applications relates to sexual encounters, such as higher levels of unprotected sex, sexual partners, sexually transmitted infections (STIs), and sexually transmitted diseases (STDs) (Benotsch et al., 2016; Ko et al., 2012; Lenward & Berrang-Ford, 2014; Sawyer et al., 2018). In regard to MDA use, studies have found that it is common for heterosexual identified young adults to report increased STIs after downloading an MDA (Birthrong & Latzman, 2014; Reyns et al., 2014; Sawyer et al., 2018). Young adults may have a tendency to be more impulsive,

which can result in unprotected sex and can lead to STIs, STDs, and unwanted pregnancies (Charnigo et al., 2013).

When using MDAs, users are at risk for deception (Couch et al., 2012; Solis & Wong, 2019). Within MDAs, users are either required or given the option to post pictures on their profile. However, users may view profiles that have outdated pictures or contain inaccurate, stolen pictures of someone else. In addition, users can promote false details about themselves on the applications by choosing a race, religion, or relationship status that is inconsistent with their life outside of the MDA (Couch et al., 2012). For example, users might say that they are looking for a relationship when they are searching for sex. Individuals may lie about their profession, interests, or whether they have children. As such, this suggests that MDA users are likely to view profiles of users who devise a persona of a “real” person. According to one study, MDA users found that there were certain characteristics that were more likely to be misrepresented by other users after meeting them based upon physical appearance, relationship goals, age, income, and marital status (Gibbs et al., 2006). Due to the reasons outlined, there is a pervasive issue of dishonesty on MDA platforms.

Harassment and sexual violence are two other risks that MDA users face. Some users have reported rape, spiked drinks, and stalking (Couch et al., 2012). In a study conducted by the Pew Research Center in 2019, younger women reported a history of being targeted by other MDA users who used rude and harassing behaviors (Anderson et al., 2020). Individuals on MDAs may find it easier to target and manipulate others as they are not required to meet the other user face-to-face. More specifically, research conducted by Anderson et al. (2020) included individuals between the ages of 18 and 34 and showed that 60% of women were repeatedly contacted after telling another user that they were not interested compared to 27% of men; 57%

of women reported being sent explicit messages or images compared to 26% of men; 44% of women reported being called an offensive name compared to 22% of men; and 19% of women reported being threatened compared to 6% of men. Thus, this demonstrates that young adult women are more susceptible to negative interactions on MDAs compared to young adult men.

Another form of harassment that has become increasingly common on MDAs is the use of *revenge porn*, which is referred to as non-consensual pornography. This involves the act of distributing confidential, intimate images without the individual's consent (Short et al., 2017). There have been reports of individuals communicating on MDA platforms by sharing explicit photos or videos of themselves or others either on the MDA itself or through other media platforms. Users have experienced threats from other users who expose their shared sexually explicit texts, photos, or videos. For example, there was a case of revenge porn that was tied to two Tinder users (Packowitz, 2017). In this case, after exchanging Snapchat information, one of the individuals threatened to expose and share nude pictures of the other person after getting into an argument.

Also, users are at risk for potential ghosting. *Ghosting* is a term that describes a situation where an individual ceases to communicate with another individual without any explanation (Gili et al., 2019). It is common for MDA users to end contact with others by not communicating and ignoring messages (LeFebvre, 2018; LeFebvre et al., 2019). Another risk is *catfishing*, which is described as “falsely representing oneself to a potential romantic partner, without the intention of meeting in person” (Mosley et al., 2020, p. 227). An MDA user may pretend to be someone by portraying themselves as a certain person or persona that they are not either through their pictures and/or the way that they describe themselves on their profile.

### **Coronavirus Disease (COVID-19) Pandemic**

## **Background**

On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic (Cucinotta & Vanelli, 2020). COVID-19 ranges in symptomatology, where some individuals experience mild symptoms, such as the common cold, whereas others experience severe respiratory infections and organ failure (Rothan & Byrareddy, 2020). This outbreak was started by a new virus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and originated in Hubei Province, China, in December 2019. There is skepticism as to the original source of the virus, but researchers have traced initial cases back to a Huanan South China Seafood Market, where animals such as bats, birds, and snakes were sold (Dos Santos, 2020). The virus spread globally, infecting a multitude of countries. Subsequently, every country in the world was affected by the highly contagious virus. Throughout 2020, many countries raced to develop a vaccine.

The United States has authorized and approved three different vaccines: Pfizer-BioNTech, Moderna, and Johnson & Johnson's Janssen. The vaccines were created to help individuals develop immunity to the virus that causes COVID-19 (CDC, 2022c). The Pfizer-BioNTech vaccine is recommended for ages 5 and older and is given in a primary series of two doses that are spaced out 3 weeks apart. It is recommended that individuals who are 18 and older receive a booster dose 5 months after their last dose in the primary series. Individuals are considered fully vaccinated 2 weeks after their second dose. The Moderna vaccine is recommended for ages 18 and older and is given in a primary series of two doses that are spaced out 4 weeks apart. People who receive that vaccine are considered fully vaccinated after their second dose. Similar to the Pfizer-BioNTech vaccine, it is recommended that individuals 18 and older receive a booster dose. Johnson & Johnson's Janssen vaccine is recommended for

individuals who are ages 18 and older. The primary series is given in a single dose, and a booster dose is recommended 2 months after receiving the first dose. Individuals are considered fully vaccinated 2 weeks after the first dose (CDC, 2022b).

Citizens have been told to take precautions while in public and when meeting other individuals (CDC, 2022c). A few recommendations include getting vaccinated and staying up-to-date on the COVID-19 vaccines, washing hands often, covering one's mouth and nose with a mask indoors, covering coughs and sneezes, cleaning and disinfecting surfaces, monitoring one's health, and avoiding poorly ventilated spaces and crowds (CDC, 2022c). The CDC initially suggested in 2020 for individuals to limit contact with others, which has been coined "social distancing." People were advised to remain at least six feet apart from one another (CDC, 2020). Within the United States, the government urged citizens to limit nonessential travel such as going out to restaurants and bars, and refrain from attending large gatherings such as classes, workspaces, and weddings.

### **Impact on Society**

COVID-19 has affected many facets of everyday life. Healthcare is an area that was directly impacted (Moon & Ascher, 2021). As of June 6, 2022, the United States had a total of 84,636,391 COVID-19 cases and 1,003,925 deaths (CDC, 2022a). The accumulation of cases has placed a high burden on the medical system, as the system was not originally prepared to tackle an infectious disease. Initially, hospitals within the United States had a limited supply of medical resources, such as beds, oxygen tanks, protective equipment, and healthcare workers (Miller et al., 2020). Some primary care doctors began to see patients virtually through telemedicine in order to avoid risking potential exposure. Likewise, doctors and healthcare professionals were at risk as they are front-line workers, tackling the virus head-on (Haleem et al., 2020).

From a financial standpoint, COVID-19 has drastically impacted the United States economy, as citizens and non-citizens have experienced a deep financial hardship (Zu et al., 2021). Globally, there has been a decrease in the distribution of essential goods (Haleem et al., 2020). Within the United States, there has been an increase in business closures (Newbold, 2020). The Pew Research Center conducted a survey in 2020 and found that 25% of U.S. adults have lost their job or know someone who has because of COVID-19 (Parker et al., 2020). Numerous individuals have experienced reductions in work hours and pay. Subsequently, these individuals are more likely to use money from their savings and retirement accounts to pay for bills. Furthermore, the Pew Research Center 2020 survey found that 25% of U.S. adults have had trouble paying their bills since the start of COVID-19 (Parker et al., 2020). During the beginning of the pandemic, it was common for adults with no college degree and lower socioeconomic and minority statuses to borrow money from others or go to a food bank.

From a social standpoint, COVID-19 adversely impacted individuals and disrupted many lives (Elharake et al., 2022). During the years of 2020 and 2021, many regulations were imposed by the United States government to protect the general public and slow the spread of COVID-19. The rules enforced occupancy restrictions in a variety of enclosed spaces including sports and concert arenas, places of worship, restaurants, businesses, and schools (Haleem et al., 2020). Before vaccines were released, the CDC suggested that older adults distance themselves from others to limit exposure to the virus, especially for individuals who had pre-existing medical conditions such as diabetes, hypertension, and cardiovascular disease (United Nations, 2020). In addition, many students experienced a shift from in-person learning to remote learning. Countless adults in the workforce were forced to work from home due to business closures.

Consequently, people experienced changes in the ways in which they connected with others socially on a daily basis, moving from in-person activities to virtual interactions.

### **Impact on Mental Health**

While many facets of life have been altered by the pandemic, mental health is one of the most prominent aspects. Initially, many individuals experienced mental and emotional challenges associated with the morbidity and mortality caused by COVID-19. People struggled to adjust to the CDC's recommendation of social distancing and mandatory stay-at-home orders, which ultimately activated feelings of isolation and loneliness (Czeisler et al., 2020). Furthermore, research has shown that it is a natural human response to experience intense emotions related to anxiety, grief, stress, and worry during the COVID-19 pandemic (CDC, 2021). Biologically, individuals perceive threats through a cognitive process within the human brain that scans the environment for potential danger, and, if detected, arousal levels are increased (Gordon, 2015). If the brain detects danger, there are multiple internal processes that unconsciously happen within the human body such as increased heart and respiration rates, muscular tension, and overwhelming feelings associated with anxiety and alertness (Holland, 2021). Therefore, COVID-19 is perceived as a durable threat to society that instills intense emotions within individuals leading to increased levels of fear, worry, and stress (WHO, 2020).

The lingering fear and anxiety individuals feel about contracting COVID-19 can be particularly stressful (Czeisler et al., 2020). According to research conducted by the Mayo Clinic (2021), people who are stressed may experience multiple changes in various aspects of their body. Physically, stress is associated with headaches, muscle tension, chest pain, fatigue, changes in sex drive, digestion issues, sleep and eating problems, and worsening of chronic health problems (e.g., dementia, arthritis, diabetes, asthma). Mentally, stress is related to

increased anxiety, restlessness, irritability, and depression. Behaviorally, stress may lead to overeating or undereating, angry outbursts, drug or alcohol misuse, tobacco use, social withdrawal, and less exercise. Additionally, research has shown that many people developed symptoms of stress during the pandemic. One survey conducted by Czeisler et al. (2020) found that 40.9% of participants experienced symptoms of a mental health condition related to COVID-19. Specifically, the researchers noted that 30.9% encountered symptoms of an anxiety disorder or depressive disorder, 26.3% experienced symptoms of a trauma- and stressor-related disorder, and 13.3% developed symptoms of a substance-related disorder (Czeisler et al., 2020). Furthermore, Keeter (2020) found that 18% of U.S. adults experience nervousness or anxiety most or all of the time since the COVID-19 pandemic began compared to a survey in 2018 that reported 9% of U.S. adults experienced feelings of nervousness most or all of the time within a typical month.

Since the start of the pandemic, researchers have found that individuals with previous mental health diagnoses experienced increased levels of loneliness, social isolation, and loss of interest in usual activities (Rains et al., 2020). One research study found an increase in suicidal ideation during the pandemic in respondents who were young adults, Hispanic or non-Hispanic Black, and essential workers (Czeisler et al., 2020). Many individuals experienced struggles with their mental health due to an abrupt change in their daily routine, as well as an overall lack of social connection.

### **Dating and COVID-19**

Dating is another factor that has been impacted by the catastrophic effects of the pandemic. While there is limited data on dating during the pandemic, there are a few studies that show how individuals are navigating and pursuing casual and romantic relationships. According

to a study conducted by Li et al. (2020), younger individuals reported a decreased desire to partake in sexual experiences (e.g., intercourse) with others because of COVID-19. Likewise, a study conducted by researchers at the Kinsey Institute found that half of their participants reported a decrease in their sex life. In addition, researchers found that individuals reported masturbating and viewing pornography more frequently compared to their sexual behaviors before COVID-19 (Li et al., 2020). In other words, the lack of in-person sexual experiences, living alone, and feeling anxious due to COVID-19 led to an increase in solo sexual behaviors (Lehmiller et al., 2021). Before the release of the COVID-19 vaccines, those who utilized solo sexual behaviors were considered to be engaging in safe sexual practices. At that time, physical acts of intimacy were perceived as dangerous since COVID-19 could be transmitted through one's breath, mucus, and saliva. Kissing posed a risk of virus exposure through respiratory transmission, as it involves the possible exchange of saliva. Thus, the act of kissing was seen as more dangerous compared to vaginal or anal sex, in which no saliva is needed (Severn, 2020).

During COVID-19, many single individuals longed for serious relationships. Research conducted by the Kinsey Institute found an increase in those interested in long-term relationships and marriage (Brosher, 2021; Match, 2021). Researchers found that young adults reported an 18% increase in their desire to find a partner as compared to two years ago. Conclusions from the study by Match (2021) expanded on how the pandemic initiated a longing in young, single individuals to find meaningful and steadfast relationships. The researchers noted that only 11% of single individuals desired to date casually and 62% yearned for committed relationships (Match, 2021). Furthermore, such findings indicate that single, young adults are now more interested in emotional connection and long-term relationships.

Throughout the pandemic, dating applications have been a foundational tool for individuals to stay connected and meet potential partners (Gibson, 2021). The pandemic has shifted how individuals connect digitally, thus resulting in increased use of MDAs to virtually date (Coombe et al., 2020). For instance, Tinder received its highest number of user swipes of 3 billion on a single day at the beginning of COVID-19 in March 2020 (Fortune, 2021; Wiederhold, 2021). Likewise, Bumble found a 70% increase in virtual video calls conducted by users (Fortune, 2021; Wiederhold, 2021). In addition, one study conducted by Williams et al. (2021) found that MDA users tend to date others who have similar belief and value systems relating to the ways in which they manage health risks during COVID-19. As such, through the increased use of MDAs during the pandemic, users conducted virtual dates and assessed their matches' values to determine overall dating compatibility.

Additionally, multiple MDAs adjusted their platforms to provide users with guidance, tips, and advice to virtual dating (Coombe et al., 2020; Gibson, 2021). Specifically, Tinder provided a hopeful message to its users that was displayed on the application that stated,

Social distancing doesn't have to mean disconnecting. We hope to be a place for connection during this challenging time, but it's important to stress that now is not the time to meet in real life with your match. Please keep things here for now. (Jensen, 2020)

This message encouraged users to stay connected to other application users, but to refrain from meeting face-to-face, if at all possible, to prevent the spread of COVID-19. Tinder also tried to connect users during COVID-19 by providing a free subscription to the Passport feature that allows users to choose which city they prefer to view matches (Seidman, 2020).

Additionally, Tinder changed its "Tinder U" experience. The Tinder U is a feature that allows college students to connect with other students nearby within 100 miles. This newly

implemented change allows college students to match with other students with no geographical location restrictions. Moreover, this allows individuals to match with people no matter where they are in the world. Likewise, Hinge changed its platform by adding a “Date From Home” feature, that allows users to call and video chat with one another (Lovine, 2020). Overall, MDAs aimed to support their users during COVID-19 by adding certain features that allowed for increased virtual connection.

One specific MDA, Bumble, assessed users’ comfort levels while dating during a pandemic by conducting a survey that showed over 44% of its users expressed uncertainty about what is safe and acceptable in dating during COVID-19 (Bumble, 2020a). Bumble provided recommendations for users to participate in dating such as getting takeout from a restaurant, eating at a local park outdoors, or going for a socially distanced walk. Recently, Bumble created new features on its MDA platform, such as the ability to add a virtual date badge to a given user’s profile. This virtual date badge informs other users about that particular individual’s comfort in communicating virtually through video chat. Bumble also introduced various additions to its platform such as a question game, an option to send audio notes, and an expanded geographical distance filter to match with individuals across the entire country (Bumble, 2020b).

### **Motivations for Downloading MDAs**

#### **Finding a Relationship**

Users of MDAs download applications for various reasons, and one’s use of a particular MDA is susceptible to change (Ward, 2017). One user’s primary motivation could be to find a hookup partner. That user’s motivation may change if they match with another user, and after talking for a period of time, they find a deeper connection akin to the start of a romantic relationship. On the other hand, one user may be looking for a relationship, but then may find

themselves matching and meeting other users that just want to hook up. Overall, one of the primary motivations for downloading MDAs is to find a romantic or sexual relationship (Solis & Wong, 2019). Specifically, love motivations, such as the desire to find a long-term romantic relationships, are stronger for women; on the contrary, sexual motivations, such as the desire to find short-term hookups, are common for men (Sumter et al., 2017). In addition, users who are motivated to find a relationship tend to seek out other users who are looking for the same outcome. However, even if users are looking for long-term relationships, many still engage in sexual experiences with other users before a committed relationship is established.

While many users download MDAs to find a relationship, certain applications are known to have a focus on different motivations to connect its users. The majority of peer-reviewed research has focused on the popular MDA called Tinder. For instance, a study conducted by Timmermans and De Caluwé (2017) found that less than half of their participants used Tinder to seek out a long-term relationship, whereas a majority of their subjects downloaded it to engage in exclusively sexual relationships with users. In addition, only 30% of participants in a qualitative study used Tinder to find a relationship (Tanner & Huggins, 2018). Similarly, research carried out by Sumter et al. (2017) showed that individuals who use Tinder for sexual excitement purposes may also desire increased one-night stands. However, it is important to note that this data were found for the specific MDA, Tinder, which is a platform tailored to individuals who are looking for hookup partners.

It is important to discuss the motivation of finding a relationship as it relates to the COVID-19 pandemic. During the pandemic, establishing meaningful romantic and emotional connections through MDAs can be helpful to cope with life stressors. COVID-19 has created a digital world where MDA users have the opportunity to get to know individuals on a deeper level

by communicating online throughout the average day and week more often. While there is minimal data regarding MDA users' motivation to find a relationship during COVID-19, many MDA platforms have offered virtual date ideas via Zoom. For instance, Tinder displayed a message to its users during the pandemic that stated, "We won't tell you these things are the same as sitting within arm's distance of one another, but they can help build chemistry and keep a connection until you are able to meet IRL [in real life]" (Duguay et al., 2022, p. 13). One MDA, OkCupid, found that there was a 5% increase in users seeking a long-term relationship compared to a 20% decrease in its users looking to hook up during COVID-19 (Medium, 2020). Through that same study, OkCupid mentioned that 85% of its users felt that developing an emotional connection with a match is more important than a physical connection. Another MDA, Hinge, posted an Instagram story in 2020 about virtual dating stating, "You're able to build a deeper connection" (Duguay et al., 2022). Ultimately, many MDAs tailored platforms to elevate and enhance virtual casual and romantic relationships for users.

### **Improve Social Skills and Experimentation**

Another motivation for downloading MDAs is to improve one's social skills and to experiment with flirting (Timmermans & De Caluwé, 2017). Some users find it difficult to approach people organically in person, even if they are simply interested in getting to know someone. Thus, interacting with other individuals online is easier for some MDA users, as it allows people to communicate with one another without having to physically initiate conversation in person. However, this does not necessarily mean that users will not experience rejection on MDAs. Users on MDAs can still experience rejection if they indicate interest in another user but ultimately do not match. Likewise, a user can match with another user, but the "liked" user is able to "unmatch" that person before they initiate conversation, or they can

“unmatch” them after conversing on the application. With regard to social skills, research has shown that females are more motivated by the sociability aspects of the MDAs compared to males in terms of having in-depth conversations and developing personal connections (Solis & Wong, 2019). Similarly, the social aspects of the applications foster a sense of community, which is a motivation found in a study by Blackwell et al. (2015). Users are not only able to match with potential partners, but they also have access to chat options on the MDAs, which is helpful for individuals who are looking to expand their social network.

Some of the MDA platforms have included video and audio calling features, in addition to the chat functions. As a result, users are now able to choose from a variety of virtual communication methods with matched partners. At the beginning of the pandemic, a newer MDA, Transer, encouraged its users to utilize the video and phone call services on the application to connect with individuals during the isolating periods of social distancing (PR Newswire, 2020). Additionally, many MDA users found alternative ways to connect with others by experimenting with sexting, sending nude photos, and sharing sexual fantasies (Lehmiller et al., 2021). Through this, virtual dating has allowed MDA users to increase the ways in which they can communicate, as well as try various methods of social and sexual experimentation with other individuals.

### **Traveling**

Individuals use MDAs while traveling (Ranzini & Lutz, 2017; Timmermans & De Caluwé, 2017). Users can match with potential partners to learn more about the designated area that they are traveling to and have the opportunity to start conversation with other visitors or locals. Some MDAs have specific features that allow users to access a “travel mode,” specifically located in the Bumble application (Bumble, n.d.). This feature allows users to

change their location on Bumble before they leave for their trip. Thus, they are able to connect with other individuals who are traveling or live in the specified designated area. Tinder has a feature called the “Tinder Passport,” which allows users to change their geographical location within the application and connect to other users across the globe (Howard, 2018).

Limited research has been conducted regarding the use of an MDA for travel purposes during COVID-19. However, since April 2, 2020, Tinder has granted all users access to the Passport feature as a means to decrease feelings of social isolation and anxiety due to COVID-19 (Tinder, n.d.). Before the pandemic, this was a premium feature for Plus and Gold members. Therefore, there is a potential for more MDAs to lift their location restrictions and offer users opportunities to connect with others across the country and globe.

### **After a Breakup**

After individuals terminate relationships with partners, various MDAs are used as tools to connect people with others and help ease the feelings of a breakup (Timmermans & De Caluwé, 2017; Ward, 2017). Some individuals need time after a breakup to process and grieve the relationship they had, while others feel immediately ready and motivated to connect with potential available partners. MDAs can be used as a distraction from thinking about a previous partner, as they expose people to users who are looking for connections (Davis, 2018). Similarly, communicating with others on MDAs has the potential to fulfill the need for belongingness, as the majority of users find it easy to connect with compatible partners who they either find attractive or share common interests (Vogels, 2020).

Navigating a breakup during COVID-19 can be difficult while simultaneously experiencing the stress of contracting the virus, death of loved ones, and financial instability. Currently, limited research has been found regarding the use of an MDA after going through a

breakup during the pandemic. Perhaps the increased use of dating applications during the pandemic could be helpful for those coping with breakups and personal struggles. Additionally, due to the social distancing conditions and business closures, individuals have the potential to worry less about finances in regard to taking new partners out on dates, as they can use video and call options to connect with potential partners.

### **Ease in Communicating Virtually**

As our world has become increasingly digital, more people are feeling a sense of comfort communicating with others virtually. Because of this, a motivation for downloading MDAs relates to the ease in communication method (Sumter et al., 2017). In particular, researchers conducted a study and found that individuals who had high anxiety preferred to connect with potential partners online as it is easier than initiating a relationship offline (Sumter et al., 2019). This means that individuals who struggle socially may find comfort in communicating online first as it lessens anxiety symptoms that can result from initiating conversation in person. For instance, research completed by Chin et al. (2019) demonstrated that users who had anxious attachments and were categorized as less avoidant were more likely to prefer to download and use MDAs.

During COVID-19, one MDA, Tagged, created two different options on its platform: “Blind Date” and one-on-one video chatting options (Business Wire, 2020). The Blind Date feature includes a timed video chat option that focuses on an individual’s personality instead of looks. The users start off by not being able to view each other on the video, but as the mini-date progresses, the pixels on the video chat become clearer. By the end of the timed video session, individuals have the option to press “date” and continue communicating, or they can pass. This option can be helpful for individuals who would rather get to know someone in a virtual setting

and focus on personality compatibility compared to typical first impressions based solely upon physical appearance. Throughout COVID-19, many MDAs have prioritized adding features that enable users to engage in casual conversation and connection with others within a relaxed and safe virtual environment.

### **Explore Sexuality**

Users also download MDAs to explore their sexual orientation, gender, and sexual fantasies (Ranzini & Lutz, 2017; Solis & Wong, 2019; Timmermans & De Caluwé, 2017). Popular and mainstream MDAs allow users the option to choose their gender identity and sexuality. Moreover, MDAs allow individuals to connect with others based on their specific sexual orientation and identity preferences. Some MDA users may already be established in their sexual orientation, while others might find it easier to experiment with people on dating applications who have similar sexual interests.

Throughout the pandemic, there has been limited research on the motivations behind exploring sexuality on MDAs. Nonetheless, MDAs are being used more frequently and could be utilized as a potential way for individuals to sexually experiment. Research has shown that individuals who are sexually permissive are more likely to be open to exploring sexuality within relationships (Garcia et al., 2012). As such, it is possible for sexually permissive individuals to use MDAs to explore their sexuality and increase sexual experiences during COVID-19.

### **Pass the Time**

Some individuals use MDAs to pass the time when they are bored (Timmermans & De Caluwé, 2017). The time investment in downloading an MDA is low, as it only takes a few minutes to set up a profile and does not require a substantial amount of time to monitor and check the application for matches. Swiping on MDAs could take around a few seconds up to a

minute depending on the ways in which one views other user profiles. One study conducted by Griffin et al. (2018) found that 31% of their 441 participants used MDAs for entertainment purposes. Furthermore, another study found that it was more common for women to use MDAs for entertainment purposes (Barker, 2009). Individuals use MDAs for fun since it gives them something to do in their free time (Solis & Wong, 2019).

Various MDAs during COVID-19 have created new ways to interact with users. For instance, Bumble and Tinder have created virtual games on their platforms that allow users to interact with one another. Bumble created the option for users to tap “Play Game” on its platform and participate in a trivia game with a match (Bumble, 2021). Similarly, Tinder created an interactive video game called “Hot Takes,” which allows users to answer various multiple-choice questions about a current event or topic and chat with potential partners before matching (Wynne, 2021). Through the creation of novel games, MDAs have potentially increased the reasons in which users connect and engage with others for entertainment.

### **Increase Self-Esteem**

Numerous individuals who have previously downloaded MDAs hope to increase their self-esteem (Sumter et al., 2017). Matching with another user leads to increased validation and sense of self-worth. Specifically, research completed by Barker (2009) found that men are less likely to have positive self-esteem compared to women, which results in them turning to MDAs to compensate for their lack of self-esteem and self-worth. For example, research has shown that men who used Tinder reported a decrease in face and body satisfaction, consequently resulting in lower self-esteem (Strubel & Petrie, 2017). Additionally, another study conducted by Breslow et al. (2020) concluded that men who used a variety of MDAs reported having low self-esteem and a high level of self-objectification. However, it is also possible that individuals with low self-

esteem are drawn toward MDAs with the hopes of increasing their self-worth (American Psychological Association [APA], 2016).

Since the pandemic started, many people have felt lonely and isolated from others, oftentimes resulting in feeling sad. These emotions may potentially have an impact on individuals' self-esteem, self-confidence, and self-worth. However, there is limited research on using an MDA to increase one's self-confidence during COVID-19. Regardless of this, it is possible that feelings of loneliness, isolation, and sadness have decreased self-esteem, resulting in increased MDA use.

### **Chapter 3: Research Design and Method**

The previous section expanded on the history of MDAs, motivations behind using them, and the impact of COVID-19. Based on the literature, there is a possibility that MDA users' motivations have been altered due to the pandemic, as well as users having experienced a change in their mobile dating behaviors. However, there is a lack of scientific research regarding MDA use during the COVID-19 pandemic. Furthermore, no scholarly articles have addressed how the pandemic has impacted underlying motivations for using MDAs. The purpose of this study is to utilize a qualitative method approach to explore the motivations behind downloading and using MDAs during a global pandemic. Additionally, the responses from the study will allow further exploration pertaining to the altered ways that MDA users interact and connect with potential partners. This study will use phenomenology to compile themes that explore MDA users' motivations and lived experiences on the applications during a pandemic. Through this study, clinicians and the general public will be informed about the ways in which individuals navigate dating during a global pandemic.

#### **Characteristics of Qualitative Research and Interpretive Framework**

This study used a qualitative methods approach. Common characteristics of qualitative research include collecting the data in a natural setting, identifying the researcher as a key instrument, focusing on participant meanings, ensuring that the researcher conveys their background, using complex reasoning skills to develop patterns and themes, and ensuring that the researcher utilizes a holistic viewpoint (Creswell, 2013). This particular method was chosen to empower individuals to share their stories. Interviews are useful within qualitative research to have an in-depth account of a particular focus area. Additionally, interviews allow the researcher to ask follow-up questions and clarify participants' responses. A social constructivism

interpretive framework was used, and it relied on utilizing the participants' subjective experiences, views, and opinions regarding MDAs (Creswell, 2013). Within this approach, it is imperative to recognize the researcher's own background and personal experiences as they relate to the study. The researcher can then interpret the meanings and experiences of others. The constructivist worldview manifested in this phenomenological study as participants described their lived experiences using MDAs (Creswell, 2013; Moustakas, 1994).

### **Qualitative Research Approach Used**

This research used a phenomenological approach. The study aimed to describe the common meaning of using MDAs during a global pandemic based on participants' lived experiences. Data were collected from participants who downloaded and used an MDA during COVID-19. The study included semi-structured interviews, and the researcher also had time to ask follow-up questions to obtain additional information on the participants' lived experiences regarding MDA use. Within the analysis, the researcher uncovered meaning units and interpreted various underlying meanings based on the participants' responses (Moustakas, 1994).

### **Positioning the Researcher**

Various forms of phenomenology include a discussion about the researcher and their personal experiences with the specific phenomenon being explored (Creswell, 2013). As such, I identify as a White, heterosexual, cisgender woman within the age cohort of the study participants. Personally, I developed a fond connection to this research topic based upon my own experiences using MDAs during COVID-19. Throughout the past few years, I have used multiple MDAs in search of meaningful connection and with hopes of finding a long-term relationship. My own personal experiences, as well as those of close friends and peers, helped to inform the interview protocol and questions about the lived experiences of women who use

dating applications during COVID-19. Based on this previous knowledge, I am aware of potential hypotheses regarding motivations behind MDA use. Nonetheless, throughout the data collection and analysis process, I made sure to bracket my experiences and consistently addressed my biases to allow for a more accurate, faithful, and holistic interpretation of the data (Giorgi, 2009).

### **Data Collection Procedures**

#### **Population and Sample**

This study was based on eight interviews with heterosexual, cisgender women who were between the ages of 20 and 29. The participants in this study had to have either downloaded or opened a preexisting MDA on or after March 11, 2020, which is the date the CDC declared the coronavirus a pandemic (CDC, 2020). This study was limited to heterosexual, cisgender women who lived in the United States as a way to explore in-depth behaviors and experiences of a specific population. Women who were not at least 20 years old or older than 29 years old were excluded from this study. Even though users on MDAs can be younger than 20 and older than 29, this age range was selected, as the literature suggests that women between 20-29 years old are common MDA users (Smith, 2016; Vogels, 2020). Since the interview could only be conducted in English, individuals who were not proficient in verbal and written English language were excluded from this study. In addition, individuals who did not have Internet or phone access were unable to participate since the study required participants to read the consent form online and complete the interview via Zoom or through a phone call.

Participants were recruited by using purposeful sampling methods, primarily criterion and snowball sampling (Creswell, 2013). The research contained established criteria for studying individuals who have been users of MDAs since the start of the pandemic. Participants included

in the data collection must have been (a) at least 20 years old but not older than 29 years old, (b) individuals whose gender identity was a cisgender woman, meaning that their gender matches the sex that they were assigned at birth, (c) individuals who identified as heterosexual, meaning that they are attracted to people of the opposite sex, (d) living in the United States, (e) mobile dating application users that have either downloaded a new account or reopened a preexisting account since March 11, 2020, and (f) fluent English speakers. Furthermore, participants were allowed to participate in the study if they either redownloaded or reopened a previously deleted or inactive MDA account on or after March 11, 2020. Participants of all ethnic backgrounds, religious affiliations, educational levels, occupations, and incomes were solicited.

### **Participant Recruitment and Selection**

To complete this study, participants were recruited through social media platforms on the researcher's Facebook and Instagram accounts. One post contained an electronic recruitment flyer (see Appendix A), and a second post contained an electronic recruitment script (see Appendix B), which were each posted separately on both social media accounts. Snowball sampling was used to recruit participants since the electronic recruitment script stated to forward the announcement to other individuals who were eligible and interested in contributing to this research.

Individuals who were interested in the study were encouraged to visit the research website available at: <https://bklinsky.wixsite.com/research>. The research website included information regarding the study (i.e., the purpose, eligibility criteria, research procedure, confidentiality, informed consent), a relevant description of the researcher, a contact form, and a list of mental health resources. The participants had to visit the researcher's study website and fill out the contact form. Following this, the investigator called the participants on the phone and

completed a pre-interview verbal screening (see Appendix C) that determined participant eligibility. If the participants qualified, they were asked to select a date and time to complete an interview on Zoom with or without a camera. If the potential participant did not meet the criteria for this study, then the researcher told them that they did not meet the criteria, and they thanked them for their time.

### **Interview Procedure**

Informed consent was the first topic addressed during the Zoom interviews. The researcher sent participants a link to the study's website and instructed them to read the informed consent form (see Appendix D). The informed consent form described the study, discussed what the participants should expect, and explained the risks and benefits associated with their participation. Furthermore, it informed participants that their responses would be strictly confidential. Participants were made aware that they may withdraw from the study without penalty at any time, that participation was voluntary, and that there would be no compensation. Additionally, the researcher asked the participants for their verbal permission to record the interview; they were also invited to ask any questions they had. If the participants had questions, then the researcher answered them. If there were no questions, then the researcher asked, "Do I have your consent that you read through the description of the study and agree to participate?" The recording began after participants provided consent. The researcher gave each participant the option to choose a pseudonym they would like to be referred as throughout this study.

The Zoom interviews lasted approximately 1 hour, and they were all recorded. Participants were asked to answer honestly and authentically. The researcher asked interview questions (see Appendix E) that explored participants' experiences using MDAs during COVID-19, as well as their motivation for downloading an MDA, safety precautions, and any change in

dating behaviors. The interview ended by asking the participants if they wanted to discuss anything that was not asked in the interview. The researcher then thanked the participants for their time and participation. Participants were informed that the results of the study would be posted on the researcher's website.

### **Data Analysis Procedures**

The phenomenological theory approach was used to code and assess participants' responses for themes and concepts that could be turned into categories (Creswell, 2013). The data were analyzed for similarity in responses and commonality of repeated words and phrases. In order to form themes with the words and phrases, the researcher analyzed specific patterns in participants' responses that were then placed into categories.

Additionally, the researcher analyzed the study data through the use of the structured method of Creswell (2013). To begin, the investigator read through the written transcripts multiple times to ensure overall familiarity with participants' responses. Then, the investigator developed a list of significant statements from the interviews that pertained directly to the lived experience of using an MDA during COVID-19, particularly noting specified motivations behind downloading the application. This was completed by reviewing the interview transcripts and highlighting sentences or quotes that appeared to be significant. Then, the significant statements were grouped together across participants to form "meaning units" or themes. Next, the researcher wrote a description regarding "what" the participants in the study experienced by including verbatim examples, as well as "how" the participants experienced the phenomenon. Lastly, the investigator included an in-depth description of the phenomenon that summarized the overall context of all participant experiences.

### **Strategies for Validating Findings**

Clarifying researcher bias is important so that the reader understands the researcher's position, biases, assumptions, and experiences that may impact the analysis (Merriam, 1988). Prior to data collection, the researcher bracketed their prior experience using MDAs during COVID-19. After each interview was conducted, the investigator dedicated time to journal, which allowed time for personal reflection regarding participant experiences and created a space to highlight any biases that may have arisen. Additionally, the researcher prioritized rereading each interview transcript at least four times through. Following this, interrater reliability was ensured as two graduate assistants independently read the transcribed interviews, coded the data, and sought to find thematic commonalities. Peer review from graduate assistants provided an external examination of the research process and data analysis (Creswell, 2013). Results were formulated from participants' direct responses with the consistent aim to provide a voice to the participants who engaged in this study.

### **Assumptions**

The investigator assumed that all participants answered the interview questions honestly and authentically. Specifically, it was assumed that each participant downloaded an MDA since COVID-19 was declared a pandemic on March 11, 2020 (CDC, 2020). Furthermore, it was assumed that all participants were between the ages of 20 and 29 and identified as heterosexual, cisgender women.

### **Ethical Assurances**

This study complied with the guidelines set forth by the Institutional Review Board (IRB) of The Chicago School of Professional Psychology. Ethical Guidelines and Principles for the Protection of Human Subjects of Research according to the U.S. Department of Health & Human

Research was reviewed to ensure that this dissertation complies with all guidelines and principles. Data will be kept for a minimum of five years after publication per American Psychological Association (APA) guidelines. After this time, the electronic files will be deleted from the researcher's laptop.

Risks to the research included emotional discomfort, invasion of privacy, and breach of confidentiality. Interviews were recorded for subsequent transcription. If the participants felt any discomfort during or after the interview, they were directed to the list of resources on the study website. The recordings were manually transcribed by the researcher and had no identifying information other than the participants' pseudonyms. Pseudonyms were chosen by participants to protect their anonymity. All data were securely stored and saved in a password-protected folder on the researcher's password-protected laptop. The laptop was kept in the researcher's locked residence.

### **Summary**

This chapter discussed the population of the study, who were heterosexual, cisgender women between the ages of 20 and 29. Additionally, it was a requirement to have either downloaded or opened an MDA since March 11, 2020. The qualitative research method was described and was followed by an explanation of why this method was used for this particular study. Data collection and analysis procedures were thoroughly provided, as well as assumptions and ethical assurances. The next chapter will present the results of the study.

## Chapter 4: Findings

The purpose of this exploratory study was to investigate the various experiences of heterosexual, cisgender women regarding their MDA use during a global pandemic, as well as propose underlying motivations for downloading them. A brief description of each participant is presented. Following this, major and minor themes identified through data analysis are presented.

Each individual interview allowed the participant to share their experiences and offer their opinions regarding MDAs. The interviews were conducted throughout July and August of 2021. A total of eight heterosexual, cisgender women, between the ages of 20 and 29, who either downloaded, reopened, or used an MDA since March 11 2020, were interviewed for this study. The semi-structured interviews lasted between 30 and 60 minutes. The questions explored various factors regarding participants' experiences on MDAs prior to and during COVID-19. The initial questions addressed participants' experiences, motivations, and attitudes regarding MDA use prior to the pandemic. Following that, additional questions focused on MDA usage since March 11 2020, exploring participants' experiences, motivations, primary communication methods, COVID-19 safety concerns, and attitudes.

The pseudonyms used for each participant description were either selected by the participant themselves or assigned by the researcher to protect confidentiality. Each participant disclosed their age, general geographical location, employment status, ethnicity, marital status, and highest educational degree completed throughout the interview. All participants recorded identifying as heterosexual and cisgender women. The relevant demographic information for each participant is highlighted in Table 1 below.

**Table 1**

*Participant Demographics*

Pseudonym, age	Education	Employment status	Geographical area	Ethnicity	MDAs	
					Before COVID- 19	During COVID- 19
Nicole, 25	Master	Student	Suburban	Caucasian	Hinge	Bumble and Hinge
Michelle, 24	Bachelor	Full-time	Suburban	Caucasian	Tinder	Bumble, Hinge, OkCupid, and Tinder
Alexandria, 27	Bachelor	Full-time	Suburban	Caucasian	Bumble and Tinder	Bumble, Hinge, and OkCupid
Lauren, 25	Bachelor	Full-time	Urban	Caucasian	Bumble, Hinge, J- Swipe, and Tinder	Bumble and Hinge
Phoebe, 25	Bachelor	Full-time	Urban	Caucasian	Hinge	Bumble and Hinge
Emma, 24	Bachelor	Full-time	Suburban	Caucasian		Hinge
Sophie, 25	Bachelor	Full-time	Rural	Caucasian	Bumble, Hinge, and Tinder	Bumble, Hinge, and Tinder
Cassidy, 26	Master	Student	Urban	Caucasian	Bumble and Hinge	Bumble and Hinge

**Nicole**

Nicole was 25 years old, lived in a suburban area, and completed her MA. Before March 11 2020, she had downloaded Hinge during Fall 2018. Nicole said, “I do not think I ever consistently used it for more than two months.” She would often pause her profile and delete it. Since March 11 2020, Nicole continued to use Hinge and downloaded Bumble in June 2020.

**Michelle**

Michelle was 24 years old, lived in a suburban area and completed her BA. Before March 11 2020, she had downloaded Tinder when she was 18; however, she “never actually used it.” Michelle stopped using it when she got into a committed relationship. She redownloaded Tinder in early July 2020, and she also downloaded Bumble, Hinge, and OkCupid.

**Alexandria**

Alexandria was 27 years old, lived in a suburban area, and completed her BA. She downloaded Bumble and Tinder in the mid-2016 and experienced successes on Bumble and said it “has been favorable for me.” Since March 11 2020, she has used Bumble, Hinge and OkCupid.

**Lauren**

Lauren was 25 years old, lived in an urban area and completed her BA. Before March 11 2020, she had downloaded Bumble, Hinge, J-Swipe and Tinder while she was in college but deleted them when she got a boyfriend in college. After her breakup, Lauren redownloaded Bumble and Hinge. Since March 11 2020, she has continued to use Bumble and Hinge.

**Phoebe**

Phoebe was 25 years old, lived in an urban area, and completed her BA. Before March 11 2020, she downloaded Hinge but rarely used it. Since March 11 2020, Phoebe continued to use Hinge and also downloaded Bumble.

### **Emma**

Emma was 24 years old, lived in a suburban area, and completed her bachelor's degree. Prior to March 11 2020, she had not downloaded any MDAs because she said, "I was always in a relationship." Nonetheless, Emma downloaded Hinge on June 1 2020.

### **Sophie**

Sophie was 25 years old, lived in a rural area, and completed her bachelor's degree. Prior to March 11 2020, she downloaded Bumble, Hinge, and Tinder and reported, "I used them off and on throughout college." Since March 11 2020, Sophie has used Bumble, Hinge, and Tinder.

### **Cassidy**

Cassidy was 26 years old, lived in an urban area, and completed her MA. Before March 11 2020, she downloaded Hinge and Bumble and said, "I used them intermittently on and off between 2018 and the pandemic." Cassidy redownloaded Hinge at the beginning of COVID-19 in March 2020. A few months later, she downloaded Bumble.

### **Areas of Focus and Themes Across Participants**

After analyzing the data across all participants, nine areas of focus, 22 major themes, and three minor themes emerged and are highlighted in Table 2. Areas of focus were pre-determined for the interview and derived after reviewing the literature. Major themes are defined as topics that were addressed by at least five of the eight participants, and minor themes were noted as those addressed by at least three participants. Within each area of focus, major theme, and minor theme, each participant's unique experiences were described.

**Table 2***Areas of Focus and Themes*

Areas of Focus	Major Themes	Minor Themes
MDA Use Pre-COVID-19: Motivations	Sought a Relationship	
MDA Use Pre-COVID-19: Patterns	Deleted Then Redownloaded	
MDA Use Pre-COVID-19: Attitudes	Positive Thoughts and Experiences	
MDA Use During COVID-19: Motivations	Finding a Relationship, Being Able to Connect With Others, Improving Social Skills, and Being Entertained and Passing the Time	Exploring After a Breakup and Increasing Self- Esteem
MDA Use During COVID-19: Patterns	Using MDAs Daily Between 15 to 30 Minutes and Deleting or Pausing an MDA Account	Using MDAs Daily for More Than 30 Minutes
MDA Use During COVID-19: Interactions and Communications	Chatting on the MDA Platform, Texting, Calling or Video Chatting, and Meeting Offline	
MDA Use During COVID-19: Safety Precautions	Considering Safety Precautions, Screening for COVID-19 Safety, Sensing Political Stances and Values, Being Cautious Regarding Others' Safety, Taking Safety Precautions When Meeting Others, and Getting Vaccinated and Navigating Comfort Levels	
MDA Use During COVID-19: Intimate Experiences	Engaging in and/or Being Open- Minded to Intimate and Sexual Experiences	
MDA Use During COVID-19: Attitudes and Beliefs	Believe That Dating Has Changed on MDAs and	

## Personal Dating Behaviors Have Changed on MDAs

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### **Area of Focus One: MDA Use Pre-COVID-19 – Motivations**

Each participant described whether they had previously used an MDA. Seven out of eight participants had used MDAs before COVID-19. Emma was the only participant who stated being a “new downloader” and mentioned, “Before COVID, I was always in a relationship.” Overall, six out of eight participants sought a relationship on an MDA prior to COVID-19.

### **Major Theme: Sought a Relationship**

A theme that emerged from participants’ MDA experiences prior to COVID-19 was their motivation and desire to find a relationship. Some relationships that participants were looking for were casual and others were long-term. Several participants highlighted that their goal was to meet a long-term relationship partner. Alexandria said that her motivation was to “find suitable dating partners and to engage with men socially.” Nicole shared a similar sentiment and had a goal of finding a relationship on an MDA. However, she found difficulty meeting people due to her rigorous school schedule. More specifically, she stated:

Because I was a student, I felt like it was hard to meet people. I spent, like, 12 hours a day at the school. So, I really just wanted an easy way to scan through, meet people, and set up dates. I wasn’t going out and meeting friends of friends kind of thing. I would definitely say my ultimate goal was for a relationship. I always only date for being in a relationship and to find a husband.

Other participants were looking to meet people casually with hopes that their connection would turn into a relationship. Lauren discussed wanting a casual relationship with someone using MDAs. She explained, “I just wanted to meet new people...I was curious what was out

there. I didn't want to shut myself out or stick to the people that I had already known." In other words, using an MDA furthered Lauren's ability to meet others and expand her network of potential partners. Additionally, two participants stated that they were looking to meet people during college to find potential partners. Sophie expressed that she wanted to "meet new people, kind of branch out and just live that college lifestyle... and go on dates." Likewise, Michelle also used MDAs in college. She stated:

I just got into college. So, that was, like, the environment. My roommate had one. It was sort of like, let's just match and go meet some boys. That was the motivation as an 18-year-old. Then I met someone not on a dating app, and we dated for five years.

Another participant, Cassidy, described her experience downloading MDAs after moving for graduate school. She was looking to meet people and date casually. She said:

I moved for my program. When I moved, I really didn't know anyone there. I was just like, okay, I'll download probably Hinge or Bumble. I guess I kind of just wanted to meet people to get to know the area through them, like, suggesting things and going on dates... I'll just see who is around there and see if they can find a fun place for us to go. I was never, like, seriously looking for anything on them.

As Cassidy highlighted, MDAs provided an opportunity for her to meet others and get to know the area when she moved.

### **Area of Focus Two: MDA Use Pre-COVID-19 – Patterns**

All the participants shared their general experiences using MDAs prior to COVID-19. The most commonly used MDA was Hinge, followed by Tinder and Bumble. Additionally, a major theme emerged as participants described a reoccurring pattern of deleting and redownloading MDAs.

**Major Theme: Deleted Then Redownloaded**

Five out of eight participants described a pattern of deleting and redownloading MDAs prior to COVID-19. Alexandria explained, “I had downloaded them, discontinued usage maybe a few months after, and then I redownloaded them.” This concept was also evidenced in Cassidy’s transcript, where she shared, “I was, like, on and off with redownloading them.” Likewise, Sophie also highlighted the pattern of deleting and redownloading and stated, “I downloaded them off and on throughout college. Sometimes I would be on them, and sometimes I would be off. I was sort of back and forth on them.” This concept was also evident in Lauren’s transcript. She shared about her experience redownloading MDAs in college and discussed, “I got a boyfriend in college, so I deleted them. I had obviously redownloaded them when I was ready.” After redownloading them, Lauren stated, “I’ve had the same account, and I think it just remembers, like, who you are. I just have to update stuff [on my profile].” Nicole spoke in-depth about her experiences deleting and redownloading Hinge prior to COVID-19, stating:

I had only used Hinge before the pandemic, and I have been on it off and on. I think it’s funny that their slogan is made to be deleted because I legitimately delete it, like, every week because I just didn’t want to be on it. But then I would just end up redownloading it again the next week...I don’t think I was ever consistently using it for more than two months. I would pause my profile and delete it. So, whenever I redownloaded the app, I would unpaue and my whole profile was still there.

Essentially, Nicole described a pattern on Hinge regarding pausing, deleting, and then redownloading. As she explained her redownloading pattern, she vocalized feeling frustrated after meeting partners and said:

I think I would go on a couple dates, and it wouldn't turn into anything, so I would just get discouraged. I started to feel like this isn't really finding me the kind of people that I want. Sometimes it would be a good first date, and after that, I just kind of lost interest really easily. It just wasn't a long-term match.

As one can see, many participants described a similar pattern of deleting and re-downloading MDAs prior to COVID-19.

### **Area of Focus Three: MDA Use Pre-COVID-19 – Attitudes**

In commenting on MDA use prior to COVID-19, there were also overlapping themes that pertained to attitudes about MDAs. Each participant described their general attitude toward using an MDA before COVID-19, and six of them reported positive experiences and thoughts regarding the use of MDAs. However, it was noted that two participants held neutral or negative attitudes toward using MDAs, suggesting that these participants were not in favor of using the dating applications. Specifically, Michelle explained:

I thought they were silly. They were definitely targeted more for hookup culture and not steered towards relationships. It is rare when people do successfully meet someone off the app because it is so geared towards hookup culture, at least the app Tinder itself.

When you think of Tinder, you initially think that others are on there to hook up with people.

Michelle's attitude suggests that she believed MDAs were tailored more towards hookups as opposed to long-term relationships. Another participant, Emma, discussed a similar sentiment regarding MDAs. Prior to COVID-19, she was in a relationship. However, Emma discussed others' experiences with MDAs by stating:

I was always in a relationship where we were set up by mutual friends, or we met in math class. It was always a really organic way to meet. So, I wouldn't say I looked down on apps at all because I didn't. I think that they are a good way to expand your pond to make your sea a little bit bigger and, like, to meet people you wouldn't otherwise meet...The thought of meeting someone online just, like, felt not [necessarily] icky to me, because I really supported my friends who did want to take that route, but I was just really proud of the fact that I met people organically...But for sure before actually downloading the app, I had that preconceived notion that it was a little icky and you might meet some weirdos.

An interesting element of Emma's transcript is that she underlined the importance of meeting others organically. She felt that using MDAs was somewhat off-putting due to the artificial nature of meeting a potential partner. Conversely, other participants held optimistic attitudes and beliefs towards MDAs.

### **Major Theme: Positive Thoughts and Experiences**

As mentioned earlier, six participants had positive attitudes regarding MDAs prior to COVID-19. Overall, participants viewed MDAs as a helpful tool to meet potential partners. For example, Phoebe felt that her attitude was "Positive not negative... It just was something that was fun. Our culture is around it, so it's like why not be a part of it." As Phoebe noted, she held a positive stance towards using MDAs since they were entertaining to use and popular in society; this suggests that MDAs were commonly used among young adults. Similarly, Cassidy was open to initially using MDAs, as they were "fun," and many of her friends used them. Along the same lines, Alexandria stated:

My attitudes were fairly positive. I had met several people that I had two short-term relationships with prior to March 11<sup>th</sup>, 2020. I felt that people were very kind and had really given me a good impression of what was out there.

Alexandria's account highlights that she favored using MDAs and had success meeting others. Additionally, Lauren previously had a positive experience being on MDAs; however, she described her experience going on dates that did not turn into long-term relationships. She reported:

I am all for them. Like, if I found someone and we went on a date that didn't go well, that didn't deter me from trying again. I think it's kind of like every day is a clean slate when you're on the app. Not that I use it every day, but, you know, every time you log on, it's like a fresh mindset just seeing what's out there.

Lauren's experience suggests that MDAs provide increased opportunities to meet others.

Some participants distinctly pointed out the benefits of using them while in college and graduate school. Cassidy described using MDAs when she moved out of state for graduate school. More specifically, she stated:

I was definitely open to them. I knew a lot of people and friends were, like, all on them. So, I was totally open to see what would happen. And then kind of as I was using them, it was actually fun at the beginning. There were so many people who were doing interesting things, who had been here a long time, and knew the coolest spots... I was definitely never like, oh, it's scary. I thought it was a good way to get out there... My attitude was like it could be really useful in a lot of different things not to just, like, meet someone great.

As Cassidy explained, MDAs offered additional opportunities to acclimate to her new environment by meeting others and exploring new places. Sophie described a similar sentiment and explained that MDAs were easy for her to use while she was in college to meet potential partners. The positive attitude toward using MDAs while in school was also evident in Nicole's transcript regarding her experience of being in graduate school. Nicole shared:

I think it was just kind of, like, a supplemental way to meet people when I didn't have time to go out and meet people. There were good options to, like, have conversations with people and go on first dates. Generally, I liked using it [Hinge] and liked the platform. I met, like, maybe one [person] a month and maybe [have been on] close to 20 dates.

What is apparent here is that Nicole used MDAs to meet potential partners since she had a busy schedule in graduate school.

#### **Area of Focus Four: MDA Use During COVID-19 – Motivations**

After the participants described their experiences and attitudes regarding downloading MDAs prior to COVID-19, they highlighted their motivations for downloading and using MDAs during the pandemic. Multiple major themes emerged from the participants' responses, including finding a relationship, being able to connect with others, improving social skills, being entertained, and passing the time. Minor themes included downloading the application after a breakup and increasing self-esteem.

#### **Major Theme: Finding a Relationship**

The theme of finding a relationship emerged in five interviews. Participants described wanting to find someone to connect with during times of loneliness and isolation. Specifically, Nicole expressed how she wanted to "meet people" and "find a relationship." Sophie also stated

that her motivation was “finding a relationship.” In speaking of finding a relationship, Emma offered, “I would love to find a relationship if it’s, like, the right guy.” From her standpoint, she added, “At the end of the day, I feel like we’re all downloading an app to find a relationship.”

Similarly, Alexandria’s motivation was to find a relationship. She explained:

It was loneliness and really realizing that we were in this for the long run with this pandemic. It wasn’t going away, like, in six weeks or two months. It was gonna probably be around for a minimum of, like, six months to a year. So, I think the fear stemmed from the idea that I should probably start seeking somebody out as a dating prospect, so that I can have somebody when this is over. Ideally, to hopefully, like, secure somebody prior to this ending. That way, when the world opens up again, I’m not alone...It was also something that I had been seeking prior to the pandemic, too. It was just the timing had worked out such that now we were in this lockdown situation, and I was finding myself single. I think the strong desire to find a partner was very much ramped up by the status of lockdown and quarantine.

Lauren also discussed feeling isolated from others during COVID-19. Lauren’s motivation was to “meet someone” and “definitely find a relationship.” More specifically, she stated:

I think it was a really lonely time for everybody. Even though I lived with my two best friends, I am a heterosexual female, and I kind of like that companionship and being able to share my boring life with somebody.

The accounts of Alexandria and Lauren highlight how feelings of loneliness and isolation led to the increased desire to find a partner during the pandemic.

**Major Theme: Being Able to Connect With Others**

The theme of connecting with others on a virtual platform emerged in five interviews. Due to social distancing limitations, these participants expressed that it was easier to connect with others on a virtual platform during COVID-19. For example, Phoebe said, “There was never, like, execution because we were in COVID, and I was, like, not going anywhere.” Cassidy also enjoyed connecting with others virtually during the pandemic since she spent the majority of her time “just in my apartment with my roommate.” Along the same lines, Nicole stated, “There was no other way to meet people when you’re not going out, and you’re socially distancing. That was my only possible way to meet people because we weren’t leaving the house or anything.” Nicole also highlighted that using MDAs felt like the only way she could meet others due to government restrictions. Furthermore, Lauren described her experience by sharing:

I knew that there was no way I was going to actually go and meet someone, especially since a lot of the boys that I was talking to didn’t really care about COVID or exposure as much as I did and as much as the people around me.

Lauren’s experience suggests that she was cautious about COVID-19 and wanted a safe way to connect with others. Another participant, Emma, longed to meet someone during this time but was worried about safety during COVID-19. It was easier for her to connect and chat with individuals on a virtual platform to protect herself and others from acquiring the virus. Emma described feeling comfortable downloading MDAs “when the CDC announced that, like, vaccinated people could be indoors together.” Prior to the CDC’s update regarding vaccinated individuals, Emma noted, “It just wasn’t safe to be meeting strangers.” The theme of ease in accessibility to connect with others on an MDA offered an alternative way to date during the pandemic.

### **Major Theme: Improving Social Skills**

Five participants expressed the desire to download MDAs to improve their social skills. Phoebe and Michelle found that they used MDAs to experiment and talk with others. This theme was also noted in several participants' transcripts regarding their usage of MDAs to improve social skills that differed from before COVID-19. Specifically, Alexandria explained:

Also, a product of what was going on for me during that time was that I was working as an essential worker with teenagers. And so, I was spending all my days with people who were a decade plus younger than me, and that was really challenging for me socially. I was feeling a strong disconnect between people my own age and myself. So, it was nice to be able to have adult conversations again and not have to talk about teenage things.

Here, Alexandria spoke about her motivation of talking to others around her age on MDAs as a break from her job that included conversing with adolescents. Lauren shared a similar sentiment regarding using MDAs to improve her social skills. She paid particular attention to the ways in which she conversed with others, stating:

We can all use skills and make sure that we provide context when we're talking virtually, such as making sure that we use emojis and some sort of like "haha" or "lol" so that people who are reading it on the other end aren't just reading a monotone statement. Especially since I'm super sarcastic, and I have a very dry sense of humor. I can be, like, pretty bitchy. I found that, like, people were not responding to me the way that I was, like, saying things, so I kind of had to change the way I worded stuff and use more emojis.

This concept of improving social skills during the pandemic is also noted in Emma's transcript, wherein she outlined:

I kind of forgot how to, like, talk to strangers. Like, I'm trying to remember - I was at the grocery store and I was making small talk with the woman in front of me. Then, I, like, said something really stupid. I'm just like, I forgot how to talk and do small talk with strangers. I think it's a good experience that I'm having [being on the apps]. I actually do think it is improving my social skills, and I think I'm, like, learning a lot about myself too.

This theme noted by the in-depth accounts of Alexandria, Lauren, and Emma highlight the participants' willingness to improve their social skills by talking to others on MDAs during a pandemic.

### **Major Theme: Being Entertained and Passing the Time**

Five participants described using MDAs during COVID-19 as an entertainment source and to pass the time. Multiple participants mentioned the idea of using MDAs out of "boredom." On this topic, Alexandria stated, "A lot of boredom was happening during this time, and it was nice to be able to communicate with people." Phoebe had a similar sentiment and said, "During COVID, I think it was just, like, boredom. We couldn't do anything, so it was like, alright, let's just see what happens and talk to randos. Everyone was in the same boat doing the same thing." Sophie also wanted to pass the time, and Cassidy mentioned:

At certain points, it was just like, oh, it's just me and my roommate here. I'm very bored and am really done with Zoom happy hour. I was just kind of bored and looking for more procrastination tools, I guess. It was kind of, like, an escape, you know? It was definitely a mix of, like, being bored and also looking for something kind of exciting. Just, like, out of the nothingness that was kind of happening...I wanted to see if I could, like, just do something different than watch, like, bad TV with my roommate.

Here, one can see that Cassidy used MDAs as an alternative activity to other social media platforms and as a supplement to watching television. Another topic of entertainment was evident in Michelle's statement about using MDAs as a way to connect and joke with friends.

She shared:

Me and my friends made a group chat called "It's Complicated" because we were all in complicated situations. We would just send Tinder screenshots. It was such an entertaining part of going through the summer and not being able to socialize as much...I kind of say it's my way of passing time, seeing people, and getting comfortable with myself as, like, a single and approachable individual. I just have fun on them. I think it's funny to talk to people, like the vulgar messages you get are sometimes hilarious to clap back at...I definitely used it as an entertainment source. It's like scrolling through Instagram almost. I will just check it and will look at the messages that have been sent to me, and then I'll just exit the app. That'll be my satisfaction.

As evidenced in the accounts of Cassidy and Michelle, it is suggested that participants utilized MDAs as a procrastination tool to diversify their daily mobile application usage.

### **Minor Theme: Exploring After a Breakup**

A minor theme of downloading an MDA after a breakup emerged for four participants. Participants described breaking up and navigating meeting a new partner during COVID-19. For example, Alexandria described using MDAs during the pandemic, "because there was a breakup during this time as well with a long-distance and long-term relationship that had dissolved, returned, and then dissolved again." Similarly, Emma shared her experience of downloading an MDA after a breakup to "try to meet new people." Along the same lines, Sophie highlighted her breakup experience by sharing, "I broke up with my now ex-boyfriend in February of 2020

during the start of the pandemic. So, then I redownloaded Tinder and the apps right before the pandemic.” The theme of exploring after a breakup was noted in Michelle’s testimony. She explained:

I had gotten out of a very long-term relationship. I really downloaded it [MDAs] because I was single again and had not been flirting with people or talking to people; so, just, like, basically putting myself out there as, like, a new person. I found that downloading the apps helped introduce me to that world in a time when the world didn’t let me go out and do what other people would do when they get out of a long-term relationship. That was really the only essence I got out of feeling like a single person again. It was also like feeling single with my single friends, too...So, it was just nice to have someone to talk to after getting out of a relationship, like just someone to chat with and someone with similar interests and stuff...I was just so confused as to what it meant to be single.

Michelle’s account highlights that downloading MDAs after a breakup helped her connect with other single individuals. It is apparent through the experiences of these participants that downloading MDAs after a breakup during the pandemic ultimately provided an opportunity for increased connection with potential partners since there were limited ways to meet others due to social distancing regulations.

### **Minor Theme: Increasing Self-Esteem**

Four participants discussed downloading an MDA to increase their self-esteem. However, one participant, Emma, believed MDAs would decrease her self-esteem. She highlighted, “I was really nervous to download Hinge because I was worried if no one would like me. Like, what if I don’t attract anyone? I thought it would actually hurt my self-esteem.” On the other hand, participants also noted the ways in which they felt MDAs enhanced their self-esteem. For

example, Nicole felt that downloading MDAs would increase her self-esteem and stated, “It is always nice to get some attention.” Similarly, Lauren described, “Because you kind of get that rush when you’re talking to someone new, and their name pops up on your screen. So, that definitely makes you feel good.” The notion of improving self-esteem was also echoed in Michelle’s response, when she stated, “I liked those initial compliments.” In addition, Cassidy detailed:

I definitely relied on the dating apps in some way during that time to, like, increase my self-esteem in multiple ways...I was, like, sitting around like ensuring myself that I can still talk to people and that I’m, like, fun and whatever.

The accounts of Nicole, Lauren, Michelle, and Cassidy highlight how they were looking to increase their self-esteem by getting attention through talking to someone new and receiving compliments.

#### **Area of Focus Five: MDA Use During COVID-19 – Patterns**

All of the participants described their experiences using MDAs during COVID-19, which resulted in the emergence of major and minor themes regarding patterns. Topics that were assessed within the interview questions and resulted in patterns among users encompassed daily time usage on MDAs and current user activity status. Specifically, major themes included using MDAs daily between 15 to 30 minutes and deleting or pausing an MDA account. A minor theme included using MDAs daily for more than 30 minutes. In addition, Hinge and Bumble were the most commonly used MDAs.

#### **Major Theme: Using MDAs Daily Between 15 to 30 Minutes**

Five participants discussed using MDAs daily between 15 to 30 minutes. For example, Nicole reported using them for “only about a half an hour.” In addition, other participants such as

Emma, Cassidy, Lauren, and Phoebe described being on them ranging from 15 to 30 minutes. Lauren added, “If I was uninterested or didn’t find anyone intriguing, I exited out and went to Instagram.” Through Lauren’s statement, she noted exiting out of the MDA and finding a different social media platform to use.

### **Minor Theme: Using MDAs Daily for More Than 30 Minutes**

Three participants described using MDAs daily for more than 30 minutes. Specifically, Sophie reported that her usage was between 30 minutes to an hour. Michelle expanded on her usage of MDAs and explained:

Initially, I was spending, like, a good amount of time on Tinder because I felt like I was experiencing being single for the first time and at, like, a very weird time. I was on Tinder for, like, at least an hour a day, whether it just be, like, even sitting in bed at night...Now, it is definitely significantly less time.

Another participant, Alexandria, described her initial increased MDA usage during COVID-19 and stated:

I would say I remember the months of September and October being very high-volume usage, probably spending three to four hours a day on them. Then, the usage decreased. In April of 2021, the usage increased again, but that was largely a product of me working overnights, having access to them on my phone, and being able to use them when I was working. Then, it was, like, close to four to five hours a day.

Based on the accounts of these participants, their daily MDA usage ranged from more than 30 minutes and up to 5 hours.

### **Major Theme: Deleting or Pausing an MDA Account**

Participants discussed whether they were currently using MDAs. The majority of the participants were not current users. However, there were three current users: Michelle, Phoebe, and Lauren. The other five women reported deleting or pausing their MDA accounts. For example, Nicole stated:

I think I am paused on Hinge, and I just haven't opened Bumble in a couple of months.

This summer we've been going out again, so I just kind of put my time into meeting people in person. I was also out of the country and didn't have, like, Internet.

Nicole highlighted that she had it paused due to being out of the country. Another participant, Emma, also paused her account during COVID-19. She shared:

I have it paused right now actually just because it's very overwhelming...I would, like, turn it on for a week and turn it off for a week. I was travelling last week, so I paused it and still have it paused. I am waiting until I move to unpause it.

Emma had it paused because she was planning on moving.

Ultimately, three participants deleted their MDA accounts due to finding a boyfriend. Specifically, Alexandria found a boyfriend using an MDA. Similarly, Sophie stated, "I met someone off the dating app during a global pandemic, definitely one of a kind." Another participant, Cassidy, mentioned, "I actually met my boyfriend, like, a non-dating app way in October." Cassidy's experience differed from those of Alexandria and Michelle in that she met her boyfriend outside of MDAs.

#### **Area of Focus Six: MDA Use During COVID-19 – Interactions and Communications**

Participants described the type of modality they used to communicate with partners on MDAs. Various forms of communication were noted throughout participants' interviews. Major

themes emerged such as chatting on the MDA platform, texting, calling or video chatting, and meeting offline.

### **Major Theme: Chatting on the MDA Platform**

First and foremost, it was evident that all participants used the chat medium on the MDA platform as a way to communicate with potential partners. Specifically, Phoebe, Lauren, and Cassidy mentioned chatting with others on an MDA platform. In addition, Sophie recalled her process of talking with matches by initially chatting and then exchanging phone numbers.

Another concept that emerged from interviews is that participants engaged in chatting more during the pandemic to get to know their matches and determinate overall compatibility. For instance, Nicole mentioned:

I really only used the chat feature... I feel like I definitely wanted to chat with them longer before meeting them in person rather than before the pandemic where I would just, like, send a couple messages and be like, "hey, let's go for a drink."

Here, Nicole highlighted that she spent more time chatting with potential partners on MDAs during the pandemic. Similarly, Michelle would often communicate with partners to get to know them better. After she felt comfortable talking to someone for a period of time, she would give out her phone number. Michelle described how she would chat with partners on MDA platforms and stated:

We would start chatting on the app. If he, like, immediately asked to talk outside of the app, then, like, I was immediately uninterested. I want to get a feel for the person within the app before I give them any sort of, like, external personal communications like social media, cell phone, anything like that. Then usually, like, after some rapport is built, I will give them my number. When a good conversation is happening, that person would be,

like, “Here, just text me.” I feel like I need to chat more before I feel ready to go out and meet someone.

As Michelle explained, she felt more comfortable meeting someone if they talked and maintained conversation for a period of time on an MDA platform. However, another participant, Emma, described her experience talking with others and ensured that she did not spend too much time conversing through the chat feature. She said, “We start by chatting and having a conversation. I like to talk not, like, a crazy amount because you still need stuff to talk about on a date.” Emma echoed a similar sentiment in regard to becoming less interested if a match asked for her personal number and/or to take her out on a date. More specifically, Emma stated:

There are some guys who ask you out, like, right away and that’s kind of off-putting to me. I’m like why would I give up a whole night to go spend a few hours with you when I know nothing about you? A guy asked me out just a few days ago after maybe, like, four exchanges. I just didn’t know him and kind of ghosted him. I don’t think I owed him anything. I think if we had gone on a date then I would owe you something. Other guys we’ve, like, talked for two to three days on the app. Then they say, “I’d love to take you out for coffee, here’s my phone number.”

Emma highlighted her discomfort with being asked out by a match before getting to know the person. She also described the notion of ghosting when this happened since she felt as if she did not owe her match anything. However, Emma did feel comfortable distributing her phone number to a match after they talked for multiple days. Alexandria echoed this sentiment by stating:

We would start off with back-and-forth messages within the app. Then it would get to the point where somebody or myself would announce that the app was something that they

didn't want to rely on, didn't use as often, or didn't check in on enough. A phone number exchange would be the next appropriate step in like our getting to know each other.

It is apparent that participants felt more comfortable giving out their phone numbers after chatting for multiple days on the MDA platforms.

### **Major Theme: Texting**

Texting was a theme that was communicated consistently throughout the interviews. After talking on the platform, participants shared that they would give their number to individuals with whom they felt a connection. Amongst all interviews, five participants shared that they moved to text in terms of the next step in their communication process. Those five participants were Michelle, Alexandria, Lauren, Emma, and Sophie. Additionally, Lauren stated that she would "harp on texting to make sure that I actually like this person."

### **Major Theme: Calling or Video Chatting**

Five participants shared their experiences using the FaceTime feature to talk to individuals on MDAs. Specifically, Cassidy, Emma, and Nicole reported only using FaceTime once. Alexandria mentioned that she video chatted with at least seven individuals. She was in favor of video chatting with others and described her thoughts regarding the importance of calling someone:

At some point there would be a video chat, definitely always before meeting in person. Sometimes it would just be the video chat and it would never go to in person...It would always be a FaceTime before meeting in person if it went that far. I think it's a good way to gauge your immediate chemistry and compatibility. If you have a good Facetime call, I think it's a good assessment for knowing how somebody speaks, makes eye contact, knowing, like, what their smile looks like in real time. So, I think it's a really good

assessment of dating compatibility. I think it should always be the precursor to meeting in person.

Alexandria highlighted that using FaceTime was a requirement for her prior to meeting a match in person. She felt that using FaceTime with a match was an accurate assessment of overall chemistry and compatibility. Another participant, Michelle, used the FaceTime feature with three individuals. She felt similar to Alexandria in that video chatting allowed her the opportunity to get to know a potential partner on a deeper level. Michelle said, "I think it helps bring the nerves off of it and be like, 'can we communicate face to face?'" Following this, she noted the importance of seeing someone on a live video. Specifically, Michelle stated, "I just think it helps with the first date anxiety. I feel like the voice, too, just makes things easier, like hearing what they sound like gives you a better picture of who they are." Moreover, Michelle and Alexandria highlighted the idea that scheduling a FaceTime with someone is important in that it mirrors an in-person interaction more so than chatting on an MDA platform or texting.

One participant, Lauren, did not use FaceTime during the pandemic. However, she mentioned that she would have been open to using that modality to communicate with individuals if she felt a deeper connection while chatting with potential partners on MDA platforms. She recalled, "It's kind of, like, a progression like the more you get comfortable with someone, the more willing you are to call and FaceTime them." As such, it became apparent in the interview process that using FaceTime with a potential match was an important aspect for the participants after comfort was established through chatting and texting.

### **Major Theme: Meeting Offline**

Six participants felt comfortable with meeting individuals in person. Specifically, Cassidy reported meeting one individual. Additionally, Nicole mentioned meeting in person with two

individuals. Emma also met two individuals and described, “I only met two because I am really picky about who I actually meet face to face.” Furthermore, Lauren and Michelle stated they had met three individuals. Sophie recalled meeting five to six individuals who were either acquaintances or friends of friends. After meeting up with a match, Sophie began to date him. Similarly, Alexandria met seven people and reported meeting her current partner on an MDA.

After meeting others online, two participants shared how they felt. The notion of connections “fizzling” and using MDA matches as “fillers” were described. Nicole recalled meeting one guy six times by stating:

Things just fizzled. We just didn’t have a lot to talk about. I think it was one of those where we both just wanted someone to hang out with during pandemic times. And then, once people were vaccinated and things were opening up again, we were like, “Well, I am going to meet someone else,” which sounds so awful. It felt like we were both fizzling out on purpose. I don’t think I have ever had it be that mutual pre-pandemic.

Similarly, Michelle found comfort in meeting and talking with individuals for multiple months, despite not being the best long-term match. For example, she stated:

I feel like I’ve always known whoever I’m taking to like this person isn’t the person for me, but it’s been nice to have someone to, like, chit chat with, especially after going from having someone of that, like, level of intimacy for so long. So, it’s, like, rude of me to call them fillers, but that’s kind of how I take it and how I use dating apps.

In other words, Michelle described how she continued socializing with individuals to occupy her time and fill her need for intimacy, although she knew that they would not be compatible long-term.

### **Area of Focus Seven: MDA Use During COVID-19 – Safety Precautions**

While salient for all participants, safety precautions were considered due to the CDC guidelines during COVID-19. Each participant described their experiences using MDAs, particularly noting how they navigated dating with COVID-19 safety precautions. Various themes emerged, such as considering safety precautions, screening for COVID-19 safety, sensing political stances and values, being cautious regarding others' safety, taking safety precautions when meeting matches, as well as getting vaccinated and navigating comfort levels.

#### **Major Theme: Considering Safety Precautions**

Every participant noted that COVID-19 impacted their online and offline MDA use in terms of connecting with other individuals. Multiple participants mentioned having reservations about matching and meeting others. For example, Alexandria described:

It just seemed messy and complicated to really try to attempt to date anybody in real life during this time...People weren't meeting up in person because it wasn't deemed safe.

There were concerns for going out in public, being in a restaurant or coffee shop, and the transmission of potentially acquiring it from another individual within the space that we were in. So, it was a public health concern. It was a big obstacle to determine what was going to be a safe place to go and a safe date for us to go on. Also, I had been concerned that if I was seeing people on dating apps that were also going out in real life and meeting people in person, possibly contracting the virus or being a super-spreader.

As Alexandria explained, she was hesitant to meet others due to COVID-19. Similarly, Phoebe shared her concern regarding transmitting COVID-19 and stated, "I think the safety concern was just being that no one knew what the virus was, the spreading of it, and what would happen when

you got it.” Phoebe mentioned how she remained in contact with a small number of individuals to reduce the transmission of COVID-19. She added:

I think creating your bubble and staying in your bubble was comfortable. Anybody outside of that bubble was not comfortable. So, like, going and meeting somebody fully that I do not know was, like, something I was, like, not willing to risk.

Often, the notion of transmissibility was highlighted by the participants in relation to the importance of considering COVID-19.

Additionally, many participants expressed how they took COVID-19 precautions seriously. For instance, Cassidy described how she was hesitant to meet anyone since she was “trying to be very COVID aware.” Other participants, such as Lauren, Nicole, Sophie, and Emma, took COVID-19 precautions. Specifically, Emma noted that she would look for a vaccination badge on Hinge when she was matching and talking with individuals. Another participant, Michelle, referenced how she would have been upset if the person she met did not follow the CDC COVID-19 guidelines. As evidenced in the interviews, participants described the importance of considering COVID-19 safety precautions.

### **Major Theme: Screening for COVID-19 Safety**

Five participants referenced that they would screen for the ways in which their MDA matches considered COVID-19 safety. Participants noted screening for vaccinations, as well as assessing for specific safety precautions taken to prevent potential exposures to the virus. For example, Lauren would screen to see if her matches had taken COVID-19 precautions that were in alignment with hers. In addition, many participants initially expressed discussing COVID-19 with MDA matches. Specifically, in Nicole’s words:

It was such an odd question to ask people, like, “How much are you socially distancing?” It’s something that we normally don’t ask, so it was quite a unique time. I would get a feel for how much they are socially distancing or how seriously they are taking this pandemic. I definitely wasn’t going to see people if they were just kind of going out and partying. I definitely screened more using the chat before I met people in person because I wanted to limit my exposure.

What is apparent here is that Nicole implemented a screening procedure by asking matches about the ways in which they practiced social distancing. Similarly, Alexandria shared that she asked about socially distancing during the initial communication stages with a match. She considered various questions, stating, “How are you staying safe? Do you know anybody who has been testing positive? What is your living situation like? Are there any people in your immediate social circle who are immunocompromised?” Along the same lines, Sophie mentioned that she would have conversations with people she matched with regarding whether the individual or anyone they know has had COVID-19 recently, as well as assessed if they felt sick. Furthermore, Emma recalled an instance where she double-checked with an MDA match that she met to ensure that he was vaccinated. Again, the element of screening is apparent here in that participants would ensure that their matches took COVID-19 precautions that were in alignment with their lifestyle.

### **Major Theme: Sensing Political Stances and Values**

A major theme that emerged from the initial COVID-19 screening revolved around individuals’ political stances and personal values. Five participants noted that they assessed and identified their matches’ personal beliefs and values based on their conversation regarding COVID-19. For example, Nicole voiced:

I feel like if I talked to them long enough and, like, asked them the kind of questions, you could tell even, like, subtly politically where they stood, especially I feel like once the capital riots happened. I feel like it was so much easier to have conversations and figure out where people were on the spectrum of, like, social distancing and how they felt about the pandemic. So, I definitely went on fewer dates because I was doing that screening.

Here, Nicole evaluated her MDA matches by asking questions about COVID-19. She suggested that it was easier to engage in these discussions based on the 2021 United States Capitol riot attack, which led to Nicole noticing her matches' political stances. Also, Michelle elaborated on her experience as she assessed her matches' political beliefs and personal values. It was important for her to pursue others who were vaccinated, as they would have taken similar COVID-19 precautions as she did. Michelle stated:

If you're not vaccinated, I feel like we probably won't get along because then I'll just push you a little. I feel like generally the guys I meet up with, like, are very liberal, always wear masks, and are very polite. I feel like if I encounter someone that would, like, talk shit about a mask, I'd be like, "alright, bye."

As Michelle explained, she met individuals who were politically liberal and wore masks. She added:

We would talk about the Black Lives Matter movement and the protests downtown. We talked shit about political leaders and joked about the current events that were happening. Sometimes I would feel like guys would even test me and be, like, testing to see if I am, like, pro or anti whatever...I feel like it is kind of more overt how people show their affiliation. If we are going to go on a date, I want to make sure I don't think your rights and beliefs hurt other people.

Michelle's experience highlighted that she engaged in discussions about political events during the COVID-19 pandemic. Similarly, Alexandria shared that her screening "led to many conversations about politics and other very uncomfortable things." The participants' unique screening protocol for COVID-19 led to political discussions.

Vaccines were also an element that two participants spoke about regarding screening others, which led to them noticing patterns between vaccination status and political beliefs. Specifically, Emma shared, "If someone isn't vaccinated, first of all, their values do not align with mine. I would not want to go on a date with them because of that." Similarly, Lauren offered the following:

It's very interesting because there is a correlation between their political views and whether they are vaccinated. So, it kind of just eliminates those people. I care about if you are vaccinated and want you to be vaccinated. It's pretty selfish if you are not, in my opinion, which is really sad. Your political views should not impact something scientific, like it is just wrong.

Through these accounts, it was noted that vaccines were given great magnitude in terms of participants' comfort levels in meeting other individuals.

### **Major Theme: Being Cautious Regarding Others' Safety**

Many participants shared that they were cautious of COVID-19 in protecting others' safety. Four participants mentioned that they were conscious of their family's health. For Alexandria, she had older parents and was more worried about their safety than her own. She stated, "I was concerned of being an asymptomatic carrier and bringing it home to my parents. I do live with my parents as well." Additionally, Nicole mentioned she had an immunocompromised parent and took that into consideration before meeting others. Evidence of

similar experiences was referenced by Lauren, as she saw her parents, as well as Emma, who lived with her parents.

Two participants were concerned about their work environment. For instance, Alexandria stated, “I was fearful about my employment status given that I was an essential worker during this time.” Likewise, Cassidy reported being fearful of acquiring COVID-19 since she was a nanny with a pregnant mother for a family.

Three interviewees spoke about their concerns regarding transmitting the virus to their roommates. Lauren stated, “I did not want to bring it back to my roommates.” Another example was noteworthy when Cassidy recalled, “My roommate was very worried about COVID and had high COVID anxiety.” Additionally, Phoebe noted her concern regarding the transmission of COVID-19 to her roommates. As such, multiple participants addressed considering how their actions impacted their living spaces and roommates.

### **Major Theme: Taking Safety Precautions When Meeting Matches**

Although not all participants met matches during COVID-19, a majority of participants who met an MDA match in person described their experiences and specified the safety precautions they took. Common places to meet were bars, restaurants, and coffee shops. Outdoor activities that participants reported engaging in with MDA dates included going for a walk, playing tennis, swimming in a lake, hiking, and fishing. Five participants, specifically Nicole, Sophie, Michelle, Alexandria, and Lauren, also noted taking precautions to wear a mask.

Many participants discussed their experiences meeting others in person. For example, it was important for Michelle and Alexandria to meet their dates outside and in a public place. Sophie shared a similar experience as she stated, “I tried to find more, like, outdoor activity things to do.” Furthermore, Nicole described what it was like for her to meet others and stated:

We wore masks when we walked in and then didn't wear them when we were, like, sitting. For the first guy, we met at a bar that was, like, one of the only ones open. This was February of 2021... There was one other person in May that I went out to dinner with, and we just indoor dined... We did outdoor things like go for a walk, play tennis, and things like that. So, I definitely favored outdoor things, if possible.

Here, Nicole highlighted initially wearing masks in person and engaging in outdoor activities.

Additionally, Lauren discussed that it was important on her date for them "to be outside because I don't want to be exposed to anything." Following this, Lauren referenced that she would not hug her MDA dates since she feared that they were lying about their COVID-19 safety precautions. Along the same lines, Cassidy mentioned using COVID-19 as an excuse to avoid various activities. She shared:

He was like, "Oh, do you want to come up?" I was like, "I'm just really worried about COVID." I would have actually gone up, but I relied on COVID as an excuse. No one could really argue that. I definitely used it as more of a way to not engage with people that I didn't want to.

Cassidy's experience suggests that she justified declining invitations from others by stating she was not comfortable due to COVID-19.

### **Major Theme: Getting Vaccinated and Navigating Comfort Levels**

Nicole, Phoebe, Michelle, Lauren, and Emma referenced the importance of their own and others' vaccination status that impacted their comfort in meeting MDA matches in person. Specifically, Michelle voiced that she only wanted to meet people who received the COVID-19 vaccine. Likewise, Lauren highlighted noticing a change in her dating behavior when she became vaccinated and met others who were also vaccinated. She felt more comfortable hugging

her date, sitting next to him, and sharing drinks. In addition, Emma discussed her experience and remarked:

I didn't want to download Hinge before the CDC came out with [a statement] that vaccinated people can be unmasked in a room together. But now with the vaccine, it's a little different. I drove my date home. We ate indoors because it was raining. We shared guacamole. We didn't really take too many COVID precautions because I knew he was vaccinated.

An interesting element to Emma's transcript is that she underlined the importance of receiving the vaccine and dating others who were vaccinated.

Two participants referenced receiving the vaccine and being open to seeing others who were not vaccinated. For Nicole, she noted that obtaining the COVID-19 vaccine allowed her to venture out. She expressed feeling more comfortable meeting people in person and stated:

If they chose to not get vaccinated, then that is really just putting themselves at risk and they are choosing to go out and about unvaccinated. That is more their choice. Whereas if they are vaccinated, I don't have to worry about it.

What is apparent here is that Nicole felt comfortable meeting unvaccinated matches since she felt protected after receiving the COVID-19 vaccine. She also highlighted that she could not control the decision of her MDA match regarding whether they would receive the vaccine. Phoebe shared a similar sentiment regarding vaccination status and said, "It's like a totally different mindset with vaccinations." More specifically, she discussed feeling more comfortable meeting people and going places because COVID-19 "is not an excuse anymore." After Phoebe received the COVID-19 vaccine, she added, "I would have wanted to be with somebody who is vaccinated, but I am not going to sit there and micromanage anybody. It's your life." Similar to

Nicole, Phoebe desired to meet vaccinated partners but remained open to meeting MDA matches even if they chose not to receive the vaccine.

### **Area of Focus Eight: MDA Use During COVID-19 – Intimate Experiences**

Multiple participants shared their sexual and intimate experiences with MDA matches. For many participants, ensuring that they were vaccinated, as well as their MDA match, allowed for an increased sense of openness to engage in sexual behaviors. Some participants engaged while others mentioned that they were open to the idea of being intimate with a partner on an MDA. A theme of engaging or being open to intimate experiences emerged.

### **Major Theme: Engaging in and/or Being Open-Minded to Intimate and Sexual Experiences**

Six participants referenced intimate behaviors they engaged in with matches on an MDA. Specifically, two participants mentioned being open to engaging in intimate experiences after receiving the COVID-19 vaccine. For example, Emma would have felt more comfortable participating in intimate experiences depending on her MDA matches' vaccination status. She discussed being open to engaging in intimate experiences after a couple of dates and said, "If they touched me, and I knew they were vaccinated and had not gotten off a plane from an area that was high in cases recently, then, yes, I would let it happen." Lauren shared a similar feeling regarding her vaccination status. She described:

Before my full vaccination, I acted completely different than how I did after. Before, I didn't touch anyone, like share drinks, hug, and was definitely not putting my mouth on anybody else's. But after, like, this past date, it went pretty well. We ended up kissing. I was, like, totally fine with that.

As Lauren said, receiving the COVID-19 vaccine increased her comfort with hugging and kissing MDA matches.

Several women described their experiences in-depth regarding engaging in intimate experiences with MDA matches. For instance, Alexandria stated, “I only engaged in episodes of kissing from the September through April men that I had met.” She added that there was less comfort during this time “due to the consequences of COVID.” Nicole shared a similar sentiment about being hesitant, although she still engaged in sexual experiences after she felt an increased sense of comfort with her MDA partner. Nicole explained:

The one I had seen for six dates, it got to the point where if I am seeing them often enough, I feel like hanging out without a mask is almost the same as kissing and stuff. I went about that the same as normal dating. A couple dates in, we had kissed and made out. The last couple of dates we hooked up and did oral and not intercourse...Once we hang out in person, it was my normal dating pre-pandemic.

As Nicole noted, seeing her MDA match in person multiple times during COVID-19 led to an increased sense of comfort in kissing, making out, and participating in oral sex. In addition, Michelle engaged in intimate experiences with MDA matches during the pandemic. She instilled trust in the fact that the individuals she met took COVID-19 safety precautions. Michelle described a specific sexual experience by noting:

I went to his house the third time and we did have protected sex. I feel like generally again, I don't think I was thinking about COVID. It was just kind of like how you were when you hangout. I knew this guy wasn't doing anything, like he told me what he was doing every day. I think it just goes back to, like, who I thought they were as individuals,

and that, like, I just trusted in the fact that they were being responsible...I did hug them when I met them, which I feel like generally was not the COVID way.

Michelle's account highlights that she engaged in sex with an individual she met on an MDA during the pandemic. Similar to Michelle, Sophie trusted the individuals that she met on MDAs because they took COVID-19 precautions. She engaged in various intimate experiences and described "kissing, holding hands, things like that, and not so much sexual intercourse." The participants' accounts suggest an increased sense of being open to sexual experiences during the pandemic depended upon their trust in others' COVID-19 safety precautions.

#### **Area of Focus Nine: MDA Use During COVID-19 – Attitudes and Beliefs**

Many participants noted their attitudes towards MDAs. A majority of participants discussed being in favor of using MDAs. In particular, they described their beliefs and thoughts regarding MDA usage during and after the pandemic. Two major themes emerged regarding the belief that dating has changed on MDAs and personal dating behaviors have changed on MDAs.

#### **Major Theme: Believe That Dating Has Changed on MDAs**

All eight participants described that they believed that dating has changed on MDAs due to COVID-19. Furthermore, participants described in depth what their beliefs were and how they noticed the changes. Some participants noted the frustrations that they felt while being on MDAs. For instance, Alexandria explained, "They can be misused, and people can lie about various parts of themselves." Similarly, Nicole and Cassidy shared how they felt "frustrated," "annoyed," "exhausted," and "tired" while dating during the pandemic. Due to business closures and CDC guidelines, many people struggled with social interactions. Nicole shared:

It truly made it harder for people to socialize, and people feel more uncomfortable about it now. You, like, lost your touch for a while. There were so many memes and jokes

going around, like, once people were vaccinated and how awkward it is to try to date again because you kind of forgot how to converse with people in person and with no mask. So, there are these barriers now that I feel like are harder to overcome and be open with people. I feel like we spent so much time closed off. Now we are awkward and thrown off our game since we have not dated or conversed with people for a while.

As Nicole said, she believed that COVID-19 led to difficulties with socializing, specifically when dating.

Another point that participants highlighted was the increase of ghosting during COVID-19 when talking to matches on MDAs. For instance, Nicole described, “It was easier to ghost people or let things fizzle out because we were already socially distanced. When you don’t meet someone in person, it is just easier to not respond to chats and you don’t feel bad.” The notion of ghosting and interactions naturally subsiding on MDAs was also noted by Alexandria. She described how her frequency of contact with MDA matches diminished frequently. She added, “There’s not a lot of accountability. You know, it’s not even a real person. There’s no soul there until you get to know them and are actually in person with them.” Both Alexandria and Nicole noted that ghosting was common due to not meeting MDA matches in person specifically during the pandemic.

Many participants had an optimistic attitude towards using various MDAs. Participants felt that MDAs were something that needed to be “embraced” and attributable to the effects of “loneliness” during COVID-19. Specifically, Lauren described, “I think a lot of people realized that they were lonely for a long time.” Along the same lines, Michelle explained that using MDAs “should be embraced...because we’re social creatures.” She added, “When we can’t just go and meet people at a bar, we overcome and find ways to meet people.” Following this,

Michelle stated, “So many people were just so lonely for so long because of the pandemic.” She described that it was common to use MDAs during COVID-19 because “All these people are out here doing exactly what I’m doing right now.” Sophie shared a similar sentiment regarding loneliness and reported, “I think the biggest thing that was different with being on the apps in COVID was that everyone was alone. People craved connection, but at the same time our world stopped, and those connections were not easy to form.” Sophie also highlighted that individuals craved attention during COVID-19, which resulted in people downloading MDAs to form connections. After downloading MDAs, Sophie found a partner on a dating platform and felt optimistic about using them. Similarly, Alexandria met her current partner on an MDA and described that feelings of loneliness during the pandemic shifted the ways in which individuals desired to be with a partner, especially during periods of lockdown and social isolation.

Alexandria explained:

I think that people who were not partnered up prior to the pandemic and who wanted to be, I say that with a big asterisk, and continue to want to be during the time of this experience, have learned that they do want to be in a relationship compared to the way before.

An interesting element to Alexandria’s transcript is that she underlined an increase of longing for partnership if someone desired a relationship prior to COVID-19. In terms of loneliness, she mentioned:

People were either really feeling emotionally starved or physically starved, or some combination of both of those. People are going to either use them for the best intentions and to find their person because they would not want to go through the next lockdown alone...Now they’re like, “fuck, like, I was really lonely during that time and could have

really used a girlfriend, boyfriend, or just even, like, a steady partner in some capacity.”

They missed it, or they craved it for the first time ever.

Here, Alexandria emphasized that individuals felt an increased craving to be in a relationship during COVID-19. In addition, Cassidy felt that people were lonely and isolated during the pandemic. She described, “People were trying to figure out if it’s a COVID thing or, like, a real thing. Like, oh, is it just for COVID because we were all looking for someone to be with? Were we just lonely?” The element of loneliness that ran through participants’ commentary suggests that individuals were open to using MDAs throughout the pandemic to find connection.

A theme that was noted throughout the interviews was a decreased stigma regarding MDA usage during COVID-19. Furthermore, Emma said, “I also think like once you meet someone, who cares how you met?” She followed up and stated, “I think all it does is really expand your pool with people you could meet.” Along the same lines, Sophie discussed, “Everyone is using the apps to meet during COVID.” Another participant, Michelle, described:

I definitely feel like people are generally more comfortable with dating apps versus a year ago. I feel like they don’t have as much of, like, a dirty stigma. I feel like with the whole, like, the “oh, you met them online thing” that we all grew up with was so tacky sounding. Whereas I feel like COVID may have helped really normalize that by being like, “Hey, everyone is on dating apps, and everyone does it.” We should be open about it, and it is not embarrassing...It has really helped to just normalize like this is how people of our generation are learning to interact and engage with each other.

Essentially, Michelle highlighted that the use of MDAs became normalized during COVID-19.

Likewise, Lauren felt that using MDAs was becoming a “norm” by explaining:

I definitely think it's a norm, like, if you meet your significant other on a dating app. If I was, like, with ten couples, I bet 6 out of the 10 would have met out on an app. It's like saying, "Oh well, I was on it all during COVID, why would I stop now and go back to, like, meeting people in the wild?" I have a smorgasbord of people to choose from, like you have given me 50 people to choose from.

Here one can see that Lauren preferred to use MDAs since they were common, and they offered her a variety of options to match with others. Additionally, Alexandria noted, "People are understanding the power of what they can use." More specifically, she stated, "I think people were definitely downloading way more. They were downloading not just one, but they were spreading their attention among three, four, or five." Alexandria highlighted that more individuals downloaded and increased the number of MDA platforms they used during the pandemic.

In commenting on the ways in which dating through an MDA platform has changed during COVID-19, participants discussed an increased feeling of cautiousness when meeting matches. Sophie described, "I think that people are a lot more cautious." Similarly, Emma reported:

I think since COVID, people are a little bit more careful when meeting strangers. I think maybe people might be a little more cautious when meeting up with a stranger. Like, you might have to really make sure that they are someone worth meeting before going, especially more so than before COVID...I think COVID just brought out a lot about people's values, like how much they were willing to give up to keep others safe and how much they weren't.

As Emma explained, she highlighted an increased feeling of cautiousness during COVID-19. Furthermore, Michelle shared a similar sentiment regarding feeling cautious and described how people had more “anxiety” when meeting others. In terms of being cautious, Nicole noticed that it was common to “ask about people’s comfort level before meeting up, if they get COVID tested, or were vaccinated.” In addition, Nicole shared:

Asking about COVID safety precautions almost mirrors the consent conversation. I am wondering if, like, sexual consent is going to be easier to talk about in the future because of it. They are very sensitive questions, especially because it has become so political.

As Nicole explained, she suggested that an increase in discussions regarding COVID-19 safety precautions could ease conversations about sexual consent. Overall, the theme of believing that dating has changed on MDAs because of COVID-19 was salient in participants’ interviews.

### **Major Theme: Personal Dating Behaviors Have Changed on MDAs**

Participants described the specific changes in their use of MDAs. Specifically, Nicole and Michelle discussed an increase in their use of the chat function. Furthermore, Lauren also discussed chatting with MDA matches and explained, “I really do harp on texting and making sure that I actually like this person that I am going to spend time with, and that I want to spend time with them.” This suggests that Lauren prioritized conversing with her MDA matches before meeting them in person during COVID-19.

In terms of general MDA usage, Alexandria stated, “I had definitely used them more during COVID than I ever had by almost three times as long. Because I think in the past, I was only ever on them for, like, three months at a time.” In addition, Lauren reported an increase in her MDA usage and shared, “I am probably on it more often now than I was before.” Likewise, Phoebe described being on MDAs more during lockdown as compared to after the vaccines were

available. Contrasting with the theme of increased usage of MDAs during COVID-19, Cassidy's account highlighted a decreased usage of MDAs. She shared:

I didn't really meet up with a lot of people. I didn't even, like, FaceTime with a lot of people. I was kind of just, like, using the app to, like, take 20 minutes out of the day to not be on Instagram, Facebook, or Twitter. It was just another app in the rotation on my phone.

However, Cassidy's account differed from the majority of other participants, as it was more common to use MDAs during COVID-19.

Some participants mentioned adverse changes in their feelings, behaviors, and personalities when using MDAs during the pandemic. Specifically, Nicole pointed out that it "wasn't as fun anymore." She discussed feeling obligated to go on MDAs by sharing:

Pre-pandemic it was something I would do to fill some free time. Then it became obligatory during the pandemic because I felt that it was the only way I could meet people and look for a relationship. It was just annoying because it felt more obligatory.

In addition, Lauren noticed internal changes when talking to others on MDAs and meeting people in person during the pandemic. She limited her typical interactions of sharing food and hugging others. Furthermore, Lauren said, "People weren't able to see, like, my full personality because, like, physical touch is one of my love languages. I felt like I was just really reserved and wasn't my full self." It is suggested that individuals who preferred physical intimacy were forced to change the ways in which they relate to others.

Other participants noted a positive shift in their mindset when using MDAs during COVID-19. Compared to before the pandemic, Emma described being more open to using MDAs. She explained, "It's for sure not as icky as I thought it would be...But now I'm realizing

that, like, it's not so important how you meet them but it's just the fact that you do meet them.”

Emma highlighted that she became more open to the idea of using MDAs during the pandemic to meet a potential partner. This emphasis on shifting mindset is echoed in Sophie's transcript, as she described a shift in her mindset in terms of being intentional when she searched for a partner on MDAs. She expressed:

I realized what I was looking for and began dating more intentionally. I was very upfront with my suitors about what I was looking for. Pre-COVID, I definitely had more of a “let's just see what happens” type of mindset. I really think if it wasn't for COVID, I would have taken that first path and just thrown caution to the wind and kept being a wild soul. I think because of that intentionality I was able to find my current partner on Tinder and have the insight to form the awesome relationship we have now, amidst a pandemic.

Here, Sophie highlighted that she changed her mindset from dating casually to dating intentionally. The accounts of Emma and Sophie suggest that their positive shifts in outlook during the pandemic furthered their ability to be open and intentional when using MDAs.

### **Summary**

In total, there were nine areas of focus, 22 major themes, and three minor themes. Specifically, in regard to MDA Use Pre-COVID-19, three areas of focus were coded: Motivations, Patterns, and Attitudes. The first area of focus was Motivations which included a major theme of Sought a Relationship. The second area of focus was Patterns which included a major theme of Deleted Then Redownloaded. The third area of focus was Attitudes which included a major theme of Positive Thoughts and Experiences.

Furthermore, in regard to MDA Use During COVID-19, six areas of focus were pulled from the data: Motivations, Patterns, Interactions and Communications, Safety Precautions,

Intimate Experiences, and Attitudes and Beliefs. The fourth area of focus was Motivations which included major themes of Finding a Relationship, Being Able to Connect With Others, Improving Social Skills, Being Entertained and Passing the Time, as well as minor themes of Exploring After a Breakup and Increasing Self-Esteem. The fifth area of focus was Patterns which included major themes of Using MDAs Daily Between 15 to 30 Minutes and Deleting or Pausing an MDA Account, as well as a minor theme of Using MDAs Daily for More Than 30 Minutes. The sixth area of focus was Interactions and Communications which included major themes of Chatting on the MDA Platform, Texting, Calling or Video Chatting, and Meeting Offline. The seventh area of focus was Safety Precautions which included major themes of Considering Safety Precautions, Screening for COVID-19 Safety, Sensing Political Stances and Values, Being Cautious Regarding Others' Safety, Taking Safety Precautions When Meeting Others, and Getting Vaccinated and Navigating Comfort Levels. The eighth area of focus was Intimate Experiences which included a major theme of Engaging in and/or Being Open-Minded to Intimate and Sexual Experiences. The ninth area of focus was Attitudes and Beliefs which included major themes of Believe That Dating Has Changed on MDAs and Personal Dating Behaviors Have Changed on MDAs. The results of this study will inform recommendations and implications for clinicians working with adult women who are dating throughout the COVID-19 pandemic. The findings will also broaden an understanding of how adult women navigate using MDA platforms during a pandemic.

## **Chapter 5: Summary, Conclusions, and Recommendations**

The following chapter evaluates the qualitative results of this study with regard to the implications for the findings. Furthermore, exploration and discussion of recommendations for future studies based on the results of this research are provided. This study included heterosexual, cisgender women between the ages of 20 and 29 and aimed to (1) analyze the motivations behind downloading MDAs during the COVID-19 pandemic, (2) explore the lived experiences of women who used mobile dating applications during the COVID-19 pandemic, (3) investigate how mobile dating has changed since March 2020, and (4) compare pre-COVID-19 and current COVID-19 dating experiences. The results of the individual interviews allowed for meaning making to assess these research aims.

The findings of this study are ultimately intended for mental health professionals and sex educators. Initially, the findings were intended to increase the awareness and knowledge of MDA user experiences during a global pandemic to build upon previous research regarding MDA usage for researchers. Likewise, the findings apply to mental health professionals and sex education providers who work with clients who are either considering downloading an MDA or currently using an MDA platform.

### **Interpretation of Findings**

The study's findings were derived from various areas of focus. This section compares findings regarding MDA users' motivations, patterns, and attitudes from before COVID-19 to during COVID-19. Additionally, noteworthy findings regarding interactions, safety precautions, and intimate experiences during COVID-19 are discussed.

#### **Motivations**

To date, research notes that primary reasons for using MDAs include finding a romantic or sexual relationship, improving social skills and experimentation, exploring after a breakup, connecting with others virtually, passing the time, and increasing self-esteem (Solis & Wong, 2019; Sumter & Vandenbosch, 2019; Sumter et al., 2017; Timmermans & De Caluwé, 2017; Ward, 2017). The results of this also found that the most common reason for downloading an MDA prior to COVID-19 was to find a relationship. Specifically, four participants desired casual relationships and two participants hoped for long-term relationships before the pandemic. Consistent with prior research before COVID-19, the present study found various motivations for downloading MDAs during the pandemic, such as finding a relationship, connecting with others, improving social skills, being entertained, and passing the time.

The theme of finding a relationship during COVID-19 emerged organically during interviews with the participants. Consistent with previous research conducted by Match (2021), the participants in the present study longed for emotional connection and long-term relationships. Significantly, some participants mentioned experiencing loneliness and isolation during the pandemic. One participant, Alexandria, specifically discussed the idea of securing a partner before the pandemic ends so that she would not have to be alone. Similarly, Lauren highlighted that her motivation to find a relationship increased due to feelings of alienation experienced by COVID-19. The accounts of Alexandria and Lauren suggest that isolation experienced due to the pandemic intensified participants' motivation to find a partner.

Five participants cited being able to connect with others on a virtual platform as a motivation due to the pandemic. Due to COVID-19, the participants shared that they spent more time in their homes. In addition, these participants mentioned that they lacked the ability to meet potential partners in person due to government restrictions. Research demonstrates that the

feeling of isolation was widespread during the pandemic which led to an increase of MDA users who used dating applications for social connection (Wiederhold, 2021). As such, MDA users considered social distancing practices and engaged in safe ways to connect with others through virtual platforms.

The theme of improving social skills on MDAs during COVID-19 was also present in five of the interviews. As was noted earlier, research conducted by Timmermans and De Caluwé (2017) cited that interacting and connecting with other individuals on MDAs could be viewed as less intimidating as compared to the increased pressure and discomfort when approaching a potential partner organically in person. Regarding this study, many participants shared that they wanted to engage with individuals and felt that MDAs provided a safe and realistic option to connect with others during the pandemic. Three participants spoke passionately about this matter. Alexandria and Emma noted that they wanted to converse with others their age and engage in small talk while Lauren altered the ways in which she expressed her emotions and feelings on MDA platforms by using more emojis. Each of these participants provided evidence that would seem to support the notion of improving their social skills due to the effects of the pandemic.

Another theme that emerged was the use of MDAs for entertainment and passing the time. Alexandria, Phoebe, and Cassidy referenced the element of boredom. More specifically, these three participants remarked on their altered daily routine impacted by COVID-19, which prompted a shift to distance, isolate, and remain indoors. Furthermore, this led to a finding that MDAs were used as a break from other social media platforms. Specifically, Michelle shared that she used MDAs as a way to connect with her friends by creating a group chat called “It’s Complicated” where they would discuss their interactions with matches. She added that she

would use MDAs as if it was Instagram, scrolling through the platform, viewing the messages sent to her, and then exiting the application once she achieved satisfaction. This particular example was selected for two crucial reasons. One, it highlighted the degree to which an individual can use MDAs as a way to connect with their friends socially. Second, it showed how MDA users might use the dating platforms as an additional application to check when mindlessly scrolling on social media. Similar to Michelle's account, research has shown that virtual communities on TikTok, which is a popular social media platform, frequently discuss online dating user experiences during the pandemic (Wiederhold, 2021). TikTok users have created videos and discussed horror stories, as well as successes, regarding online dating during COVID-19, which further promotes a sense of human connection.

Two minor themes emerged regarding using MDAs during COVID-19, such as exploring after a breakup and increasing self-esteem. Four participants experienced a breakup and discussed how that prompted them to download an MDA and connect with other individuals. However, many of these participants who separated from their previous partner felt that using MDAs were the only option to meet others during the pandemic. Another finding of the present study showed that four participants downloaded MDAs to increase their self-esteem. Potential explanations align with research showing that matching with other users leads to increased validation and self-worth (Sumter et al., 2017). Participants also described positive experiences regarding receiving attention, feeling wanted, and being complimented. It appears that downloading MDAs after a breakup could lead to the idea that dating platforms may increase participants' self-esteem due to connecting with others and ensuring that they remain desirable.

### **Patterns**

Examining patterns of MDA usage, particularly with adults who identify as heterosexual, cisgender women, is principally important based on research that dating applications are most common among young adults (Sumter & Vandebosch, 2019). In addition, Sumter and Vandebosch (2019) conducted research that showed common MDAs that adults frequently reported using included Tinder, Bumble, OkCupid, Happn, Coffee Meets Bagel, and Hinge. During the interviews, the participants reported the specific MDAs they downloaded prior to COVID-19, as well as elaborated on their experiences. Specifically, five out of eight participants downloaded Hinge at some point before the pandemic. Popular reasons for downloading Hinge included having friends that used the platform and enjoying the profile written prompts on the platform. Around half of the participants previously downloaded Tinder and Bumble. However, participants expressed gravitating toward using Bumble as compared to Tinder primarily because it has resulted in more successful matches for relationships, further confirming Tinder's reputation as a hookup MDA. See Table 3 below for a description of these MDAs.

**Table 3**

*Specific MDA Intended Use*

MDA	Intended Use
Hinge	Long-term relationships
Bumble	Long-term relationships
Tinder	Casual relationships and/or hookups
OkCupid	Casual relationships

In conjunction with published research and results of the present study, Hinge and Bumble were the two most routinely used MDA platforms that were used during the pandemic. These MDAs are known for successfully pairing individuals who match on their MDA

platforms, as well as helping users find long-term relationships (Fellizar, 2022). However, a minimal number of participants endorsed using Tinder and OkCupid, as both of these MDAs are typically used for casual and/or hookup relationships (Morley, 2022). Furthermore, half of the participants reported increasing the number of MDAs they downloaded and used during COVID-19. Some participants who primarily used Tinder prior to the pandemic reported downloading and using Hinge and Bumble more frequently during the pandemic. As such, the majority of participants gravitated towards using MDAs that were geared towards committed, long-term relationships during COVID-19 as compared to MDAs that were designed for hookups.

The results of the study demonstrated that all of the participants used Hinge. Emma, for example, remarked about the popularity of the platform, individualized and interactive profile prompts, and the option to tailor prospective match demographics to a given user's preferences. The majority of the participants discussed positive experiences on Hinge. In addition, seven of the eight participants shared how they used Bumble. However, participants' views in regard to Bumble were split into two perspectives: favorable and unfavorable. Three of the participants reported positive experiences on Bumble. For instance, Sophie described enjoying Bumble because it "was the most girl-user friendly." However, four of the participants discussed how their initial positive hopes of finding success off of Bumble have changed from the perspective of now disliking the platform. Participants explained how at first, they downloaded Bumble after hearing about favorable experiences from others. The more time that has evolved after the initial download has allowed for a shift in feeling frustrated, uninterested, and overwhelmed. Specifically, Nicole noted her dislike of the inability to manually choose and change locations. Michelle, for example, described an annoyance regarding the requirement of messaging a potential match first. Likewise, Cassidy discussed feeling pressured and a general sense of

dissatisfaction regarding having to initially message a match within the 24-hour limit. As compared to Alexandria's previous experience on Bumble, she now explained having an adverse experience on that MDA as she found that her matches were looking for short-term relationships or were exceptionally desperate to find a partner during the pandemic.

In terms of the participants' daily MDA usage during COVID-19, five of them described logging on between 15 to 30 minutes. Another interesting finding was that three participants used MDAs daily for more than 30 minutes. More specifically, Alexandria reported the maximum time of using MDAs for up to five hours per day.

Another pattern that emerged within the study prior to the pandemic related to a theme of deleting and then redownloading MDAs. Five out of eight participants described engaging in this concept in that there was always the opportunity to recreate or reload an MDA account. Furthermore, some participants shared specific reasons that they deleted MDAs. For instance, Lauren shared that she deleted MDAs after she was in a committed relationship. During Nicole's interview, she described pausing and reopening her Hinge account as a cyclical pattern wherein overt and subtle cues of frustration were conveyed regarding her tonality, pitch, and overall speech.

The results of the present study demonstrate similar patterns regarding deleting or pausing an MDA account. During the time the interviews were conducted, only three participants, Michelle, Phoebe, and Lauren, were current users. Conversely, the other five participants were inactive users because of traveling, moving, or finding a boyfriend. Further, Alexandria and Sophie met their current partners on MDAs, whereas Cassidy met her current partner outside of an MDA platform.

### **Attitudes**

In looking at the participants' experiences holistically prior to COVID-19, six reported having positive experiences and thoughts regarding the use of MDAs. However, two participants, Michelle and Emma, had neutral or negative opinions regarding MDAs. Importantly, both of those participants had boyfriends before the pandemic started. Specifically, Michelle explained that she believed MDAs were "silly" and "targeted more for hookup culture." Likewise, Emma had a preconceived notion that MDAs were "icky" in that users might match with others who are unpleasantly eccentric. Even more noteworthy, Emma emphasized a desire to meet others organically and described a sense of pride in doing so within her previous relationships.

Contrastingly, a majority of the participants had favorable viewpoints regarding MDAs prior to COVID-19. While six participants spoke about their positive attitudes, to varying degrees, their overall message was clear: MDAs were viewed as a helpful tool to meet potential partners. Positive aspects included believing MDAs were common, fun, entertaining, useful, and convenient. For instance, Phoebe and Cassidy specifically noted how MDAs were frequently used among their friends. Through Phoebe and Cassidy's accounts, this confirms research underscoring that MDAs are common among young adults and regularly used by peers in their 20s (Smith, 2016). One participant, Alexandria, highlighted being in favor of MDAs as she had success meeting others that turned into committed relationships. Similarly, Lauren expressed optimism when using MDAs since she was always reintroduced to new potential matches even when some of her dates did not amount to anything significant. Furthermore, three participants addressed the benefits of using MDAs after moving away to college or for graduate school. For example, Cassidy described moving to a different state for graduate school and finding comfort in meeting others who showed her popular places to visit, which helped her adapt to a new

environment. Additionally, Nicole stated having limited time to meet others in graduate school and had success on the platform in going on 20 dates prior to COVID-19. Through the accounts of these participants, it was evident that MDAs served as a valuable tool that enhanced users' abilities to connect with others.

Finally, it is essential to note the context of participants' current attitudes and beliefs regarding their experiences of using MDAs during a pandemic. All participants noted varying degrees of how they believe that dating has changed on MDAs due to COVID-19. Participants shared common emotions of feeling "frustrated," "annoyed," "exhausted," and "tired" while dating during the pandemic. Furthermore, the notion of an increased sense of cautiousness when meeting matches during COVID-19 was salient for many participants. In addition, Nicole and Alexandria shared examples of increased ghosting techniques that were used when conversing with matches on MDAs. As a consequence of the isolation and social distancing regulations, it is suggested that users found it easier to engage in ghosting due to the unlikely occurrence of meeting an MDA match in person.

Similar to the results of the study prior to COVID-19, the majority of the participants discussed currently having an optimistic attitude towards using MDAs. The idea that MDAs need to be "embraced" due to feelings of loneliness during the pandemic emerged. Alexandria shared that she believed individuals who longed to find a partner prior to COVID-19, in turn, experienced a heightened desire to find a relationship. The concept of increasing the motivation to find a relationship during a pandemic was enhanced because of the isolation many experienced. Additionally, an interesting finding was a decreased stigma regarding using MDAs during COVID-19. Overall, participants indicated a sense of normalizing MDA usage because they hold immense power through the element of connection.

The theme of personal dating behaviors that have changed in MDAs due to COVID-19 was expected because most participants indicated the extreme measures that they took to protect themselves and others against acquiring and transmitting the virus. Three participants, specifically Michelle, Nicole, and Lauren, reported an increase in their use of the MDA platform chat function. Uniquely, Alexandria indicated that she used MDAs for three times as long during the pandemic compared to before the pandemic. Nonetheless, the increased use of MDA platforms was noted for two additional participants.

It is important to note that the participants discussed adverse changes in their feelings, behaviors, and personalities when they used MDAs during the pandemic. Since the start of COVID-19, Nicole explained how she felt disinterested in using MDAs as the platforms felt more obligatory due to social distancing limitations and government restrictions. Additionally, Lauren shared that she had to alter how she relates to others as her love language of physical touch was frowned upon to act on during COVID-19. Therefore, it is suggested that pandemics have the ability to impact individuals' abilities to connect with others and express their love language.

The women in the study noted a positive shift in their mindset when using MDAs during COVID-19. For example, Emma previously thought that MDAs were “icky”; however, she realized that they ultimately expand individuals' opportunities to meet other people. In addition, Sophie discussed altering her intentions when searching for potential partners on MDAs. Through these accounts, positive shifts furthered the participants' ability to be more open and intentional to increase their likelihood of furthering connections with others on MDAs.

### **Interactions, Safety Precautions, and Intimate Experiences During COVID-19**

Another aim in the study encompassed how mobile dating has changed since COVID-19 started in March 2020. Participants described changing the ways in which they interacted with MDA matches, considered safety precautions when talking and meeting others on MDAs, and engaged in intimate experiences with MDA partners. Prior to the pandemic, Wiederhold (2021) noted the typical sequence of interactions on MDAs included connecting, chatting, and then meeting in person. Within the present study, all the participants described how they communicated and interacted with potential partners during the pandemic. These included chatting on the MDA platform, texting, calling or video chatting, and/or meeting offline. The first theme of chatting on MDAs to connect with potential partners was evident across all participants. An interesting finding was related to an increase in chatting to become acquainted with their matches and determine overall compatibility. Compared to before the pandemic, Nicole highlighted that she chats with her matches longer before meeting with them. Michelle, Emma, and Alexandria shared that they preferred chatting for an extended period before distributing their phone number or social media account handles. As such, MDA users may emphasize the importance of using the chat feature during the initial stages of forming a relationship with a match.

The majority of the participants discussed texting a match after chatting for a period of time on the MDA platform. This highlights a streamlined communication process once rapport has been established on the specific dating application. Following texting, five participants shared using FaceTime to communicate with matches. The process of video chatting has allowed participants to feel a sense of security, confidence, and relief in terms of assessing if they are compatible with their match. One participant, Alexandria, harped on using a video chat with her MDA matches to determine immediate chemistry and compatibility. Michelle, in addition to

other participants, also noted that video chatting ultimately mirrors in-person interaction in that you can hear someone's voice and see what they look like. Furthermore, researchers conducted a study during the pandemic and found that half of their participants who were single, young adults engaged in a video date before meeting someone in person (Match, 2021; Wiederhold, 2021). Overall, this alludes to the idea that conducting a video call is an important precursor to meeting an MDA match in person.

The fourth theme, meeting offline, was exemplified, as each participant referenced their encounters with MDA matches during COVID-19. Six participants spoke about meeting matches in person. Additionally, participants reported meeting between one to seven individuals on MDAs. Two participants, Michelle and Nicole, indicated they continued to meet MDA matches during COVID-19 despite feeling that their matches were "fillers." Nicole stated that she spent time with one of her MDA matches during the pandemic to decrease feelings of loneliness. Ultimately, she stated that their relationship "fizzled" once vaccinations were distributed and government restrictions lessened. Michelle added that she met individuals multiple times despite knowing that they were not compatible long-term, essentially filling her internal need of intimacy and connection. This further explains a potential increase in using MDA matches as "fillers" during a pandemic.

Another important area of focus was the element pertaining to the ways in which participants navigated dating with COVID-19 safety precautions. Participants described how they considered taking safety precautions, screening for COVID-19 safety, sensing political stances and values, being cautious regarding others' safety, taking safety precautions when meeting matches, and getting vaccinated. This study showed that each participant noted that COVID-19 impacted their dating experiences. A number of participants also referenced some

degree of hesitancy regarding matching and meeting others because of safety concerns being in public and catching the virus. More specifically, participants highlighted the importance of considering COVID-19 safety precautions. To further explore their safety precautions, five participants mentioned using a screening process that assessed how their MDA matches considered COVID-19 safety. The screening consisted of a discussion around vaccinations, social distancing, testing for the virus, living situations, and symptoms of COVID-19. For instance, Lauren and Nicole indicated that they preferred to meet matches whose COVID-19 safety aligned with theirs to limit their potential exposures to the virus.

It is important to note that a major theme of sensing political stances and values of MDA matches emerged from the participants' screening process. For instance, Nicole shared that by questioning her matches' COVID-19 safety protocol, she was able to tell their political stance, noting this increased after the 2021 United States Capitol riot attack. Along the same lines, Michelle engaged in conversations about the Black Lives Matter movement, assessing where her matches leaned in terms of their political preferences. Through this, she was able to determine if her beliefs were in alignment with those of her MDA match. Emma seemed to utilize varying degrees of screening for vaccination status that influenced her decision regarding whether she wanted to meet up with a potential match. In fact, participants' preference to match with others who were vaccinated is demonstrated in research that found 80% of vaccinated, single individuals wanted their partners to be vaccinated (Match, 2021). Similarly, Lauren noted a correlation between her matches' political views and vaccination status. Each of these participants had a great deal of concern regarding the importance of having discussions about political events, vaccination statuses, etc., thus highlighting their concerns about overall compatibility.

To further explore safety precautions during COVID-19, participants discussed being cautious regarding others' safety. Four participants spoke about being conscious of their family's health since some participants frequently visited their families or lived at home. Additional concerns included taking precautions to limit transmission to participants' work environments and living spaces.

In terms of meeting MDA matches in person, the participants' narratives provided rich, intimate, and authentic data that provided a glimpse into how individuals navigate meeting others during a pandemic. Participants shared common places to meet matches in person, and these included bars, restaurants, and coffee shops. Additionally, participants reported engaging in outdoor activities such as going for a walk, playing tennis, swimming in a lake, hiking, and fishing. Although each participant's dating experience during COVID-19 is unique, they shared taking precautions, such as wearing a mask and engaging in outdoor activities, to limit potential exposure to the virus.

Obtaining a vaccine altered participants' experiences in terms of meeting matches and dating during the pandemic. Five participants emphasized the importance of being vaccinated, as well as ensuring that their match received the COVID-19 vaccine. It is also essential to note that most participants noticed a change in their dating behaviors once vaccines were available. Specifically, Lauren highlighted feeling an increased sense of comfort hugging, sitting near, and sharing drinks with her dates. It is clear how vaccination statuses play a vital role in determining whether individuals want to meet others in person during a pandemic.

Participants also noted the ways in which they had intimate experiences with MDA matches during COVID-19. It was interesting that a large percentage of participants either engaged in or were open to participating in intimate and sexual experiences with matches.

Vaccination status played a substantial role in increasing participants' comfort to engage with others sexually. Alexandria, Nicole, Michelle, and Sophie discussed their sexual experiences and indicated episodes of kissing, oral sex, and sexual intercourse. Since Nicole met the same MDA match multiple times, she felt comfortable enough to engage in her typical dating behaviors. This also highlights that participants who engaged in sexual experiences trusted that their partners were taking COVID-19 safety precautions.

### **Limitations and Recommendations**

The results of the current investigation add depth to our understanding of the lived experience of heterosexual, cisgender adult women who used MDAs during a global pandemic. The present study also illuminated the various ways in which MDA users navigate dating during times when socially distanced regulations are enforced. Furthermore, these results contribute to an emerging understanding of the impact of COVID-19 on dating and connecting with others, particularly with single, adult women. Overall, the ecological validity of the present study is limited in that this research sheds light on the unique experiences of heterosexual, cisgender women between the ages of 20 and 29 who live in the United States. Future studies should perhaps explore women in more diverse contexts.

Each participant in this study received their bachelor's degree. Additionally, two obtained master's degrees. It is possible that women who did not attend college may have other experiences and attitudes regarding their experiences using MDAs during a pandemic. Further research should consider including women MDA users who did not attend traditional universities may prove to be fruitful.

Another important factor that was considered in this study were the participants' locations. Most participants lived in the Midwest; however, only one participant lived in the

West. Regarding participants' current geographical area, four lived in suburban areas, three lived in urban areas, and one lived in a rural area. Moreover, additional research on rural MDA user experiences during or after the pandemic is worthy of further investigation.

It is also important to note that the participants in this study were not racially diverse. All participants identified as white. Research based on online dating profiles has shown that women of diverse racial and ethnic backgrounds may have different preferences and experiences on dating applications (Glasser et al., 2009; Litsey, 2021). In other words, women of color may have MDA experiences that differ or contrast with those of participants interviewed in the context of the present study. Future research should explore the lived experiences of women of color MDA users that are dating during a pandemic.

Likewise, this study is limited regarding participants' gender identity and sexuality. While the literature has explored MDA experiences of the LGBTQ community, it is also important to examine the experiences and motivations of other MDA users during a pandemic. In replicating this study, an in-depth exploration of MDA experiences across individuals with diverse identities, such as transwomen, non-binary femmes, bisexual, or pansexual, should be considered, as it would also add greatly to the literature.

The present study focused on gaining a sample of a population of women in their 20s. This specific age range of emerging and early adulthood correlates to individuals in this developmental period having a primary goal of finding a partner (Arnett, 2000; Litsey, 2021). While the requirements to participate in the study restricted the age of the sample size, the majority of the participants ranged between the ages of 24 and 27. Two participants were 24, four were 25, one was 26, and one was 27. Future investigations should consider including additional cohorts within or outside of this developmental period. It would be interesting to

explore the experiences of MDA users that are between the ages of 18 and 23 or older than 30, as people in those age ranges might have different lived experiences, motivations, and attitudes regarding dating during a pandemic.

Lastly, this study did not include individuals who lacked access to the Internet. As such, future studies might consider expanding recruitment procedures beyond using social media platforms. In addition, data collected from the research did not include any countries outside of the United States. Furthermore, future research should consider exploring MDA user experiences in various countries during a pandemic.

### **Strengths**

There were multiple strengths of the present study that were noteworthy. One clear strength was the comparison of motivations from pre-COVID-19 to during COVID-19. Many of the motivations that the participants expressed were enhanced due to the effects of the pandemic. Additionally, the interviews with the participants provided in-depth accounts of the ways in which women navigated mobile dating during a pandemic. An unexpected strength of the study was a unique finding related to the participants' screening processes which allowed them to sense their matches' political stances and values.

### **Implications**

The results of the present study have important crucial implications for the field of mental health and counseling interventions. This research provided insights into the lived experience of clients who are adult, heterosexual, cisgender women MDA users who have either navigated or are currently navigating dating during or after the pandemic. As a result, it can inform clinicians' understanding regarding their work with emerging adults who are MDA users. Given that many heterosexual, cisgender women pursue counseling services with relationship concerns, it is

beneficial for clinicians to understand the experiences of women MDA users during COVID-19, as well as their motivations behind downloading the various platforms. Furthermore, the results of the study suggest that users downloaded MDAs during the pandemic due to feelings of loneliness and isolation, with hopes of connecting with others and finding a relationship. Because participants in the present study suggested that talking to others on MDAs throughout the pandemic decreased feelings of isolation, it is thus recommended that clinicians consider encouraging the use of MDAs for clients who are looking for social connections during or after the COVID-19 pandemic. Based on the results of this study, it can be said that more individuals and couples who attend therapy will have either met their partner on an MDA or are currently using an MDA. Ultimately, it is imperative that psychologists, social workers, clinical therapists, marriage and family therapists, sex therapists, clinicians, and physicians aim to normalize and legitimize the experiences of MDA users.

In addition, mental health providers can also use the results of this study for psychoeducational purposes. Participants in this study utilized an in-depth screening process to assess how their matches considered COVID-19 safety. Similarly, many participants shared that conducting a video call was helpful to determine overall compatibility with a potential partner. Clinicians can provide psychoeducation regarding the implementation of healthy boundaries for clients who are considering or are currently using MDAs by encouraging them to reflect on their relationship desires and preferences. Moreover, when working with clients who either use or are considering using MDAs, clinicians should consider the benefit of support groups for women who are having difficulties dating since the COVID-19 pandemic. This is especially important given that findings suggested that participants experienced shared feelings of social isolation and loneliness due to COVID-19.

### **Conclusion**

The nature of this study was to better understand the motivations behind downloading MDAs and lived experiences of users who navigated dating during the pandemic. The interviews conducted with participants suggested consistent trends across women MDA users. First, the motivation behind downloading MDA platforms to find a relationship was exacerbated by feelings of social isolation and loneliness. This is consistent with prior research regarding seeking out a relationship as a primary motivation.

Second, women MDA users who used platforms throughout COVID-19 expressed more caution when connecting with their matches. This finding is essential when considering the ways in which individuals converse with potential partners on virtual platforms. Expanding on this idea, many MDA users utilize a screening process when talking with their matches by questioning their COVID-19 safety before meeting in person. Ultimately, the MDA users' screening process resulted in an increased awareness of their matches' political preferences and personal values. MDA users are being more direct by asking questions that will help them determine long-term compatibility.

Finally, women MDA users believe MDAs are helpful to find a relationship and seek out connection. When considering the benefits of using MDAs, it is important to note that users expressed a shared sentiment in terms of normalizing the use of MDAs. Dating application users identified that having MDAs was common for individuals in emerging adulthood. Ultimately, MDAs have a potential to enhance connection through virtual platforms during periods of social isolation.

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**Appendix A: Electronic Recruitment Flyer****RESEARCH PARTICIPANTS NEEDED:****WOMEN USING DATING  
APPS DURING COVID-19**

**Now recruiting participants for a study on the motivations behind downloading and using dating applications during COVID-19. Participants must be between the ages of 20-29, live in the United States, identify as a heterosexual-cisgender woman, and have downloaded or reopened a preexisting mobile dating application since March 11th, 2020.**

**VISIT THIS WEBSITE TO LEARN MORE AND PARTICIPATE:  
<https://bklinsky.wixsite.com/research>**

**The interview will last an hour and will be conducted over the phone or a video service. The interview will be recorded. The study is approved by The Chicago School of Professional Psychology.**

**IRB # IRB-21-04-0034**

**Contact: Blake Klinsky  
[bklinsky@ego.thechicagoschool.edu](mailto:bklinsky@ego.thechicagoschool.edu)**

## Appendix B: Electronic Recruitment Script

Hello,

My name is Blake Klinsky, and I am a doctoral student at The Chicago School of Professional Psychology. This study is being conducted as a part of my dissertation requirement for the Psy.D. Clinical Psychology program.

**Purpose:** The purpose of this research is to examine the motivations behind downloading and using mobile dating applications during a global pandemic and analyze the impact COVID-19 has had on heterosexual-cisgender women who are mobile dating application users.

**Eligibility Criteria:** Participants must identify as heterosexual-cisgender women. Participants must be between the ages of 20 and 29. Participants must be proficient in reading, speaking, and writing in English. Participants must currently live in the United States. Participants must have downloaded or reopened a preexisting mobile dating application since March 11<sup>th</sup>, 2020.

**Procedures:** As a participant, you will need to visit my study website and provide your contact information at <https://bklinsky.wixsite.com/research>. You will be asked to complete a brief 5-minute phone call screening to determine if you qualify for the interview. You will be contacted to set up an interview on Zoom audio or video call after the screening. The interview should take approximately 60 minutes and will be recorded. This interview includes questions about your use of mobile dating applications, such as motivation for downloading, safety precautions, and any change in dating behaviors. You will be asked to answer questions honestly and authentically. If you want to know more about participating, you may visit my study website.

**Contact Information:** This study has been approved by The Chicago School of Professional Psychology's Institutional Review Board. If you have any questions or concerns related to the procedures described in this document, please contact the researcher, Blake Klinsky, at [bklinsky@ego.thechicagoschool.edu](mailto:bklinsky@ego.thechicagoschool.edu) or dissertation chair, Dr. Braden Berkey, at [bberkey@thechicagoschool.edu](mailto:bberkey@thechicagoschool.edu).

Please feel free to forward this announcement to other individuals who may be interested in contributing to this research.

Thank you,

Blake Klinsky, M.A.

### Appendix C: Verbal Screening

Please indicate the following:

1. What is your age?
  - Under 20
  - Between the ages of 20 and 29
  - Older than 29
  
2. Do you currently live in the United States?
  - Yes
  - No
  
3. Do you identify as a cisgender woman (meaning, your gender matches the sex that you were assigned at birth)?
  - Yes
  - No
  
4. Do you identify as heterosexual (meaning, are you attracted to people of the opposite sex)?
  - Yes
  - No
  
5. Have you either downloaded or reopened a mobile dating application(s) since March 11, 2020?
  - Yes
  - No

**Appendix D: Informed Consent Form**

## Informed Consent



**Investigator:** Blake Klinsky, M.A.

**Study Title:** Just a Swipe Away: Navigating the Motivations Behind Downloading and Using Mobile Dating Applications During a Global Pandemic

I am a student at The Chicago School of Professional Psychology. This study is being conducted as a part of my dissertation requirement for Clinical Psychology.

I am asking you to participate in a research study about your experiences using mobile dating applications during COVID-19. You will be asked to participate in an interview about your mobile dating application experiences during COVID-19. This will take around 60 minutes and will be recorded. Although you may not benefit, it will help the general public to understand the attitudes, behaviors, and motivations behind mobile dating application users during a pandemic. Risks associated with this research include emotional and/or psychological discomfort and a breach of confidentiality. Please take your time to read the entire document and feel free to ask any questions.

**Purpose:** The purpose of this study is to understand the motivations behind downloading or reopening a mobile dating application during a pandemic. Additionally, this study will explore the personal experiences of heterosexual-cisgender women mobile dating application users during a pandemic.

**Procedures:** You will first be contacted to complete a brief 5-minute phone screening. Following that, I will schedule an interview with you at a later date on the phone call if you are eligible to participate in the study. The interview includes questions pertaining to your experiences while using a mobile dating application since March 11, 2020. The interview will be conducted and recorded via Zoom, and it should take around 60 minutes.

**Risks to Participation:** Participants may experience emotional and/or psychological discomfort while completing the interview. Additional risks include breach of confidentiality and invasion of privacy. Should this occur, participants are encouraged to refuse any question, skip all questions, or withdraw from the study at any time. If you experience discomfort from your participation in this research study, please refer to the following mental health resource list that will be emailed after the interview:

National Sexual Assault Hotline: 1-800-656-4673

National Suicide Prevention Lifeline: 1-800-273-8255

National Domestic Violence Hotline: 1-800-799-7233

National Human Trafficking Hotline: 1-888-373-7888

National Alliance on Mental Illness (NAMI) Helpline: 1-800-950-6264

Substance Abuse and Mental Health Services Administration (SAMHSA) Hotline: 1-800-662-4357

Crisis Text Line: Text HELLO to 741741

**Benefits to Participation:** There are no direct benefits to your participation. However, it is the researcher's hope that your willingness to share your information will contribute to a better understanding of the motivations behind downloading a mobile dating application during a pandemic, as well as the experiences of those who are navigating using the applications during that time.

**Alternatives to Participation:** Participation in this study is voluntary. You may withdraw from this study at any time without penalty.

**Confidentiality:** During this study, information will be collected about you for the purpose of this research such as your name, telephone number, and email address. This includes only taking email addresses from participants that provide them to contact for a phone screening interview. These emails will only be used to contact the participant, which will be followed by using a pseudonym for that particular participant for the researcher to reference. Therefore, email addresses will be removed from the answers provided. Once you have completed the research, the results will be coded. There will be no identifiable information that will be associated with your results. However, your confidentiality will be kept to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet by any third parties.

All reports from the study will be presented as overall results. All data will be downloaded to a password-protected spreadsheet and password-protected laptop. Audio recordings will be deleted immediately following transcription. The transcriptions will be stored in a folder on my password-protected laptop. The laptop is password-protected and will be kept in my locked residence. Research materials will be kept for a minimum of five years after publication per American Psychological Association (APA) guidelines. After this time, the electronic files will be deleted from my laptop.

It is possible that your data may be used for future research or distributed to another researcher without your consent. However, information that could identify you will be removed.

Your research records may be reviewed by federal agencies whose responsibility is to protect human subjects participating in research, including the Office of Human Research Protections (OHRP) and by representatives from The Chicago School of Professional Psychology Institutional Review Board, a committee that oversees the research.

**Questions/Concerns:** If you have questions related to the procedures described in this document, please contact Blake Klinsky at [bklinisky@ego.thechicagoschool.edu](mailto:bklinisky@ego.thechicagoschool.edu) and the dissertation chair Dr. Braden Berkey at [bberkey@thechicagoschool.edu](mailto:bberkey@thechicagoschool.edu).

If you have questions concerning your rights in this research study, you may contact the Institutional Review Board (IRB), which is concerned with the protection of subjects in research projects. You may reach the IRB office Monday-Friday by calling (312) 467-2335 or in writing at:

Institutional Review Board  
The Chicago School of Professional Psychology  
325 N. Wells  
Chicago, Illinois 60654

**Consent to Participate in Research:**

I have read the above information and have received satisfactory answers to my questions. I understand the research project and the procedures involved have been explained to me. I agree to participate in this study. My participation is voluntary, and I do not have to say yes to this form if I do not want to be part of this research project. I will refer to a copy of this consent form on the researcher's website for my records. I will verbally indicate that I have read the description of the study and I agree to participate in the study.

## Appendix E: Interview Questions

### **Informed Consent**

**At the onset of the interview, I will state the following:** *I am interested in hearing and understanding your experiences with mobile dating applications during COVID-19. First, we will get started by reviewing the informed consent form. I will share my screen with you. I will also share the link to the informed consent page on my website. Once you are done reading, I will begin recording with your permission. You will also be able to ask any questions about the informed consent form as well.*

**After the participant reads the consent form, I will ask the following:** *Do I have your consent that you read through the description of the study and agree to participate? Do I have your permission to be recorded? What would you like your pseudonym to be after the interview is over and within the written study itself? Do you have any questions before we proceed?*

### **Participant Context**

1. Could you please tell me a little bit about yourself? What is your current location? What is your current living situation? Is there anything else that would be important for me to know?

### **Pre-COVID-19 Mobile Dating Applications Usage**

2. Before March 11, 2020, have you used mobile dating applications? If so, ask the following:
  - a. When did you first download a mobile dating application?
  - b. Which ones have you previously used?
  - c. How many times have you previously downloaded mobile dating applications?
  - d. What were your motivations for downloading and using them?
  - e. Tell me about your general experiences on mobile dating applications.
3. What were your attitudes towards mobile dating applications prior to the pandemic?

### **Current COVID-19 Mobile Dating Application Usage**

4. Since March 11, 2020, how many dating applications have you downloaded and used?
5. How many mobile dating applications are you currently on?
6. Which ones have you downloaded?
7. How much time per day did you and/or do you spend on the mobile dating applications now compared to before COVID-19?
8. What motivated you to download and use a mobile dating application during the pandemic?

9. Tell me about your primary ways of interacting and connecting with individuals, such as using the chat, phone call, video call, and/or meeting in person.
10. Have you had a FaceTime or video date with any of your matches? If so, ask the following:
  - a. How many?
  - b. How do you feel about conducting a video call with a match?
11. Have you met any individuals face-to-face from a mobile dating application since March 11, 2020? If so, ask the following:
  - a. How many?
  - b. Where did you go?
  - c. Tell me about your experiences meeting a match face-to-face during COVID-19.
12. Since downloading and using mobile dating applications during COVID-19, did you have any safety concerns initially and/or currently? If so, ask the following:
  - a. What safety concerns did you have initially and/or do you have now?
  - b. How did you consider taking safety precautions during COVID-19?
  - c. Did the safety concerns impact your mobile dating behaviors?
13. What safety precautions did you take and/or are you taking when matching and/or meeting mobile dating application users?
14. Since the pandemic started, how have you engaged in any sexual behaviors, such as touching, kissing, or having intercourse, with individuals you met on mobile dating applications?
15. Since the pandemic started, what have been your attitudes toward mobile dating applications?
16. Have you noticed a change in your mobile dating application usage due to the pandemic? If so, ask the following:
  - a. What changes occurred?
17. Do you think differently about dating now, specifically on mobile dating applications?
18. How has dating and connecting with other individuals changed because of COVID-19?
19. Is there anything else that I should know about your dating experiences during the pandemic that I did not ask?

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