

**Building Better Relationships: An Analysis of Technology-Mediated Relationships**  
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CCTP 615: New Media & Texts, Across Cultures

## **Part 1: Historical Background**

Dating applications are on the rise and what was once taboo (meeting someone through the internet) is now the norm. A survey/study done by Stanford University shows that between 1995 and 2017 the number of heterosexuals who met their partner in an online environment rose tremendously from 2 percent to 39 percent (Shashkevich, 2019). This has only increased since the COVID 2020 pandemic that swept the world. The number of smartphone dating app users in the US reached 26.6 million this year in 2020 (Statista, 2021). According to Business Insider, that's an 18.4% increase from 2019 (Kats, 2020). The biggest players in the dating application industry, Tinder, Bumble, and Hinge saw record growth due to the pandemic, "the largest dating apps in the U.S. saw a 12.6% year-over-year increase in monthly active users in the final quarter of 2020, the biggest such jump in nearly two years, according to data tracker Apptopia," (Wu, 2021). The emerging prominence of dating apps in the dating industry has prompted much research on the motivations and behaviors of dating app users. Dating application companies such as Match (owner of dating platforms such as Match.com and Tinder, to name a few) have found that the way users engage with the applications is changing. For example, users' behaviors have shifted- they are now looking for more serious relationships rather than casual hookups.

Match's latest Singles in America survey confirms this assessment, "In the scientific study of over 5,000 people, Match found that 58 percent of single app daters shifted toward more intentional dating due to the pandemic. Sixty-three percent said they're spending more time getting to know potential partners, with almost 70 percent saying they're being more honest in their interactions," Dr. Helen Fisher, biological anthropologist and Chief Scientific Advisor to Match, goes on to explain that, "Recent cataclysmic events have led singles to want more from

dating: a desire for a relationship over casual dating; more meaningful conversations, and more honesty and transparency during a date,” (Iovine 2020). The COVID 2020 pandemic has also made people wearier to meet in person, especially with those who are strangers. In a recent survey, Bumble reported that almost half of respondents in the US said they preferred a first date to be virtual rather than in person (Porter, 2021). 52% of Hinge daters say they'd probably continue video dating even once things become safe again, and 40% of Tinder users feel the same (Iovine, 2021). Although Tinder, Bumble, and Hinge all attempt to help people find romantic connections, their histories and the way they go about connecting people are vastly different.

Tinder, originally pitched as Match Box, was founded in 2012 by Sean Rad, Jonathan Badeen, Justin Mateen, Joe Munoz, Dinesh Moorjani, and Whitney Wolfe (who later left and started Bumble). Tinder popularized swiping, which allows users to swipe right to like someone and to swipe left to dislike someone (Dating Sites Reviews). As of early 2021, the Tinder app has been downloaded more than 400 million times. The service itself has around 75 million active monthly users, out of which almost 7.8 million are in the US (Business of Apps, 2021). According to Statista, as of March 2021, 75.8% of US Tinder users are men. Although it currently has the largest user base out of all of the dating applications, it also has one of the poorest reputations. A quick search in the app store reviews will show you stories of sexual harassment, fake bot accounts, and more. I conducted an anonymous survey that received 104 responses, and although there were a couple of respondents who found love, most have had negative experiences on the platform, especially the women (heterosexual and queer).

Bumble is a social media dating platform geared towards women's safety. After co-founding and serving as the Vice President of Marketing for online dating giant, Tinder, and experiencing sexual harassment in the workplace, Whitney Wolfe Herd founded Bumble with the intention of creating an online dating space where women could exercise more control over their dating lives. In February 2021, Herd became the youngest female CEO to ever take a company public (Subin, 2021). The API or rules of Bumble make it so that men cannot message first. Once two heterosexual users of opposite genders match, the woman has 24 hours to message the man or the match disappears. The man then has 24 hours to respond back. Once both users have messaged each other, they have an unlimited amount of time and the conversation stays in their inbox. Bumble has many functionalities like in-app video chat that allow users to screen their dates prior to meeting them in real life. Functionalities such as the video chat have been adopted by competitors like Hinge. However, Bumble has also taken notes from its competitors as well. Bumble used to employ a full-screen photo for the profile, but it has now adopted the half photo, half text, grid design that Hinge popularized.

Although Bumble and Tinder have the largest user bases of the three, Hinge has shown to be the most successful at keeping up with the changing trends in relationships. When Tinder came out with its swipeable cards, many people became concerned about the superficiality of the design. Therefore, Justin McLeod created the mobile version of his pre-existing dating site, Hinge, in 2015 in order to present an option that focused on personality instead of appearance (Markowitz, 2017). Presented in a vertical format, profiles on Hinge are composed of pictures plus three self-selected personal prompts (it is not allowed to forego having prompts), which encourage the users to focus on their personalities and be more thoughtful when creating their

profiles. Instead of swiping to show interest, users must either like or comment on the photos or prompts to show their interest. In 2017, Match Group, the same group that owns Tinder, started investing in Hinge. Now, 100% of Hinge has been sold to Match Group (Tiffany, 2019).

Although Hinge is the newest mobile dating application of the three, it is quickly rising in popularity. Connections made are known to be more serious and lead to more relationships. This aligns with their ethos: “the app that is meant to be deleted”. Because of its more serious reputation, Hinge has thrived during the COVID 2020 pandemic. App data tracking company, App Ape, reported that Hinge had 1.2 million active users in October in the U.S., a 101.6% increase from last year, based on Google Play Store data (Times Square Investment Journal, n.d.). The designers of Hinge have said on record that Hinge’s grid design prioritizes text responses in order to encourage less superficial matches (Dawood, 2019).

Users are clearly craving more genuine/serious connections, and although many applications such as Bumble and Hinge are attempting to address this shift in user needs, according to my research, they still do not fully address users' needs for safe, genuine, and healthy connections. With the large disparity between genders on the apps, the increasing amount of bots and fake accounts, and the lack of more "organic" ways to interact, people are becoming increasingly frustrated with their dating app experiences, and that, in turn, can affect the quality of the relationships that they do find on the apps. This paper will conduct a literature review of different psychological effects of technology-mediated relationship-building, analyze the needs and user experience of those currently using dating applications and then apply learnings to propose a design for a social gaming & relationship-building application

## **Part 2: Literature Review**

This section of the paper will review literature covering relationship/community building through the use of a variety of technologies: dating applications, social media platforms, and video games. Each technological avenue of relationship-building has its own affordances and constraints, but by reviewing the literature, we may find ways to utilize and combine features of each in order to create a hybrid platform that best addresses users' needs for genuine and healthy, yet, exciting connections. The emerging prominence of dating apps in the dating industry has prompted much research on the motivations and behaviors of dating app users so we will start there. Amsterdam School of Communication Researcher Sindy Sumter and her colleagues studied how heterosexual users' identities drive their motivations and engagement/behaviors in mobile dating. According to Sumter, "One of the primary goals of young adulthood is to establish a committed romantic relationship. The process of building and maintaining a committed romantic relationship is characterized by trial-and-error and can be preceded by an explorative phase that involves casual sex adventures,"(2018).

Sumter explains that the Internet has become an important platform to initiate contact with potential romantic or sexual partners and explore the possibilities of what a relationship can become. The largest market for these dating applications is unsurprisingly, young adults, "Approximately one-third of young adults (18-24-year-olds) reports to have engaged in mobile dating," (Sumter, 2018). Sumter and her colleagues find this demographic interesting because those years are very formative years for young adults. Therefore, with their study, they aimed to, "investigate the relationships between dating app use and identity features including

demographic and personality-related variables among a representative sample of young adults,” (2018).

Before conducting the study, Sumter conducted a literature review of gender differences in mobile dating usage between men and women and found that, overall, “men use dating websites more often than women (Valkenburg and Peter, 2007) and are also more active in approaching women online (Kreager et al., 2014),” (2018). There were also differences in the motivations between men and women for using mobile dating applications, “With regard to the relational goals, at least three studies found that adult men reported a higher motivation to use Tinder for casual sex compared to women... With regard to intrapersonal goals, research has shown that women engage more often in offline dating to validate their self-worth compared to men,” (2018). In a prior study done by Sumter and her colleagues, they also found a difference in, “Ease of Communication: young men felt more strongly that it was easier to communicate via Tinder than offline as compared to their female counterparts,” (2017). They also found that men were more likely to use Tinder due to entertainment goals, i.e. matching and talking to women for the thrill of it. Sumter and her colleagues also explore how sexual orientation moderates the relationships between gender and motivation.

In her 2018 study, Sumter also explored personality-based antecedents and motivations to using dating apps, specifically, Tinder. She specifically looked at dating anxiety, sensation seeking, and sexual permissiveness. Dating anxiety is described as the worry, distress, and inhibition experienced during interactions with dating partners or members of the opposite sex, and according to Sumter, it “becomes more relevant during young adulthood when dating experiences increase,” (2018). SENSATION SEEKING is defined by, “the need for varied,

novel, and complex sensations and experiences and the willingness to take physical and social risks to gain such experiences,” (2018). SEXUAL PERMISSIVENESS is described as having a liberal attitude towards sexual activities. Sumter and her colleagues asked the following questions in their study: 1. How do gender and sexual orientation relate to the usage and motivations of using dating apps? 2. How do dating anxiety, sensation seeking, and sexual permissiveness relate to the usage and motivations of using dating apps? 3. Do gender and sexual orientation moderate the relationships between personality-based antecedents and young adults’ choice of using dating apps as well as motivations for using dating apps?

To answer these questions, Sumter and her colleagues received demographic (age, gender, sexual orientation, etc.) information from and measured dating app usage, dating app motivation, dating anxiety, sensation seeking, and sexual permissiveness of 171 participants. First, they reviewed the characteristics of dating app users, that is, which apps they use and how they differ from non-users. Second, they conducted logistic regression analyses to test the relationship between demographic and personality-based variables and dating app usage. Next, they conducted multiple regressions to test the relationships between demographic and personality-based variables and dating app motivations, “In all regressions, the included demographic and personality-based predictors were gender, sexual orientation, dating anxiety, sensation seeking, and sexual permissiveness; the outcome variables were two relational goal motivations (love, casual sex), two intrapersonal goal motivations (self-worth validation, ease of communication), and two entertainment goal motivations (the thrill of excitement, trendiness)”(2018).



Following this process, Sumter and her colleagues found that participants who were non-heterosexual, low in dating anxiety, and held more sexually permissive attitudes were more likely to use dating applications. Young adult males were especially driven to use dating apps by The Casual Sex motivation and high scores on sexual permissiveness. The ease of communication motivation was extremely relevant for men and participants high in dating anxiety. Self-worth validation motivated young adults, male or female, who scored high on sensation seeking. Finally, the excitement of using dating apps was motivating participants high in sexual permissiveness and sensation seeking to use Tinder. These findings are interesting because they demonstrate that the dating application in question, Tinder, seems to appeal more to the LGBTQ+ community and heterosexual men. This may be because the design of the application lends itself to motivating and supporting those looking for more explorative and sexually permissive relationships. The findings of this study are further supported by the user statistics for Tinder: 75.8% of US Tinder users are men. Although Bumble and Hinge have designs that are more geared to women and “serious” relationships, their ratios are still far from equal: 67.4% male to 32.6% female on Bumble; 64% male to 36% female on Hinge (Statista 2021). The large disparity between genders on dating applications causes frustration for men and women alike. This problem may be addressed through the use of video games. According to Statista, 55% of all mobile gamers (203 million) in the United States are female. Not only could video games attract more women to dating applications, but they could also help build stronger and healthier relationships between users.

One study found that the pull of a game is many times correlated to its out-of-game effects. Researchers argue that games have such a strong pull because of their ability to generate,

“three key feelings of well-being: autonomy (sense of willingness), competence (challenge and feeling of effectiveness), and relatedness (feeling of connection with other people),” (Ryan et al., 2006). Not only do video games provide feelings of well-being for the players, but they are also shown to strengthen relationships and help form new and healthy relationships.

A meta-analysis conducted by researchers at the National Institutes of Health (NIH) reveals that, “two-fifths of study participants said they would discuss sensitive issues with their online gaming friends that they would not discuss with their real-life friends, with female players more likely to do this (Cole and Griffiths, 2007). Two-fifths of participants had met their online friends in real life, suggesting that online video gaming is a social activity that facilitates social connections. A third of participants were attracted to another player (26% males compared to 42% females) suggesting that MMOs offer a safe environment for players to become emotionally involved with others,” (Jones et. al, 2014). They go on to explain that the inherent nature of video games promotes and facilitates all aspects of renowned Psychologist Martin Seligman’s PERMA model, e.g., Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment. They cite studies that have shown videogames abilities to produce positive emotions in players; immerse players in highly engaging experiences; provide players with opportunities to fortify existing relationships and build new ones; create and find meaning by “attaching to something larger than oneself such as an interactive gaming environment”; accomplish goals and build self-esteem (Jones et. al, 2014).

The use of avatars in games is also shown to promote well-being in trans and other young LBTQI+. One study found that there are considerable therapeutic benefits of using avatars with positive mental health implications. The study showed that trans and gender diverse young

people, “use avatars to explore, develop and rehearse their experienced gender identities, often as a precursor to coming out in the offline world,” (Morgan, 2020). Participants of the study reported that avatar customization allowed them to experiment with, refine, and finally consolidate their gender identity in the relative safety of the gaming world. The ability to play as their experienced gender produced positive emotions in many of the participants, and “the pairing of enacted experienced gender with positive emotion affirmed their gender identity, particularly in the fledgling stages of social transition. For some, avatars were the only outlet for their gender expression before coming out, indicating the potential therapeutic role avatar curation played during an emotionally challenging period. Positive emotions were also experienced when avatars were acknowledged and accepted in their experienced gender in-game, for example, through game dialogue or by other players online,” (Morgan, 2020).

Increased communication seemed to be a common denominator when studying in-game relationship quality. One study found that games with clear shared goals and high interdependence facilitate social closeness by requiring players to interact, communicate, and collaborate (Tan & Cox, 2019). Another study that compared the relationship qualities of Second-Life players found that “differences in communication patterns and satisfaction levels are in line with a more positive or idealized view of relationships in the virtual world (based upon some combination of enhanced interaction, reduced stressors, and the relative newness of the virtual setting and relationship) and a somewhat more negative, but not distressed, view of the participant's real-life relationships,” (Gilbert et al., 2011). The data from this study indicated that many participants in 3D intimate relationships perceive positive qualities and levels of satisfaction in these relationships that go beyond avatars and, in some instances, may rise to or

surpass the positive feelings and levels of satisfaction within a co-occurring real-world relationship. This suggests that relationships built online through the use of avatars and metaverses are true competitors for real-life relationships. However, more studies need to be done to see if these relationships last once they're moved offline and exposed to the stressors of real life.

Some studies found that in-game relationship quality also depends on the mental boundaries that players set between their online and offline lives. Kim-Phong Hyunh and his colleagues conducted a study in order to explore Massively multiplayer online role-playing games (MMOs) as spaces of socialization and relationship formation and maintenance. According to Hyunh, "Massively multiplayer online role-playing games (MMOs) have evolved into places for people to meet up, find romantic partners, and maintain relationships. Communication is one of the cornerstones of romantic relationships and MMOs are one of the latest incarnations of media used to initiate them,"(2013). In order to study the role that MMOs have in fostering and maintaining relationships, Hunh and his colleagues interviewed 26 users of MapleStory South-East Asia (MapleSEA), a popular youth-centric MMO with a strong emphasis on relationship development. This qualitative study sought to understand how MMO players differentiate the boundary between gameplay and "real life" when it comes to their game-originated romances. Their research is inspired by the theoretical framework of the magic circle devised by Huizinga (1950) and further expanded by Castronova (2005).

Castronova argued that, "the distinction between play and life in MMOs is a "porous membrane," such that "people are crossing it all the time in both directions, carrying behavioral assumptions and attitudes with them" (Castronova, 2005, p. 147),"(Hunh, 2013). This means that

although players straddle the line between reality and online play, often crossing over back and forth, they also realize that there are differences between the two worlds. Other researchers argue for a framework in which players are not manipulating their characters, but in which they are their characters- the separation between the real world and the online world is more blurred here. Hunh explains that the “special meanings that players attach to virtual worlds take effect when the game starts, forming a new reality as defined by the rules of the game. Hence, we can only make better sense of the magic circle and the segregation between play and life from the players' perspectives. This has a significant impact on players' in-game relationships; because if they do not believe that experiences in-game can be real, then their relationships may be merely a fantasy,” (2013). Hunh and his colleagues conducted various interviews with MapleSEA players in order to understand players' constructions of boundaries, and players' strategies against perceived stigma when moving their relationships offline (2013).

Hunh and his colleagues found that three categories of players emerged based on their differentiated perceptions of the play/life boundary permeability of their game-originated romantic relationships: splitters, migrators, and blenders (2013). Splitters believe that the magic circle cannot be crossed and it marks a solid boundary between what counts as play and what is considered life. Migrators believe the magic circle is more permeable and that online relationships can potentially transition into being offline relationships. They realize that the two worlds are different, but the emotions are the same. The blenders believe that the boundary between game and life simply does not exist, “The circle is never constructed and play and life are blended into one reality. To them, the game world merely serves as another ‘platform for meeting-up’,”(Hyunh et al., 2013). Hunh’s study shows that strong and real relationships can be

formed in online games/metaverses. He explains that one of the reasons that splitters believe the magic circle is a strong boundary is,” the existence of real-life constraints such as age differences,”(2013). My proposed application could address this issue through its age preferences functionality, meaning that players would be able to explore the metaverse and play games with players of similar ages. Because of this, the magic circle may become more permeable or non-existent for players, encouraging the formation of more relationships that can be taken offline. A **social** gaming platform such as the one I will propose at the end of this paper would also be successful in encouraging community and relationship building because of its ability to reduce the psychological distance between users.

In these unprecedented times, staying connected is especially vital, and as we now know, “social media helps connect users who otherwise cannot do so due to physical distance. However, due to physical distance, users perceive an increased psychological distance between each other, which is the perceived distance that one feels with objects, circumstances, and people,”(Lim, 2012, pg.1366). Throughout the 2020 pandemic, video-streaming platforms such as Twitch thrived. Lim explains that the reason that social-media enhanced, real-live streaming video platforms are so successful, is because of their ability to reduce psychological distance and in turn, enhance co-experience within the domain. An experience that is psychologically distant is one in which the experience is not one’s own or belongs to the past or the future, i.e. a YouTube video of someone else’s experience (p.1367). Lim goes on to explain that, “consequences of psychological distance include difficulty in relating to each other or sharing a deep level of interaction,” (2012, pg.1366).

Lim explains that with the reduction of psychological distance, more benefits occur, “shared user experience is a crucial aspect of social media because social media connects users who are physically distant to each other. This is also known as co-experience, which is a specialized concept describing experiences between multiple users under product or service use,” (2012, pg.1366). By reducing psychological distance, co-experience also increases.

Co-experience is defined by the combination of a user’s experience of the product or platform and the social interactions had through the product or platform. In layman’s terms, co-experience would be the interaction of the technical features of the platform and how/how well they are used to facilitate social interactions.

There are a couple of ways that a social media-enhanced video-streaming platform such as Twitch reduces psychological distancing, such as: creating an inhabited space and utilizing isomorphic effects. Inhabited spaces define the spaces where an interaction takes place, for example, a Twitch streamer’s channel/profile/landing page functions as an inhabited space. The branded visual content, overlays, and streamed footage simulate a meeting area aka a “3rd place” for content consumers interested in that streamer’s content/experience. Through this inhabited space, “users are provided with a context in which experience with one another can effectively take place,” (Lim, 2012, pg.1368).

Together, inhabited space and isomorph effects can bring individuals closer together by providing the space and tools for interacting with other users. The isomorphic effects refer to the degree with which users can perform activities that produce similar results to what they do in the real world in that inhabited space i.e. users being able to cheer on their favorite streamers by utilizing the emotes and bots to project cheering sounds and clapping hands emotes across the

screen in real-time. The consequent reduction in psychological distancing afforded by the technical features of the platform causes enhanced co-experience among members of these inclusive communities.

In conclusion, Lim ponders how “psychological distance and co-experience may be applicable not only in social media-enhanced real-time streaming video but also in other domains that deal with the interaction between multiple users such as social networking services and social games. Like social media-enhanced real-time streaming video services, these domains require certain levels of coordinated action and decisions. Hence, by focusing on reducing domain-specific psychological distances, users may be able to collaborate efficiently and effectively, thereby enhancing co-experience in these domains,” (2012, pg.1376). Lim’s research suggests that the addition of inhabited spaces and isomorphic effects in other platforms such as dating applications can help people forge stronger and healthier relationships. For example, a design that allows a user to create an inhabited space for themselves (not just a resume-like profile) and experience isomorphic effects by playing games with others in that inhabited space could cause enhanced co-experience and less psychological distance between them, even though they are not physically together. As the analysis portion of the paper will demonstrate, there seems to be increased psychological distance between users in traditional dating apps inhibiting the formation of healthy relationships. Lim’s research on reducing psychological distance offers promising solutions to this dilemma.

### **Part 3: Thesis Statement**



As demonstrated through the literature review, young users of different sexual orientations and gender identities have different needs and experiences when it comes to relationship-building. In the following analysis, I will conduct an analysis of: 1. a conversation had between a heterosexual, cisgender man and a heterosexual, cis-gender woman regarding their vastly different dating application experiences; 2. A viral TikTok video demonstrating the affordances and constraints of dating applications; 3. The words used by survey respondents to describe the big three dating applications, Tinder, Bumble, and Hinge. I will then identify the ultimate needs and desires of the three main types of dating application users.

Following the analysis of user experiences on dating applications, I will propose an application design for a social gaming & relationship-building application called LUCIO. The application design will incorporate features that reduce psychological distance, permeate the magic circle, promote and facilitate all aspects of Seligman's PERMA model and address the needs of users of every sexual orientation and gender identity. LUCIO does not intend to replace reality, rather, it hopes to supplement it. LUCIO wants to help users find people that inspire and light up their lives through the shared enjoyment of games and positive experiences. As users get to know each other and have fun together through games, the hope is that they will associate those positive feelings with each other and form strong and healthy relationships.

## **Part 4: Analysis and Proposal**

### **Conversation analysis:**

For my research, I conducted an anonymous survey that asked participants about their most genuine connections (platonic and romantic) and their experience with dating applications.

I received 104 responses. Of those responses, 82.52% were from young adults aged 22-29, 57.28% were from men, 39.81% were from women, and around 3% were from agender or gender fluid. A large majority of respondents were heterosexual, 86.41%. The survey was posted on various forms of social media, Facebook, Instagram, VSCO, and even on dating application profiles. The sample is a convenience sampling and therefore, the results cannot be generalized. In the process of distributing the survey, I also had many enlightening interviews and conversations with people regarding dating applications. Many men who messaged me on dating applications were curious about the study and would start conversations about their experiences with dating applications- one conversation, in particular, was especially interesting since it demonstrated many of the shortcomings of traditional dating applications and the many opportunities for improvement. An excerpt of the conversation can be found in the index.

For context, Hinge has a feature of the application that allows you to see how many users have already liked your profile. However, unless you have a paid subscription, you are not able to see all of the profiles at once. In order to see all of the users in your “queue” of likes you must go through each profile one by one and make a decision to match or pass on them. The man who I had this interaction with had liked and messaged me 45 days prior to me matching and messaging him back. I had not seen his profile because I was slow-going in getting through my queue. Once I matched with him, I responded to his message and he noted how long it took for me to finally be able to match with me, “Wow lol. You must have a “likes you” tab a mile-long huh.” I explained to him that while it is long, it’s unsurprising seeing as more than 70% of users on dating applications are men. He responded with shock and proceeded to discuss the various shortcomings of dating applications.

Many times throughout the conversation he brought up the long waiting times that men go through to get a response, let alone a date. He explains that he has to put in a lot of time and effort to convince a woman to meet him in person, and many times, within the first few minutes of the date he knows whether or not he would go on another date, “I have to spend 2 weeks talking to some women online to get them to sit down for a drink. And it’s different in person. And then at the date, you realize ‘**well that was a long two weeks for something I could’ve figured out in the first five minutes of coffee, next**’. But you gotta wait. Cuz you’re a guy and you don’t have a line of women knocking on your door.” I then explained to him that although I understood his frustrations, there is a reason that women may take longer to be willing to meet in person- the predominant one being safety concerns. Many women use dating applications because they are able to “screen” men before meeting them in person. The video chat functionality is especially popular because it allows users to meet without the exchange of personal information such as phone numbers. However, a big factor is also the huge disparity between men and women on these apps. Because of this, the experience can be very overwhelming for a lot of women. One female respondent said the worst thing about dating apps is, “**the burnout you can get from talking to multiple people at once** and the likelihood that it won’t get anymore past a few conversations.”

After this was explained to him, the male respondent then responded with sarcasm and mock horror. When I pointed out his rude behavior he then apologized and cited another reason he dislikes dating apps: increased psychological distance. “Another issue with dating apps because I could only be cynical behind a screen. I’d never be a dick to even the worst person I’d met in person. But online you seem like a sweet person, probably a great person. I’m confident

we probably won't go out though, and my lack of civility is just because I know that fact. **To me you don't exist, get that? You're just on the app. Outside the app, you're not there. It's disrespectful and the worst and it probably happens a million times a day,**" This begs the question: does the lack of genuine interchange and lack of potential for genuine interchange on these applications, both discourage men and also diminish their "civility"? Not only do dating applications like Tinder make interactions between users seem robotic, but they are also flooded with various fake accounts that are actually bots. This sentiment was echoed by another survey respondent when he explained, **"Dating apps seem to foster detached, superficial conversations that are utterly boring and uninviting.** Most often the profiles I've encountered are either fake, fictitious or used by solicitors."

Although the man I was speaking to had very cynical views about dating apps and dating in general, he did admit that there are some positives in dating, "that's the best part of a first date now. Learning about humans, learning about social intellect and listening to them and trying to see what their world is like even if you know it's going nowhere." This comment suggests that while he is searching for a romantic partner, his frustration with the search isn't with the probability that he doesn't achieve his end goal, it's with the long and arduous process that is caused by the disparity between genders and the robotic nature of the interactions due to the constraints of the design of the application, including but not limited to: the deck of profiles that users swipe through (prioritizing aesthetics and dehumanizing users), poor safety measures and teams to investigate bad actors (causing many women to leave the apps), the lack of creative ways to communicate and opportunities for positive shared experiences (no opportunity to send pictures, videos, memes, games, etc.- a bandaid fix to the bad actors that

ends up causing more psychological distance between users and creating an environment where interactions become more robotic). These factors create an unpleasant experience for everyone involved- further exacerbating the problem. The more negative interactions women have with men on the applications, the more women will leave the applications, making the disparity even worse.

### **Video Analysis:**

A viral TikTok video (linked in the Index) perfectly encapsulates the affordances and constraints of traditional dating applications. A man is pictured opening a door and encountering the various possibilities or affordances of dating applications, followed by the reality and constraints of the same applications. The affordances mentioned are as follows:

1. Ability to speak to and meet new people that you would otherwise never meet.

Dating applications provide people with the opportunity to meet people they otherwise might not cross paths with in real life. It widens the pool of potential romantic partners.

2. Not having to constantly wonder whether they find you attractive or not.

Being matched with someone may give users the confidence to interact with someone.

Otherwise, in real life and without this mutually expressed interest, users might not have the confidence to interact with each other.

3. Not having to put in the effort to go out in order to be introduced to new people.

This is especially important and true within the context of the pandemic. During quarantine, many people turned to dating apps because they afforded them the ability to make connections without having to leave their homes and risk exposure to the virus.

4. Some great people, dates, and experiences.

This is especially true for those who are high in sensation-seeking. Users are able to find others they can go on novel experiences with.

The video then transitions into showing the negative aspects and usages of dating apps that have developed in the past few years.

1. Increasing inability to build romantic connections without swiping.

Tinder has popularized the swiping functionality. Many users and respondents say that this inadvertently causes an addiction to swiping and objectifies other users. One respondent found the swiping through dating profile cards and getting matches akin to collecting Pokemon or Yu-Gi-Oh cards. Another respondent explained that the reason they like Hinge more than Tinder or Bumble is that their design has done away with the swiping, “Hinge is great because a “like” comes with a message. So there is a higher bar to entry. I also don't want to feel addicted to swiping, which happens.”

2. Everyone is constantly speaking to multiple people at the same time.

3. Huge amount of choice which consequently increases commitment issues.

According to the paradox of choice, the more options we have, the less we are able to make decisions and the less happy we are with the decisions we do finally make (Schwartz, 2009).

4. Ghosting- stopping all contact without notice.

The large disparity between men and women can sometimes lead to ghosting behavior. With the overwhelming amount of options available, many users may cease contact with a match seemingly out of nowhere. This causes negative feelings for the user that is ghosted and affects their view of the other person and sometimes, the other gender.

5. A hookup and throw-away culture regarding romantic partners.

One respondent explained that “Hook up culture causes many unintended consequences for simple pleasure with no true long-lasting fulfillment. I just think the apps have made it easier for hook-up culture to occur.” Because more people are so readily available, hookup culture has thrived on dating applications. However, now the tides are changing. People want more genuine relationships, but unfortunately, the designs of the applications do not afford them.

6. A level of anonymity and rudeness that often leads to disrespect.

As demonstrated through my conversation with one of the male Hinge users, the robotic nature of interactions between users may lead to the dehumanization of and disrespect towards other users.

7. Superficial interactions.

Many dating applications, specifically Tinder, prioritize physical appearance through their application design. Tinder profiles are made up entirely of the user’s photo and completely overshadows the bio. This design choice puts an extra emphasis on appearance and leads to more superficial interactions. It is unsurprising that Tinder was cited by respondents as the most superficial and problematic of the three dating apps.

8. The propensity to give up on relationships that require work.

9. Rejection, depersonalization, mental health issues, and low self-esteem.

Next, I will go into the reputations of each application and the roles that their designs have in creating those reputations.

### **Dating Application Designs and Reputations**

In my survey, I asked respondents to provide the first three words they thought of when thinking about Tinder, Bumble, and Hinge. Using the words, I crafted word art for each of the

applications in the shape of their respective logos. I will present them in ascending order of popularity, starting with Tinder.

Tinder was, by far, the most negatively described dating application. The most commonly used words were fake, hookup, casual, and swipe. Other notable words include: scam, sketchy, fuckboy, overwhelming and uncomfortable. It is clear from the survey and simple research that Tinder's reputation is one of hookups, casual relationships, and overwhelmingly negative experiences for both men and women. Because of the large disparity between men and women on the application, women become overwhelmed by the amount of attention and messages they receive, and men become disappointed with the lack of matches and responses and frustrated with the increasing amount of fake profiles and robot accounts on the platform. Tinder's focus on physical appearance has ostracized a huge part of their intended market: women. Because of this, the problem just snowballs seeing as men's increasing frustration leads to more negative interactions with women and therefore more women leaving the application.

Although Bumble does seem to have a better reputation than Tinder, one respondent's response seems to encapsulate the general sentiment, "good idea, poor execution." Bumble's ethos is all about letting women have more control in their dating life. It attempts to build a platform that allows women to feel safe in their online interactions with men. This ethos is further reinforced through the Bumble blog, which discusses various mental health and safety topics. As you can see from the word cloud that was crafted from the survey results, Bumble does succeed in prioritizing the safety of women, however, it is not as effective in bringing couples together.



The application's design is also very much geared towards heterosexual users. The 24-hour time limit is not present for queer matches. Men also complain that because of the time limit, many matches fall through the cracks, and getting a date, let alone talking to someone, becomes a lot more time-consuming and difficult. I also find it interesting and problematic that you can only match with users of your gender for Bumble BFF. **By employing this choice, Bumble is inadvertently communicating that women and men cannot be friends or have safe, platonic interactions.** This is problematic because if we want women to feel safe with their interactions with men, we need to teach men that women are not just romantic conquests. Men should be capable of enjoying a woman's company even if it doesn't lead to romance. Bumble is just a bandaid to a deeper problem of how we view friendships and relationships.

As you can see Hinge's word art, user sentiments about Hinge are much more serious and positive than those of Tinder and Bumble. Words like real, quality, serious, and text are used often when describing Hinge. Users have taken notice of Hinge's text-heavy design and attribute it to the seriousness of the interactions that are had on the application. However, although Hinge tries to prioritize communication, it does not allow many innovative avenues for it. You can call, video chat, and send voice messages, however, you are not able to send memes, gifs, or play games, making the interactions more serious and sometimes robotic. This lack of more "organic" ways of interacting has caused many users to get bored and frustrated during the process of getting to know each other.

### **Identifying Users**

After researching the literature and conducting my own research, I have identified the three main types of users that LUCIO will target: connection connoisseurs, lonely boys, and

mobile gamer girls. Connection connoisseurs are people who value and look for deep, quality connections regardless of gender or sexual orientation. They are the people who want to build a strong community for themselves that is based in teamwork, collaboration, and friendship. They make up the 64% of dating app users who want to find meaningful connections (Eharmony, 2021). Users in this category want to find (platonic or romantic) connections in a way that is less superficial. A platform that reduces psychological distance between users would facilitate that. Lonely boys are the heterosexual men who are looking to find romantic connections online. Evidence suggests that men use dating apps more prolifically than women, both in the number of users and in the frequency of use. They are high in sensation seeking and would prefer a platform that facilitates organic, synchronous, and fun interactions. Finally, the (mobile) gamer girls demographic consists of female mobile gamers who are looking for a safe way to meet and play games with other players and also take those friendships/relationships offline. A platform that makes the magic circle more permeable is preferred for this kind of user. According to Statista, out of the 203 million mobile gamers in the united states, 55% of them are women- making the Mobile Gamer Girls the largest and most untapped market.

### **Proposed Design**

LUCIO is a social-gaming and relationship-building application that provides a platform and opportunities for genuine and healthy, yet exciting connections through the use of games, avatars, and local partnerships. LUCIO has three main functionalities:

- The Matching Board: The user profile that will be displayed in the matching board among 10-20 others. The profile consists of a bio, three photos, three text prompts, and interactive personality test results, i.e. the Myers-Briggs Test, The Love languages Test,

etc. That way users can learn about how they communicate and click on others' results and learn about how they communicate. Users are able to indicate within their profiles if they are open to exploring a romantic relationship. Using AI, compatibility scores will also be displayed on the profiles of other people on the board.

- The chat: The chat will allow users to text, call, video call, and even play games with other users they have matched with. They will be able to communicate in all the same ways they would over iMessage or SNS, but they will not have to give their personal phone numbers to do it. Asynchronous turn-based games will also be integrated within the chat in order to give users a more fun and organic way to communicate with one another.
- The LUCIO geo-localized Metaverse: The LUCIO Metaverse will be a direct representation of the users' immediate Metropolitan area. The user has an Avatar and public-facing profile they can use in order to express their identity, explore the metaverse, and play games and interact with other users of their age and location preferences. Local businesses that actually exist in the area will have a virtual location within the metaverse where users can play games together and win coupons and deals to go together to the physical locations.

Although LUCIO facilitates the creation of relationships through the use of various technological features, it is specifically designed to not replace reality. It attempts to break the magic circle by integrating features that directly supplement reality. LUCIO breaks the magic circle, further differentiates itself from traditional dating applications, and addresses the needs of its users by:

- Allowing users to use the matching board in order to find friends, forge strong connections, and build a community for themselves online that can be experienced offline as well. Users also have the opportunity to befriend one another regardless of their gender and sexual orientation. The application will not ask for gender, rather, it will ask users for the pronouns that they identify with and their sexual orientation.
- Inviting users to take personality tests based on psychology so that they can learn about how they best communicate and show affection towards others. This will increase the quality of communication between users and give them the tools they need to effectively communicate their needs and boundaries. It will also give the algorithm the information it needs in order to give more accurate compatibility scores.
- Displaying the interactive results of personality tests on users' profiles and compatibility scores so that others may learn about how they communicate and/or show affection. This allows users to understand one another better and humanize them further.
- Compatibility scores will be calculated through similarities in communication styles, lifestyles, values, and shared interests. The matching portion of the application will also be a board of profiles rather than a deck to swipe through. Users get around 10-20 people on their board a day who they can choose to friend.
- Integrating asynchronous, turn-based games in the chat so that users can break the ice and have a fun and more organic way to communicate/interact. This will also allow users to build trust and rapport with each other. Ultimately, the incorporation of the games will allow users to enjoy the process of getting to know each other, regardless of whether or not the interactions result in a romantic relationship.

- Providing the geo-localized metaverse platform so that users can meet other users of their age and locations preferences in a more "organic" way online. Users are able to meet each other in real-time and have synchronous interactions. Users can meet in a way that is safe but also timely. Interacting and playing games with users of their age preference and in their proximity will make the magic circle more permeable, consequently facilitating the transitions of online relationships to offline relationships. Also, the ability to interact with their environment and do actions that they'd be able to do IRL will reduce the psychological distance between users and allow them to bond more effectively.
- Encouraging users to meet offline by incorporating local businesses that offer deals and coupons for the physical locations. The magic circle is broken down further with the incorporation of local businesses that can be visited offline.
- Providing user profile individualization, which means users can create their own avatars in the metaverse that best represent their identities. With the incorporation of Avatars, those within the LGBTQ+ community can build an online identity that more aligns with how they view themselves. Avatars also allow users to be more immersed in the experience. According to McCloud, simplified cartoons/icons tend to resonate more with people than more realistic pictures. He calls this phenomenon amplification through simplification (pg. 30). He explains that by, "stripping down an image to its essential meaning, an artist can amplify that meaning in a way that realistic art can't," (pg.30). He also attributes the universality of cartoons to their popularity, "the more cartoony a face is, the more people it could be said to describe," (pg. 31), therefore, more people can "be"

the character rather than just see the character. That is why LUCIO will employ more anime/cartoon-like avatars and emotes.

- Giving users more autonomy by allowing them to choose how they meet people (the matching board or the metaverse).
- Ensuring that users feel safe by allowing them to decide when to reveal their true identities in the metaverse. Once they meet people that they like, they can trade player cards, essentially matching/friending the other user, and giving them the permission to see their "real" profile.
- Employing proximal text chat and voice chat (optional) throughout the metaverse in order to reduce psychological distance and make the interactions less robotic.

Originally, LUCIO was actually named LUSIO, Latin for "the act of playing". However, after asking respondents about their most genuine connections (romantic or platonic), I found a common theme: light. When describing their significant others or their most genuine connections, many people spoke about how their partner or friend brightens their day. Their connection makes the mundane exciting. Although the world has not physically changed, everything seems brighter whenever their crush, friend, or significant other are around.

I too realized, in my own experience, that was the case. The most genuine connections I've ever had have been with people who light up my life and inspire me to grow as a person. When you're with them, everything seems clearer, and the world doesn't seem as scary. That is why I changed the name to LUCIO, Latin, and Greek for "light". I hope that LUCIO can help people find significant others, friends, and communities that make their lives a little bit brighter.

## **Index:**

### **1. Transcript: An Excerpt of a Very Meta Conversation About Gendered Dating App Experience**

**MAN, 26:** Tryna have NBA kinds? :) hey I'm ....!

**WOMAN, 25:** I was thinking volleyball stars who go to schools and become lawyers/doctors, but if they're not into school they can go for the NBA (not to say they can't be good at school and NBA, but they'd probably be recruited before they graduate). I'm ....!

**MAN, 26:** Wow lol. You must have a "likes you" tab a mile long huh

**WOMAN, 25:** haha yeah, but it's nothing special- 70% of dating app users are men, so that's to be expected for most women (on Hinge).

**MAN, 26:** Ah I should 100% thin that number then and get the hell off these apps haha I don't like waiting and I don't like sharing. Oh well, that's dating in 2021.

**WOMAN, 25:** And I hate getting overwhelmed by all the people I need to message, feeling guilty that I can;t answer them all, them feeling slighted because of me (and by other girls who have the same experience), and then eventually quitting altogether and not going on for weeks at a time because it's too stressful. That's why I'm doing research to try to find a better way.

**MAN, 26:** I have a theory

**WOMAN, 25:** Do tell!

**MAN, 26:** I used to hate dating apps. The idea made me cringe. I hate social media in general. I think it has a terrible impact on society. Its intent was good. But it has both destroyed people's perceptions of themselves and also accentuated/stressed their need to appeal to others. As for dating apps being an extension of social media, my friends were on Hinge, Tinder, bumble years ago and I never was. I always told them it's a self-fulfilling app. The more people use it, the less incentive there is to meet someone in person "the natural way". Therefore making the people not on "the apps" less likely to actually meet someone in person. And in general, it sucks having to wait for a match. At a bar, I'd say "hey can I buy you a drink" and it's not 40 days later that I get a response lmao

**WOMAN, 25:** I totally agree with all of these points, but as a woman, especially as one who has been stalked before, I can see why meeting someone on an app can be appealing. With a random guy coming up to me out of nowhere, I have no idea who he is, what his intentions are, or frankly if he could be abusive. Meeting someone on an app, video calling, etc. allows you to see any red flags before you give them your number or even meet them in person. Unless I met someone at school, work or at a place of shared interests like a book club or intramural sports- I'm not likely to take their advances seriously out of self-preservation.

**MAN, 26:** ...and I can tell in 2 seconds if it's going anywhere

**WOMAN, 25:** ... I definitely think the apps need to be redesigned, because the current design causes men to feel like they're not desirable and women to feel overwhelmed.

**MAN, 26:** red flags are very easily hidden online. I think the best thing is having a social meter on point and meeting in person. Overwhelmed? Haha I'd love to be overwhelmed. What a tragedy

**WOMAN, 25:** I totally understand that, but when I go out with a guy, I have to gauge if he'd physically harm me- it makes meeting someone a lot scarier. Bad people are very good at putting up fronts in person too. See you belittling and invalidating my feelings is a red flag already. I didn't do that when you told me your feelings. I tried to express the fear and apprehension women have when meeting new men and you sarcastically called it a tragedy.

**MAN, 26:** Understandable. Very easy to get cynical, I'm sorry. Another issue with dating apps because I could only be cynical behind a screen. I'd never be a dick to even the worst person I'd met in person. But online you seem like a sweet person, probably a great person. I'm confident we probably won't go out though, and my lack of civility is just because I know that fact. To me you don't exist, get that? You're just on the app. Outside the app, you're not there. It's disrespectful and the worst and it probably happens a million times a day.

**WOMAN, 25:** I'm not mad or upset at all because I don't think you meant it that way, but I think it's just important to see other perspectives- it becomes hard because when you're on a dating app it almost feels like you're not talking to real people. It feels like you're talking to a robot and it becomes a game to see what responses you can get. But there is another person behind that screen. But I've been guilty of forgetting that too.

**MAN, 26:** Exactly. And a 45 day response time. I just don't feel that's what I'm worth, you know? I'm sure you can pick and choose from 500 desperate dudes haha and that is definitely overwhelming. And I'm sure 20 of them are creeps. If not more. I understand of course. And it's not you, it's every person on these things (dating apps). Sorry, I have become cynical for sure.

**WOMAN, 25:** You do know that I can't see all of the guys who have liked me at once, right? I have to go through a line of them to see all of them. And in order to make sure I respect each guy who has shown interest, I usually just match with a couple and make conversation with just them. If it doesn't work out, I match with another couple, and then usually I get emotionally exhausted and take a three week break (from the apps)

**MAN, 26:** Sounds terrible honestly. No sarcasm.

**WOMAN, 25:** Like obviously it's not just the girls doing the rejecting- I've met up with guys who really only wanted to get physical and that's not my thing. It does hurt to have guys reject



you as a person and just want you for your body. Just because someone matches with you doesn't mean they'll respect you or even treat you like more than just a trophy or object

**MAN, 26:** and screw guys that take advantage of women, because they make my goals that much more difficult. I have to spend 2 weeks talking to some women online to get them to sit down for a drink. And it's different in person. And then at the date you realize "well that was a long two weeks for something I could've figured out in the first five minutes of coffee, next". But you gotta wait. Cuz you're a guy and you don't have a line of women knocking on your door for coffee.

**WOMAN, 25:** Maybe if women felt safer on apps and enjoyed their experience more, you would have a line of women knocking on your door, but until that happens, this is what we've got. It's simple supply and demand. There won't be women on these apps until they truly feel respected for more than just their bodies. The question is: how can you do that with an app?

**MAN, 26:** I've been on probably 75 first dates from Hinge since the start of COVID. When I got on this app, 25 second dates??? 7 third dates and 3 things, 1 girlfriend. There's some stats for you! Of those 75 dates I knew that 50% within 3 seconds of sitting down with them, it wasn't working out for a second date. Economics is my language. Haha love that... I also believe that there is not enough weight on first dates because of the era of dating we are in. I am not even concerned, nervous, or excited about most of my first dates. I'm looking for ~the one~ and a small piece of me (that grows larger after every first date) believes I may have abandoned her in Boston years ago. But there's a sense of futility augmented by my future plans to most of the dates I'm "planning" now. And holy smokes, they're expensive. My friend was giving me shit joking about how much I've probably spent on first dates and I almost gagged.

**WOMAN, 25:** It's true- I do think first dates have kind of lost their magic, but is it because of the nature of dating or because of our pasts with dating? When we were younger, we didn't have a comparison, so first dates were like this cornucopia of possibility. But if you have been in love and felt that magic with someone and lost them, you will constantly compare everyone who's new to them. First dates become dull in comparison to the time you spent with them. Does that mean you'll never feel that way again? Or will love just feel differently the second time around? I don't know because I'm still struggling with not comparing- it's a work in progress.

**MAN, 26:** I don't think it's a comparison thing for me. I don't compare, you can't. Everyone is so different. And that's the best part of a first date now. Learning about humans haha learning about social intellect and listening to them and trying to see what their world is like even if you know it's going nowhere. I think I'm just jaded.

xxxxx End of excerpt xxxxx

## 2. Viral TikTok Video [Link](#)







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