# The Effects of Matches vs. No Matches in Online Dating Apps on Well-being and Profile Liking Behavior: A Longitudinal Investigation

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## Abstract

This study aimed to investigate the impact of receiving rejection in an online dating app on users' overall well-being and profile liking behavior. To test this, a dating app prototype (HeartBeat) was utilized, with two dating success conditions. Half of the participants were assigned to the match condition, where they predominantly received matches. The other half were assigned to the no match condition, where they predominantly received no matches. Over the course of five consecutive days, participants actively engaged with the prototype dating app, creating a profile and evaluating 30 fictitious dating profiles daily by swiping right (indicating a like) or left (indicating a dislike). In total, 37 participants utilized the prototype dating app throughout the entire duration of the study. Results showed no significant differences in well-being scores between individuals who predominantly received matches and those who did not. Similarly, the results revealed no differences in profile liking behavior between individuals in the two conditions. While the study also intended to explore the swipe time for giving a like as part of profile liking behavior, no results could be obtained. The findings suggest that experiencing rejection in the pre-conversation phase of online dating does not significantly affect users' overall well-being and profile liking behavior. This is yet one of the first studies that focuses on the effects of match versus no match on profile liking behavior. Future studies are recommended to investigate this further with a larger sample and more diverse measurement scales that encompass all aspects of well-being.


*Keywords*: online dating app, well-being, rejection, no-match versus match, profile liking behavior, longitudinal experiment

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## Introduction

Online dating has gained tremendous popularity as a widely accepted method of seeking romantic connections. Millions of people use dating apps to find potential partners worldwide, and the Netherlands is no exception. Almost half of the people aged 18-34 in the Netherlands have created a profile on a dating site or app, with platforms such as Inner Circle, Lexa, and Tinder among the most widely used (Beukers & Cabenda, 2019). With the increasing popularity of online dating platforms, users now have easy access to a massive pool of potential matches via their mobile devices. However, this can also have drawbacks, as a larger number of people using dating apps can result in experiencing more romantic rejections than traditional dating.

In online dating, rejection refers to cases where users are refused, rejected, or blocked by (potential) romantic partners (Van de Wiele & Campbell, 2019). Rejection can occur in various forms, depending on the stage of interaction. In the conversation phase, when two individuals have expressed initial interest and engage in conversations to get to know each other better, rejection occurs through message ignoring, ghosting, blocking, or unmatching (Van de Wiele & Campbell). While on the other hand, rejection in the pre-matching phase refers to the initial evaluation of profiles, where individuals make decisions based on profile attractiveness, visual cues, and limited information (Olivera-La Rosa et al., 2019). To date, there has been limited research on the impact of rejection, specifically at this stage, where individuals face rejection when their profiles are not liked, despite it being a prevalent form of rejection in contemporary online dating. Therefore, this research focuses on rejection in the pre-conversation phase, particularly on receiving no matches. A "no match" occurs when a user expresses interest in a profile by swiping it to the right (indicating a like), but the owner of the profile does not reciprocate, swiping it to the left (indicating a dislike) (Pronk & Denissen, 2020).

Experiencing rejection can affect an individual's overall well-being, including life satisfaction, emotional state, and self-esteem (Courtois & Timmermans, 2018; Heino et al., 2010; Karsay et al., 2019; Thomas et al., 2023). Previous research suggests that romantic rejection in mobile dating apps is associated with sadness, anger, frustration, and decreased self-esteem and self-worth (Andrighetto et al., 2019; Leary, 2015). However, most previous studies have focused on single interactions with mobile dating apps, providing only a limited perspective. Moreover, these previous studies have primarily relied on survey methods. This study addresses these limitations by re-examining the effects of rejection on well-being in an experimental study over a more extended period, where participants engage with a dating app prototype for several consecutive days.

The way individuals express their interest in an online dating profile, known as profile liking behavior, can also be influenced by the experience of rejections. For example, users may be less likely to swipe right for self-protection or may take more time to decide whether to like a profile. Despite the growing prevalence of dating apps and the increasing experiences of rejection within this context, there has been limited research on how rejection within mobile dating apps affects individuals' profile liking behavior. Investigating this further could provide new insights into an individuals' social behavior on digital platforms.

This study aims to fill existing gaps in the literature by answering the following research question: "*Does predominantly receiving no matches in an online dating app prototype affect users' well-being and profile liking behavior over time, compared to predominantly receiving matches?*". To achieve this, an experimental study will be conducted in which participants interact with a prototype mobile dating app for five consecutive days, swiping through 30 fictious profiles each day.

Depending on the assigned condition, participants will receive predominantly matches or not. To assess the impact of the rejection on their well-being, participants will be asked to complete a series of statements about their well-being at the beginning and the end of the study.

## Theoretical background

Online dating has gained increasing attention in scientific literature. This trend is unsurprising, as the practice of using technology to find and establish romantic relationships – online dating – has become an integral part of modern society (Stoicescu, 2019). Notably, the number of online daters have grown rapidly, with an estimated 441 million active users worldwide by the end of 2023 (Buchholz, 2023). Among the various forms of online dating, dating apps have become the most widely utilized. Especially the so called fast-dating apps, or swipe-based dating apps, have revolutionized how individuals connect with potential partners. These apps typically present users with a series of profiles that they can swipe left or right to indicate interest or disinterest, respectively, expanding the pool of available options beyond one's immediate social circle and providing a convenient and accessible way to connect with potential partners (Timmermans & De Caluwe, 2017).

The popularity of these fast dating apps can be explained by Uses and Gratifications Theory, which suggests that individuals actively choose media platforms to fulfill their specific needs and desires (Katz, 1959; Katz et al., 1973). More specifically, fast dating apps serve as a platform where individuals can fulfill their fundamental social needs for interaction and connection, such as seeking a romantic partner, expanding their social circle, or simply enjoying entertainment and fun (Bryden, 2017; Timmermans & De Caluwe, 2017). Moreover, swipe-based dating apps, characterized by their quick and intuitive swiping mechanism, offer a range of

features tailored to meet the diverse needs of their users. The swipe system allows users to swiftly navigate through profiles and engage with those they find appealing. Once users have viewed profiles that match their search criteria, such as age and location, they can utilize the swipe function to express their interest or disinterest. A left swipe indicates a lack of interest, while a right swipe signifies interest in the person featured on the profile. When two users swipe right on each other, a match is established, enabling them to initiate a conversation and explore the possibility of further connection (Tinder, 2021). However, if one of the users does not swipe right on the other, there is a no match, indicating a lack of mutual interest.

This browsing and evaluation of profiles is called relation shopping (Heino et al., 2010). This metaphor proposes that daters treat potential romantic partners as assets to be evaluated and compared, similar to shopping for a product in a shop. The abundance of profiles available online allows users to engage in the form of comparison shopping, browsing through profiles to find someone who meets their ideal criteria. However, this abundance of choices can have negative consequences. Previous research suggests that online daters may develop a rejection mentality, becoming more pessimistic and dismissive due to the abundance of choices in the form of an almost unlimited pool of potential partners (Pronk & Denissen, 2020). The many options presented to individuals increase the likelihood of rejecting potential partners. This generates a general feeling of dissatisfaction and pessimism about finding a suitable partner, causing users to gradually become more closed to potential mating opportunities. Therefore, this mindset may cause individuals to reject more people over time and close themselves off to mating opportunities.

**Rejection in online dating**

As individuals reject a larger number of potential partners, the number of individuals who experience rejection also increases. Online dating offers the advantage of a wide selection of potential partners to choose from. However, as the number of users on online dating platforms continues to grow, the likelihood of experiencing romantic rejection intensifies. In online dating, romantic rejection refers to declining or not responding to a potential match's interest or invitation to communicate further (Van De Wiele & Campbell, 2019). This rejection can occur at different stages of interaction. In the orientation phase, known as the pre-matching phase, individuals evaluate profiles based on attractiveness, visual cues, and limited information to determine whether they find the person appealing or interesting enough to initiate contact (Olivera-La Rosa et al., 2019). Rejection within this phase is one of the most prevalent forms of rejection experienced when using online dating apps, often occurring when individuals do not receive matches with those they have liked (Hetsroni & Tuncez, 2019; Pronk & Denissen, 2020). In the subsequent conversation phase, where two individuals have expressed initial interest and engage in conversations to get to know each other better, rejection takes different forms such as message ignoring, ghosting, blocking, or unmatching (Van de Wiele & Campbell).

Receiving rejection, regardless of the stage, has an impact on an individual's emotions. Van der Veen et al. (2019) conducted a study to investigate how individuals emotionally react to rejection in the conversation phase of online dating by examining brain responses in the region associated with processing mental and physical pain. Participants participated in a speed dating activity where they indicated their interest in a potential second date. Those who experienced rejection did not only report more negative sentiments, but also displayed similar cardiac responses to those associated with experiencing mental and physical pain, as compared to

individuals who did not encounter rejection. This suggests that the experience of rejection in online dating, in the conversation phase where contact has already been established and individuals may be more invested in each other, can trigger both emotional and physiological reactions, highlighting the impact it can have on an individual's well-being.

In a separate research conducted by Andrighetto et al. (2019), the phenomenon of rejection within the pre-matching phase, was explored using an experimental framework. The study involved the creation of online dating profiles by the participants, who then proceeded to engage in simulated interactions with other participants. Participants in the rejection condition were presented with a message indicating their lack of desirability, whereas the control group received an error message. The results indicated that participants who experienced rejection reported decreased levels of enjoyment and increased levels of sadness. This suggests that, similar to the conversation phase, experiencing rejection in the pre-matching phase can also negatively affect individuals' emotional well-being.

**Well-being and online dating**

Previous studies have also shown that, in addition to experiencing rejection on an online dating platform, excessive use of online dating applications can significantly impact individuals' well-being. (e.g., Courtois & Timmermans, 2018; Heino et al., 2010; Karsay et al., 2019; Thomas et al., 2023). However, well-being is a multifaceted construct that has been measured in diverse ways, leading to varying definitions. Her and Timmermans (2020) operationalized well-being as individuals' emotional states, explicitly focusing on joviality, sadness, and anxiety. Using a cross-sectional correlational design, Her and Timmermans (2020) aimed to investigate the impact of using dating applications on individuals' well-being, specifically examining the effects of using Tinder for a week. The PANAS-X subscales were used to measure participants'

emotional states following their Tinder usage. Results showed that users who more compulsively used the fast dating app Tinder experienced more sadness and anxiety after using the app (Her & Timmermans, 2020). This finding suggests that individuals who compulsively use a fast dating app like Tinder are more likely to experience decreased overall well-being after using the app.

Zervoulis et al. (2019) focused on broader psychological constructs of well-being, including self-esteem, loneliness, and life satisfaction, rather than joviality, sadness, and anxiety. They conducted a correlational survey study examining the impact of using dating apps on well-being. Participants were asked self-reported survey questions in the subcategories of self-esteem (measured by the Global Self-Esteem Scale), loneliness (measured by the UCLA Loneliness Scale (version 3)), and life satisfaction (measured by the Satisfaction with Life Scale). The study revealed a relationship between increased dating app usage and adverse psychological outcomes. Specifically, the study revealed that higher levels of dating app usage, mainly in the pre-matching phase, were associated with decreased life satisfaction, higher levels of loneliness, and reduced self-esteem, indicating an overall decrease in subjective well-being. These findings can be attributed to the challenges individuals face in forming meaningful connections within online dating apps, leading to feelings of dissatisfaction and loneliness. Moreover, the swiping system in these fast-dating apps, which promotes judgment based on physical appearance, contributes to objectification and feelings of diminished self-worth and self-esteem. The constant evaluation and comparison to others further exacerbate these adverse psychological effects (Zervoulis et al., 2019).

Overall, multiple studies have demonstrated a negative association between the use of online dating applications, particularly during the pre-matching phase and when used compulsively, and individuals' well-being. In this phase, the constant evaluation and comparison

with others causes people to score higher on sadness, anxiety and loneliness and lower on joviality and life satisfaction. Moreover, it was found that the experience of rejection in both the pre-matching phase and the conversation phase can negatively affect an individuals' well-being. However, previous research has mainly focused on assessing the state of well-being at a single moment in time. Furthermore, previous research primarily relied on survey studies and, to the best of my knowledge, there is a lack of experimental studies in this area. Therefore, this study aims to fill this research gap by conducting an experimental study focused on the pre-matching phase of online dating using a longitudinal design.

For this study, well-being is defined as an individual's subjective well-being, which refers to their personal perception and emotional experience of their own life, including pleasure, positive emotions, and general satisfaction. To measure this, a short version of the Warwick-Edinburgh Mental Wellbeing Scale is used, which captures well-being as a total construct rather than examining its components. Building upon the findings of the effects of experiencing rejection and well-being, it is expected that individuals who predominantly receive a rejection, in this study referred to as no matches, for five consecutive days will score lower on well-being compared to those who predominantly receive matches leading to the following hypothesis:

H1: People who predominantly receive no matches on a dating app prototype for five days in a row score lower on well-being than those who predominantly receive matches.

**Romantic rejection and online dating behavior**

Previous research has been conducted on how individuals adapt and modify their behavior after receiving rejection or negative feedback. Research on experiencing romantic

rejection in a dating context suggests that individuals who experience romantic rejection may employ protective strategies to protect themselves from future rejection, such as self-protection and social avoidance (e.g. Campbell et al., 1998; Gerber & Wheeler, 2009; Watson & Nesdale, 2012). This self-protective mode may be an attempt to minimize the negative emotional impact of rejection and avoid further social or romantic harm. Whether these psychological processes underlying romantic rejection also influence the behavior of individuals on online dating apps is an issue that Van de Wiele and Campbell (2019) sought to address. In their study, they examined self-reported anticipated behavioral responses associated with experiences of rejection on dating app usage through an online survey. They found that, despite experiencing rejection, most participants would continue to use the online dating apps, suggesting that rejection in mobile dating apps, specifically the pre-matching phase, may not significantly impact app usage. This finding suggests that individuals in the pre-matching phase of online dating may not perceive themselves as being rejected due to the absence of explicit feedback or communication during this phase. Instead, they may interpret the lack of matches as a neutral outcome rather than a direct rejection, leading them to continue swiping and engaging with the apps.

While Van de Wiele and Campbell's (2019) research relied on an online survey, this study takes a different approach. Instead of relying solely on self-report measures of anticipated behaviors, this study assesses participants' actual behavior. By examining participants' real-life actions instead of anticipated behavior, the potential influence of response biases is minimized.

Instead of studying participants' behavioral responses, Zhang et al. (2022) focused on participants' neural responses during the decision-making process of seeking romantic relationships. They used an online speed dating paradigm, similar to the approach used by Van der Veen et al. (2019), where participants received direct feedback about the acceptance or

rejection of their speed dates. They found that participants took more time to decide if they were interested in a person compared to showing rejection. This suggests that individuals may invest more time in considering whether they see themselves going on a date with a particular person, as the stakes are higher. Building on this outcome, it is hypothesized that people on online dating apps take longer to show interest in a potential match (swiping right) than to show rejection (swiping left). This leads to the second hypothesis focusing on profile liking behavior:

H2: The time taken (in seconds) to decide to swipe right (show interest) is longer than the time is taken to swipe left (show rejection) when evaluating a potential match.

The longer swipe time and caution in showing interest can be interpreted as an indicator that people fear rejection. When faced with consistent rejection in online dating, individuals (unconsciously) use defensive mechanisms such as denial or avoidance. This aligns with previous insights from psychological literature, which has found that individuals use protective strategies to cope with challenging situations (e.g., Argan et al., 20-23; Gerber & Wheeler, 2017; Sommer, 2001). As a result, individuals who have experienced repeated rejection tend to be more cautious and selective when deciding on a potential partner, which may lead them to be more selective in choosing a partner, thereby decreasing their liking behavior (Leary, 2015).

Moreover, individuals who primarily receive matches on a dating app prototype receive more validation. This affirmation could impact their self-worth and heightened confidence, increasing their liking behavior. Considering these factors, it is reasonable to expect that individuals who predominantly receive no matches on a dating app prototype will decrease the number of people they choose to like compared to those who predominantly receive matches

leading to the following hypothesis:

H3: People who predominantly receive no matches on a dating app prototype for five days in a row reduce the number of people they choose to like than those who receive matches for several days.

## Method

### Research Design

This longitudinal research examines whether repeatedly receiving no matches in a prototype of an online dating app affects users' (a) well-being, (b) swipe time and (c) profile liking behavior over a period of five consecutive days. Therefore, the research uses a mixed design with a within- and a between-subjects variable. The independent, between-subjects, variable in this study is dating success, defined as either a match or no match. The dependent variables are subjective well-being and profile liking behavior, measured as swiping time and number of right swipes. The within-subjects variable in this study was time, measured across five consecutive days, representing five measurement points.

In the study, participants were assigned to either the no match or match condition within a prototype dating app, following an 80-20 rule. This means that throughout the week, 80% of the dating outcomes aligned with the participants' assigned condition (e.g., 80% matches for participants in the match condition), while the remaining 20% would display the opposite condition (e.g., 20% no match for participants in the match conditions). It is important to note that the first outcome always reflected their assigned condition.

## Participants

### *Target population*

This research focused on Dutch individuals between 18 and 30 years old who were open to a relationship. This population was selected for two reasons. First, around 70% of all dating app users belong to this age group (Business of Apps, 2023). Second, the displayed profiles represent this age range, especially the profile images in the dating app prototype. The aim was to maximize the likelihood of participants swiping right (like) for the profiles by ensuring they could identify with them.

## Sample

### *Sampling method*

The sampling technique that was chosen for this research is non-probability sampling. More specifically, a convenience sampling method was used. This sampling method has many significant benefits, including its effectiveness and affordability. Furthermore, participants are easily accessible and cooperative, which is particularly valuable in a longitudinal study where participants must swipe and complete surveys over multiple consecutive days (Malhotra & Birks, 2012)

### *Sample*

In order to decide how many participants needed to be recruited for this research, a power analysis was performed. The power analysis helps to determine the actual sample size needed, given a desired alpha level (0.05), a desired power level (0.80), and the desired effect size (medium = .25) (Mayr et al., 2007). The power analysis gave a required sample size of 120 participants.

Initially, a total of 294 people participated in the current study. However, 257 of them dropped out, indicating a significant dropout rate. This study focused on the individuals who completed all five days of the study. Unfortunately, a significant number of participants did not complete the study, potentially representing the majority, as a considerably larger group of individuals initially began the study on day 1. Furthermore, participants dropped out because they did not give consent for participating in the study ($n$ = 2), did not share their real email addresses, had technical issues with the prototype, or did not meet one or more of the study requirements due to age ($n$ = 22) or not being open to a relationship ($n$ = 56). As a result, the data of only 37 participants could be analyzed. From those 37 participants, 21 were assigned to the no match condition and 16 to the match condition.

In the final sample, the distribution between men ($n$ = 16; 43.2%) and women ($n$ = 21; 56.8%) was comparable. The average age of the participants was 24 years old ($M$ = 24.43, $SD$ = 2.23), with the youngest respondent being 20 years old and the oldest participant being 29 years old. Of all the participants, 13 of them indicated they felt most attracted to men (35.1%), 18 of them to women (48.6%), and six of them to both genders (16.2%). More than half of the participants ($n$ = 23; 62.2%) reported to currently use one or more dating platforms. The remaining participants indicated they are not currently using any dating platforms ($n$ = 14; 38.8%). Among the participants who use dating platforms, 5.4% ($n$ = 2) use the platforms once a month, 10.8% ($n$ = 4) use them 2-3 times a month, 16.2% ($n$ = 6) use them once a week, 10.8% ($n$ = 4) use them 2-3 times a week, 10.8% ($n$ = 4) use them 4-5 times a week, and 8.1% ($n$ = 3) use them once a day.

## Materials

*Prototype evaluation prior to the main study*

Prior to the experiment, a prototype evaluation was conducted in collaboration with two other master thesis students from Tilburg University to assess the realism and usability of the initial version of the dating app prototype. The pre-test focused on three key aspects: the dating profiles in the app, the overall interface of the app, and the interaction with its features. To measure this, a think-aloud study was conducted. This is a qualitative empirical data collection technique in which participants verbally express their thoughts about the interaction experience (Hartson & Pyla, 2019). The study involved 12 participants aged between 18 and 30 years who were all single and had experience using dating apps. The group was evenly split between men and women and between those who received a match and those who did not. These participants were recruited through non-probability sampling, whereby individuals within the researchers' networks were approached to participate.

Before the study, participants were given an information letter outlining the expectations of the think-aloud study and asked to sign a consent form. Once this was completed, participants were sent a Qualtrics link, which they had to access via their smartphones, where they provided their demographic information, including gender, age, and romantic orientation. The Qualtrics link then directed them to the prototype dating application in which participants were assigned to either the match or no match condition. Participants were instructed to use the prototype dating app as they would any other dating app. They were presented with 30 profiles, consisting of either male or female users, depending on their indicated sexual preference. Participants were asked to speak their thoughts out loud while swiping right if they liked someone and left if they did not like them. After evaluating all 30 profiles, participants were asked additional questions

such as "*Are there any crucial features currently missing from the dating app that is essential to your user experience?*" and "*To what extent did you find the appearance of the dating app realistic?*". Examples of the materials are presented in Appendix A.

*Prototype dating app*

After analyzing the results of the pre-test conducted on the prototype dating app, various adjustments were made to the prototype of the dating app, with the expectation that this would increase its realism and usability in preparation for this experiment. The input obtained are divided into profile, interface, and interaction.

*Profile*

The pre-test showed various opinions on the realism of the profiles displayed in the prototype dating app. Some participants felt the profiles were a realistic representation of the people they would meet on a dating app. However, a larger group of participants felt that the profiles were unrealistic and inauthentic due to the use of similar types of photos for each profile (e.g. all photos were taken from the same angle or were standard stock photos with a high quality) and all the profiles showed highly attractive individuals. To improve the realism of the profiles, it was decided to follow the opinions by the participants and add more realistic profiles to the dating app prototype. This involved, for example, profile pictures of individuals taken with their pets, in groups, at social gatherings, or of a slighter lower quality.

Finally, it was discovered that users missed creating their own profiles before swiping through the profiles of other on the prototype dating app. To address this, the new version of the prototype dating app gave users the impression that they were creating a profile. In this profile, they filled in their age, gender, sexual orientation and character traits. Participants could select the character traits from a list prepared in advance by the researchers. Participants were also

allowed to specify their preferences regarding gender, age and maximum distance from a potential partner. These specified traits were then included in the participants' profiles. Simultaneously, participants had the opportunity to view the character traits on other users' profiles. This gave them insight into the personalities and interests of potential matches, which further improved their decision-making process while using the app.

*Interface*

Generally, the pre-test participants were positive toward the prototype dating app's appearance, as they indicated it looked realistic and comparable to well-known applications like Tinder and Bumble. However, some participants felt the interface was basic and lacking in special features, such as the option to contact someone. This concern was addressed in the new version of the prototype dating app by adding a feature that allows users to say "Hi" to a match. However, this was a simplified version that did not include a fully interactive feature, which was done to ensure the feasibility of the research. Moreover, participants felt that the app lacked identity because it did not have a name. In response to this feedback, it was decided to give the prototype dating app the name "HeartBeat".

*Interaction*

In general, the pre-test participants found the swiping feature work well. The cross and heart icons were user-friendly, and participants found the swiping realistic and straightforward. However, some users did not perceive receiving a match or no match notification after every swipe as realistic. In the initial version, participants received a notification after each swipe indicating the outcome (e.g., a match or no match). However, participants expressed that this approach did not feel realistic. In the revised version, this was changed so that participants would receive a pop-up notification when they had a match, a notification on top of their screen when

they had a no match with the message, "You and [name] did not match.", and sometimes did not immediately saw the outcome. We retained the notification of a no match to measure the impact of a "no match" on individuals. Examples of adapted notifications are provided in appendix B.

Additionally, an 80-20 rule was implemented, where 80% of the dating outcomes aligned with the participants' assigned condition (e.g., 80% matches for participants in the match condition), while the remaining 20% displayed the opposite condition (e.g., 20% no match for participants in the match condition). Appendix C displays visual representations of the final version of the prototype dating app

**Measures**

*Well-being*

To measure well-being over time (i.e., day 1 and day 5), the Warwick–Edinburgh Mental Well-being Scale (WEMWBS) scale was used (Lloyd & Devine, 2012). The scale measures well-being by measuring both subjective well-being and psychological functioning using 11 items (e.g., "I have been feeling confident" and "I have been feeling optimistic about the future") on a 5-point Likert scale, ranging from (=1) "None of the time" to "All of the time" (=5). Reliability analysis showed an acceptable internal consistency for both the first day of the study ($\alpha = 0.784$) and the final day of the study ($\alpha = 0.774$). In order to measure well-being, the total score was obtained by summing the score for each of the 11 items. The total score could thus range between 11 to 55, where higher scores indicate higher well-being. The mean scores obtained on the scale were 40.30 ($SD = 4.53$) on the first day and 39.48 ($SD = 4.58$) on the final day.

*Profile liking behavior*

Profile liking behavior on an online dating app is defined as indicating interest or disinterest by swiping a profile either left (dislike) or right (like). The total number of likes per day (over 5 consecutive days) was used to measure the profile liking behavior and could thus range from 0 (no profiles liked) to 30 (all profiles liked) likes per day. The number of likes across all five days was compared to assess potential changes or patterns over time.

**Procedure**

The data for this study were collected in collaboration with two other master's thesis students from Tilburg University. These students also conducted online dating research but had a different focus.

*Participant recruitment and study introduction*

Multiple recruiting techniques were employed to maximize the number of respondents for the study. Initially, respondents were recruited from the student's network, and additionally, platforms where the target audience is active, such as Facebook, LinkedIn, Instagram, Tiktok, and dating platforms, were used. After their willingness to participate in the study, participants were directed to a Qualtrics environment. Here, they were presented with an information letter detailing the study's nature and objectives. This letter emphasized that answers would remain confidential and that there were no right or wrong answers to ensure that participants answered truthfully. It also explained what was expected of them for the next five days. Subsequently, they were requested to provide their consent to participate in the study by filling out a consent form and were asked for their email address. By providing their mailing address, participants were enrolled in a mailing list. Every subsequent morning at 8 am, participants received an email notifying them to continue the study, resume their swiping activity for that day. Once this

process was completed, the first day of the longitudinal study began.

First, the participants were asked to provide demographic information, such as age, gender, relationship status, and romantic orientation. Participants who did not meet the predetermined age range (18-30 years) and were not open to a relationship were excluded from further participation. When participants met the criteria, they were asked to answer a few questions on this first day prior to swiping, starting with a personality questionnaire which was part of another master thesis student's research. Then, as a pretest measure, respondents were asked to complete the Edinburgh Mental Well-being Scale (WEMWBS) and a dating confidence scale. After these questions were answered, participants were directed to the prototype dating app.

Within the prototype, they were first asked to create a profile. After completing their profile, participants were presented with 30 profiles per day. The gender of the profiles shown to each participant depended on their indicated romantic preference, with participants who specified an interest in men being shown 30 male profiles and those interested in women being shown 30 female profiles. The participants were randomly assigned to either the match or no match condition from the onset of the study and remained in their assigned condition throughout the study period. At this stage, participants were asked to express their interest by swiping the profiles to the left (dislike) or right (like). After the participants finished swiping, they could make profile adjustments (which was a variable of interest for another master thesis student) and were asked one general well-being question (i.e., How do you feel at this moment? (1 = Very bad, 7 = Very good). After this, the participants were directed back to the Qualtrics environment to submit their responses.

*The second, third, and fourth day of the study*

At 8 am, a unique link was emailed to participants, notifying them that 30 new profiles were available for swiping. Clicking on the link redirected them to the Qualtrics environment, where they were welcomed before being redirected to the dating app prototype. Here, participants swiped left (dislike) or right (like) on the 30 profiles based on their preferences. After completing this activity, participants were given the opportunity to adjust their profiles once again. Upon completion of profile adjustments, they were asked the general well-being question (i.e., How do you feel at this moment? (1 = Very bad, 7 = Very good). After this, the participants were directed back to the Qualtrics environment to submit their responses.

*The final day of the study and debriefing*

On the fifth and last day of the study, participants again received an email with the Qualtrics link and swiped 30 profiles. At the end, they could make profile adjustments and had to fill in the general well-being question. Then, they were redirected to the Qualtrics environment, where they were asked to complete the Edinburgh Mental Well-being Scale (WEMWBS) again as a post-test measure after finishing swiping for five days. The survey ended with thanking the participants for their participation and offering them the opportunity to contact the research team with any questions or comments about the study.

**Data Analysis**

This study collected two types of data: self-reported well-being and behavioral data obtained through swiping. The analysis aimed to investigate the long-term effects of receiving no-matches and matches on well-being and profile liking behavior. For well-being, comparisons were made between ratings on day one and five to assess potential changes over time. The

statistical analysis involved two repeated measures ANOVA tests and was conducted using SPSS software.

## Results

The goal was to test if time (within-subjects variable) and dating success (between-subjects variable) influenced well-being (H1), swipe time (H2), and profile liking behavior (H3). Unfortunately, only two hypotheses (H1 and H3) could be tested due to the unreliability of measuring swipe time. The time was measured in seconds, but the dataset occasionally contained negative values and was therefore considered unreliable. Future use of the prototype will require attention to address this issue.

### Well-being

Unfortunately, data from 14 of the 37 participants could not be used because they did not fill out the well-being scale at the end of the research. Consequently, only data from 23 participants were included for analysis, of which ten were in the no match and 13 were in the match condition.

To test hypothesis 1, which states that people who predominantly receive no matches on a dating app prototype for five days in a row score lower on well-being than people who predominantly receive matches for five days in a row, a repeated measures ANOVA was conducted with well-being as the outcome variable. Results showed that there was no significant difference in well-being scores between participants in the different experimental conditions. Specifically, participants in the no match condition displayed comparable well-being scores ($M$ = 40.80, $SD$ = 2.53) to those in the match condition ($M$ = 39.19, $SD$ = 4.96), $F(1, 21) = .0868$, $p$ = .36 (See Table 1). Moreover, no differences were found between the average well-being scores on the first day of the study ($M$ = 40.30, $SD$ = 4.53) and those on the final day of the study ($M$ =

39.48, *SD* = 4.58), $F(1,21) = 1.031$, $p = .32$, indicating that consecutive days of swiping had no notable impact on participants' well-being. There was thus no main effect of time on well-being. In addition, no interaction effect of time and match condition was found, $F(1, 21) = 0.243$, $p = .63$, $\eta^2 = .01$.

**Table 1**

*Mean scores (SD) of Well-Being Scores (N =23)*

| | **Day 1** | **Day 5** | **Total** |
|---|---|---|---|
| No-match condition (*N* = 10) | 41.00 (3.59) | 40.60 (2.99) | 40.80 (2.53) |
| Match condition (*N* = 13) | 39.77 (5.22) | 38.62 (5.19) | 39.19 (4.96) |
| Total (*N* = 23) | 40.30 (4.53) | 39.48 (4.40) | 39.89 (4.09) |

*Note.* Well-being scores are the total scores of the WEMWBS scale, where higher scores indicate higher well-being.

In addition to using the WEMBWS scale to measure well-being on the first and last day of the study, participants indicated in the prototype each day after swiping how they felt at that moment on a scale from 1 to 7. Ratings to this question were examined to assess how and if the participants' feelings changed over the five consecutive days. Notably, all 37 participants responded to this daily inquiry. The findings revealed that five consecutive days of swiping had an impact on the participants' feelings, $F(4, 140) = 2.852$, $p = .03$, specifically showing a decrease in participants' average feelings as the study progressed for both experimental conditions (See Table 2). However, further analyses using Bonferroni pairwise comparison

revealed that there were no significant differences between the different time points (all *p*'s > .05). Additionally, upon analyzing Figure 1, it becomes evident that the developmental trends over time are consistent for both conditions. Despite showing higher average scores for the no match condition compared to the match condition, the difference in participants' feelings between the two groups was not statistically significant. Lastly, the repeated measures ANOVA revealed no significant interaction between match condition and time, $F(4, 140) = .639$, $p = .74$. This means that whether participants received matches or no matches in the dating app did not have a noticeable impact on how their feelings changed over the course of the study.

**Table 2**

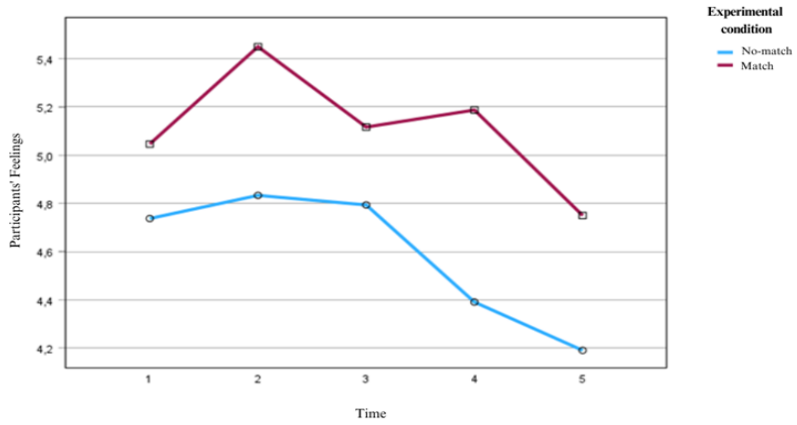
*Mean scores (SD) of Participants' Feelings (N =37)*

| | **Day 1** | **Day 2** | **Day 3** | **Day 4** | **Day 5** | **Total** |
|---|---|---|---|---|---|---|
| No match condition (*N* = 21) | 4.74 (1.33) | 4.83 (0.93) | 4.79 (1.16) | 4.39 (0.91) | 4.19 (1.25) | 4.59 (0.81) |
| Match condition (*N* = 16) | 5.05 (1.00) | 5.45 (1.15) | 5.12 (1.31) | 5.19 (1.42) | 4.75 (1.44) | 5.11 (1.00) |
| Total (*N* = 37) | 4.87 (1.20) | 5.10 (1.06) | 4.93 (1.22) | 4.74 (1.21) | 4.43 (1.34) | 4.81 (0.92) |

*Note*. Participants' feelings were measured through the question "How do you feel at this moment?" on a 7-point Likert scale, ranging from 1 (Very bad) to 7 (Very good) for 5 consecutive days.

**Figure 1**

*Average Score of Participants' Feelings over Time (No Match vs. Match)*




*Note.* Participants in no-match condition = 21, participants in match condition = 16, total $N$ = 37.

Overall, the results did not support hypothesis 1, which predicted that people who predominantly receive no-matches on a dating app prototype for five days in a row score lower on well-being than those who predominantly receive matches for five days in a row. Therefore, H1 was rejected.

**Profile liking behavior**

In contrast to well-being, the data on swiping behavior could be analyzed for all 37 participants (no match condition = 21; match condition = 16). Participants were presented with 30 profiles for five consecutive days, resulting in 150 profiles that could be swiped right or left.

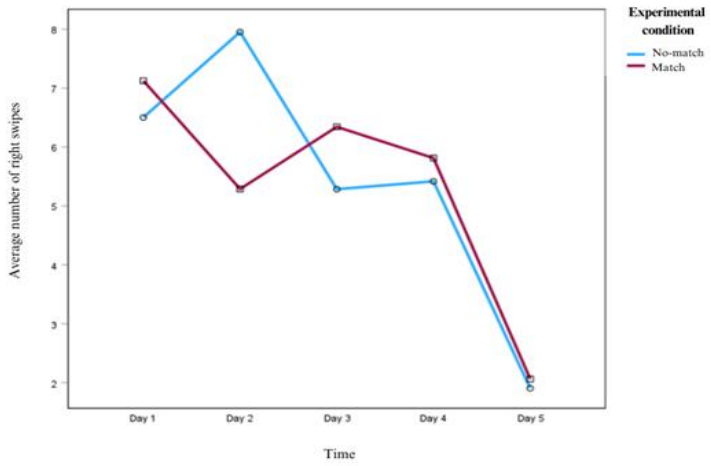
On average, participants swiped right on 27 profiles in total ($M$ = 26.87, $SD$ = 21.60). The average number of liked profiles per day was five ($M$ = 5.37, $SD$ = 4.32), with a higher number of right swipes observed on the first day ($M$ = 6.77, $SD$ = 5.77) than on the last day ($M$ = 1.97, $SD$ = 3.09) (See Figure 2). The repeated measures ANOVA results revealed that this difference was significant, $F(4, 140) = 18.635$, $p < .001$. This indicates that participants' number of right swipes changed significantly over time, showing a noticeable decline throughout the study (See

Table 3). Pairwise comparisons using Bonferroni indicated a significant difference between day five and day one ($p < .001$), but no significant differences were observed for the other time levels (all $p$'s > .05). Additionally, there was no significant main effect of right swipes between the different experimental conditions, $F(1, 35) = .004$, $p = .95$, indicating that people liked as much profiles in the match ($M = 27.06$; $SD = 17.42$) as in the no match condition ($M = 26.63$; $SD = 26.75$).

Furthermore, the results indicated an interaction effect between time and match condition (no match vs. match), $F(4, 140) = 2.653$, $p = .036$. Looking at the graph (Figure 2), it was observed that on the second day, participants in the no match condition swiped right more frequently than those in the match condition. However, further exploration of the interaction effect using pairwise comparisons corrected with LSD showed no significant difference on day 2. Additional analyses using pairwise comparisons corrected with LSD demonstrated that the number of right swipes on the last day significantly differed from the number of right swipes on all other days (all $p$'s < .01). Nevertheless, further exploration found no significant differences between different time points and experimental conditions (all $p$'s > .05). These findings, however, did not support the hypothesis that individuals who predominantly receive no matches on a dating app prototype for five consecutive days swipe fewer profiles than those who predominantly receive matches for five consecutive days. As a result, H2 was rejected.

**Figure 2**

*The average number of right swipes per day per condition*




*Note.* Participants in no-match condition = 21, participants in match condition = 16, total *N* = 37.

## Table 3

*Mean scores (SD) of Swiping Behavior (N =37)*

| | | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Total |
|---|---|---|---|---|---|---|---|
| No-match condition | Men (*n* = 10) | 8.18 (6.50) | 10.35 (6.40) | 6.27 (3.34) | 5.77 (4.85) | 2.60 (2.50) | 6.63 (4.25) |
| | Women (*n* = 11) | 4.80 (4.18) | 5.42 (3.68) | 4.67 (2.82) | 5.55 (3.33) | 1.40 (2.01) | 4.37 (2.40) |
| | Total (*n* = 21) | 6.49 (5.60) | 7.88 (5.67) | 5.47 (3.12) | 5.66 (4.05) | 2.00 (2.29) | 5.50 (3.55) |
| Match condition | Men (*n* = 6) | 12.00 (7.72) | 10.12 (6.94) | 11.64 (8.28) | 10.67 (7.92) | 5.00 (5.51) | 9.89 (6.63) |
| | Women (*n* = 10) | 4.20 (2.86) | 2.37 (1.94) | 3.19 (2.02) | 2.90 (2.18) | 0.30 (0.67) | 2.59 (1.04) |
| | Total (*n* = 16) | 7.13 (6.32) | 5.28 (5.77) | 6.36 (6.57) | 5.81 (6.23) | 2.06 (3.99) | 5.33 (5.35) |

*Note.* Swiping behavior is the average number of right swipes per day in the dating app prototype

## Discussion

Overall, no significant differences were found in this study. First, the results show no difference in well-being between individuals who predominantly received no matches and those who predominantly received matches, which contradicts H1. This finding contradicts the expectations set by previous studies (e.g. Andrighetto et al., 2019; Van der Veen et al., 2019), which suggested that experiencing rejection negatively impacts emotional well-being. There are several possible explanations for this. First, the inconsistent findings may be attributed to the low sample size. The limited number of participants in this study lacks the ability to detect significant effects or relationships accurately. A second possible explanation for this inconsistency could be the use of a broad well-being scale, which lacks specificity. Well-being is a broad concept without a clear-cut definition, and the same applies to the outcome variables utilized to assess it. Van der Veen et al. (2019) measured well-being through heart rate, while Andrighetto et al. (2019) focused on emotional aspects by measuring the levels of enjoyment and sadness. In contrast, our study utilized the comprehensive WEMWBS scale, capturing well-being as a whole rather than its individual components. This broad scale may have compromised sensitivity, leading to potential oversight of subtle variations in well-being data. Another possible explanation could be that rejection during the pre-matching phase has a lesser impact on individuals compared to rejection during the conversation phase, which has been studied more extensively. In the pre-matching phase, people are still exploring potential matches and have not yet developed strong emotional connections. As a result, the rejection experienced at this stage may not significantly affect their overall well-being. However, during the conversation phase, individuals have already matched with someone, engaged in conversations, and formed a connection. Rejection at this point can feel more personal, potentially leading to a stronger

impact on their well-being. Finally, a possible explanation of the inconsistency could be that participants perceived the experience of rejection as a ‘part-of-the-game’ aspect of using dating apps. It is plausible that individuals are aware of the possibility of encountering rejection when they start using a dating app and understand that it is a common experience within this context, potentially leading to a minimal impact on their well-being. This would align with a finding from a previous study by Van De Wiele and Campbell (2019), who found that individuals often perceive rejection in an online dating context as something "common" or "expected".

The fact that individuals were not affected by receiving rejection in the pre-matching phase could be a possible explanation for not finding a significant difference in user profile liking behavior between individuals who predominantly received matches and those who predominantly received no matches. It was expected that participants who mainly received no matches on the dating app prototype would like fewer profiles compared to participants who predominantly received matches for five consecutive days (H3). This expectation was based on previous studies that have suggested that rejection can influence individuals' behavioral strategies, with participants who experience more frequent rejection becoming more cautious in their interactions and less inclined to show interest in other profiles (Leary, 2015). However, the research results showed no significant difference in profile liking behavior between the two experimental conditions.

While no support was found for H3, results did show a main effect of time. The number of liked profiles decreased over the days, regardless of the experimental condition. This finding aligns with the concept of a rejection mindset proposed by Pronk and Denissen (2020). This mindset suggests that individuals become more inclined to reject potential partners when presented with more options.

Further exploring the relationship between receiving rejection and its impact on profile liking behavior revealed gender differences, with men swiping right on more profiles than women. This finding aligns with previous studies that have demonstrated that women exhibit higher levels of selectivity in their mate preferences (e.g., Abramova et al., 2016; Kanazawa, 2009; Whyte et al., 2021). However, contrary to these findings, it was observed that women who receive few matches increase their liking activity, suggesting that the experience of receiving no matches impacts women's swipe behavior, motivating them to search for potential matches actively. A possible explanation for this behavioral pattern could be that women who receive fewer matches may perceive a scarcity of potential partners, prompting them to take a more proactive approach to their swiping behavior (Thomas et al., 2022). Consequently, when faced with limited options, women may exhibit a more active engagement with online dating platforms, swiping more to maximize their chances of finding a suitable partner. Another explanation for this behavior could be that women seek more validation than men. Numerous studies have consistently shown that women tend to have lower self-esteem than men (e.g., Gao et al., 2022; Zeigler-Hill & Myers, 2012; Zuckerman et al., 2016). In response to rejection, women may be inclined to like more as a way to bolster their self-worth, aiming to increase the likelihood of receiving positive responses. By liking more profiles, they hope to garner more matches and interactions, reinforcing their perception of attractiveness and self-value.

**Implications**

This research contributes to the existing literature by providing new insights into the relationship between online dating success, well-being and profile liking behavior within a dating app prototype. A first implication of this research is that it contributes to the limited research that uses an experimental design to examine the relationships between online dating,

well-being and receiving rejection. Previous studies have primarily relied on survey methods (e.g., Andrighetto et al., 2019; Her & Timmermans, 2021; Zervoulis et al. 2019), which only yield correlations between online dating and well-being. In contrast, this study used an experimental approach, which allowed causal relationships to be established. Moreover, this study is one of the first studies to experimentally examine dating success on dating apps during the pre-matching phase of online dating. Previous studies focusing on online dating, rejection and well-being have primarily examined rejection during the conversation phase, where individuals are already more invested in the relationship (e.g. Thomas et al., 2022; Van der Veen et al., 2019).

Although no significant differences were found, several interesting findings emerged, which shed light on the behavior of users in the online dating app environment. One notable finding is that being rejected in the pre-matching phase on a swipe-based dating app does not impact an individuals' profile liking behavior. This observation suggests that users might anticipate the possibility of rejection right from the beginning of their app usage. This relationship, however, has yet to be explored more extensively in future research.

A practical implication of the finding that being rejected, in the form of receiving no matches, on an online dating app does not influence users' profile liking behavior is that many dating apps currently implement a feature where users encounter matches among the first few profiles each time they open or use the app (Thomas et al., 2023). This feature aims to create a positive initial experience and increases user engagement. However, considering that users' profile liking behavior remains consistent and the number of liked profiles decreases over time, regardless of whether they initially receive matches, dating apps might reconsider the need for such a feature.

Finally, the study has methodological implications as it employs an innovative approach to measure behavioral data in online dating. Utilizing a prototype online dating app that closely resembles popular fast-dating apps like Tinder introduces a novel methodology for studying online dating experiences. By simulating a realistic online dating app, the study aimed to capture participants' genuine interactions and behaviors, enhancing the ecological validity of the findings. Consequently, the study's findings can be applied to actual online dating contexts, providing valuable insights for researchers, app developers, and users seeking a deeper understanding of online dating phenomena.

**Limitations and suggestions for future research**

The results of this study give valuable information about the relationship between repeatedly receiving no-matches versus repeatedly receiving matches for five consecutive days, and their impact on well-being and profile liking behavior in the context of online dating. However, there are a few limitations that should be discussed.

First, the research needed a bigger sample size. A power analysis conducted prior to the experiment indicated that at least 120 participants were required to detect a meaningful effect size increase with $\alpha = .05$ and $\beta = .80$. Despite efforts to mitigate dropout, data from only 23 participants were available for well-being measures, and 37 participants for profile liking behavior. Several factors contributed to this high dropout rate. First, many participants dropped out due to technical problems with the prototype. Despite pre-testing the prototype, unforeseen issues arose. One of these problems was that participants sometimes landed on the wrong day when clicking the link. Participants received a daily link to the prototype via email, and on the first day, a cookie was placed to recognize their progress automatically. However, if participants opened the prototype in an incognito window or deleted cookies in-between days, the prototype

failed to track their progress and redirected them to the first day. This problem came to light through messages and emails received by the researchers. The researchers addressed this problem by creating new emails containing the necessary information. However, unfortunately, it may have resulted in the likely loss of a significant portion of participants. Second, the longitudinal design of the study may also have had an impact on participant dropout. Not all participants remained actively engaged throughout the entire duration of the study, resulting in premature dropouts. Third, external factors may have influenced the high number of dropouts. For example, the timing of the study, as the data collection took place during the May holiday period in the Netherlands. Many participants, particularly students due to nonprobability sampling, were free from their obligations during this period. This may have influenced participant engagement and involvement. In future longitudinal research, it is advisable for other researchers to plan their data collection outside of holiday periods whenever possible. This approach can help minimize the potential influence of external factors like vacations or other time-off periods, allowing for a more consistent and reliable participation rate throughout the study.

A second limitation of this study is the scale used to measure well-being. Given the lack of previous longitudinal research on well-being in an experimental study, a well-established scale with high internal consistency and reliability was chosen for this specific study. Well-being, however, is a multidimensional construct influenced by numerous factors such as self-esteem, social support, and life circumstances, which may not be measurable using just one general well-being scale alone. Therefore, it is recommended for future research to include a more comprehensive range of measures and use both narrower and broader scales to get more clarity on whether rejections do not impact general well-being as measured in this study, or if

there are also no effects when measuring other – and more specific – facets of well-being.

## Conclusion

This study aimed to investigate the impact of repeatedly receiving matches or no matches in an online dating app on users' well-being and profile liking behavior over time. A five-day experimental study was conducted, where participants interacted with a prototype dating app and daily evaluated 30 fictitious dating profiles by swiping right (indicating a like) or left (indicating a dislike). Additionally, participants completed a well-being scale at the beginning and end of the study. In contrast to the expectations, the results revealed no significant differences in well-being and number of profile likes between individuals who predominantly received no matches and those who predominantly received matches. Future research is recommended to replicate this study with larger sample size and multiple well-being scales to further explore these findings. In conclusion, this study contributes to research on online dating and user behavior and provides useful insights for online dating applications and users of online dating platforms.

## References

Andrighetto, L., Riva, P., & Gabbiadini, A. (2019). Lonely hearts and angry minds: Online dating rejection increases male (but not female) hostility. Aggressive behavior, 45(5), 571-581. https://doi.org/10.1002/ab.21852

Argan, M., Dinç, H., Argan, M. T., & Özer, A. (2023). What does rejection look like? A photovoice study on emotions and coping regarding manuscript rejection. *Current Psychology*. https://doi.org/10.1007/s12144-023-04253-5

Beukers, G., & Cabenda, P. (2019). Tinder en Grindr zijn niets om je voor te schamen: bijna helft jongvolwassenen zoekt liefde online. De Volkskrant. Retrieved February 20, 2023, from https://www.volkskrant.nl/nieuws-achtergrond/tinder-en-grindr-zijn-niets-om-je-voor-te-schamen-bijna-helft-jongvolwassenen-zoekt-liefde-online~b2f8593f/

Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. (2009). Rejection elicits emotional reactions but neither causes immediate distress nor lowers self-esteem: A meta-analytic review of 192 studies on social exclusion. Personality and Social Psychology Review, 13(4), 269-309. https://doi.org/10.1177/1088868309346065

Bryden, Lindsey T., "Online dating applications and the uses and gratifications theory" (2017). EWU Masters Thesis Collection. 453. https://dc.ewu.edu/theses/453

Buchholz, K. (2023, 18 januari). How the World Dates Online. *Statista Infographics*. https://www.statista.com/chart/24165/online-dating-penetration-rate-revenue-selected-countries/

Curry, D. (2022). Dating App Revenue and Usage Statistics (2022). Business of Apps. Available online: https://www.businessofapps.com/data/dating-app-market/

De Wiele, C. V., & Campbell, J. F. (2019). 11: From swiping to ghosting: conceptualizing rejection in mobile dating. IT HAPPENED, 13, 158. Available online: https://pure.hva.nl/ws/portalfiles/portal/6608659/It_Happened_on_Tinder_small.pdf#page=160

Du, H., King, R. B., & Chi, P. (2017). Self-esteem and subjective well-being revisited: The roles of personal, relational, and collective self-esteem. PLOS ONE, 12(8), e0183958. https://doi.org/10.1371/journal.pone.0183958

Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does Rejection Hurt? An fMRI Study of Social Exclusion. *Science*, *302*(5643), 290–292. https://doi.org/10.1126/science.1089134

Gao, W., Luo, Y., Cao, X., & Xinqiao, L. (2022). Gender differences in the relationship between self-esteem and depression among college students: A cross-lagged study from China. *Journal of Research in Personality*, *97*, 104202. https://doi.org/10.1016/j.jrp.2022.104202

Gerber, J. M., & Wheeler, L. (2009). On Being Rejected: A Meta-Analysis of Experimental Research on Rejection. *Perspectives on Psychological Science*, *4*(5), 468–488. https://doi.org/10.1111/j.1745-6924.2009.01158.x

Halversen, A., King, J., & Silva, L. (2022). Reciprocal self-disclosure and rejection strategies on Bumble. Journal of Social and Personal Relationships, 39(5), 1324-1343. https://doi.org/10.1177/02654075211055759

Hartson, R., & Pyla, P. (2012). The UX Book: Process and Guidelines for Ensuring a Quality User Experience. https://cds.cern.ch/record/1437707

Heino, Rebecca & Ellison, Nicole & Gibbs, Jennifer. (2010). Relationshopping: Investigating the Market Metaphor in Online Dating. Journal of Social and Personal Relationships. 27. 427-447. 10.1177/0265407510361614.

Her, Y. C., & Timmermans, E. (2021). Tinder blue, mental flu? Exploring the associations between Tinder use and well-being. Information, Communication & Society, 24(9), 1303-1319. https://doi.org/10.1080/1369118X.2020.1764606

Johnson, K., Vilceanu, M. O., & Pontes, M. C. (2017). Use of online dating websites and dating apps: Findings and implications for LGB populations. Journal of Marketing Development and Competitiveness, 11(3), 60-66. Available online: http://www.na-businesspress.com/JMDC/JohnsonK_11_3_.pdf

Jung, J., Bapna, R., Ramaprasad, J., & Umyarov, A. (2019). Love Unshackled: Identifying the Effect of Mobile App Adoption in Online Dating. Management Information Systems Quarterly, 43(1), 57–72. https://doi.org/10.25300/MISQ/2019/14289

Karsay, K., Schmuck, D., Matthes, J., & Stevic, A. (2019). Longitudinal Effects of Excessive Smartphone Use on Stress and Loneliness: The Moderating Role of Self-Disclosure. Cyberpsychology, behavior and social networking, 22(11), 706–713. https://doi.org/10.1089/cyber.2019.0255

Katz, E. (1959). Mass communication research and the study of culture: An Editorial Note on a Possible Future for this Journal. Studies In Public Communication, 2, 1-6. Retrieved 15, April, 2012, from: http://repository.upenn.edu/asc papers/165

Katz, E., Gurevitch, M. and Haas, H. (1973). On the use of mass media for important things. American Sociological Review, 38. 164-181. Retrieved from: http://repository.upenn.edu/cgi/viewcontent.cgi?article=1275&context=asc_papers&sei

Kolhoff, S. (2021). Romantic Miscalculations On Dating Applications: Definitions And Experiences Of Mobile Dating Micro-Rejection. Wayne State University Dissertations. 3422. Available online: https://digitalcommons.wayne.edu/cgi/viewcontent.cgi?article=4421&context=oa_dissertAtions.

Korver, R. (2021). Finding your perfect match or damage to catch? Investigating the influence of match versus no-match on well-being using online dating apps and the moderating role of internal attribution and self-esteem. Available online: http://arno.uvt.nl/show.cgi?fid=159030

Leary, M. R. (2015). Emotional responses to interpersonal rejection. Dialogues in clinical neuroscience. https://doi.org/10.31887/DCNS.2015.17.4/mleary

Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal Rejection as a Determinant of Anger and Aggression. *Personality and Social Psychology Review*, *10*(2), 111–132. https://doi.org/10.1207/s15327957pspr1002_2

LeFebvre, Leah & Allen, Mike & Rasner, Ryan & Garstad, Shelby & Wilms, Aleksander & Parrish, Callie. (2019). Ghosting in Emerging Adults' Romantic Relationships: The Digital Dissolution Disappearance Strategy. Imagination Cognition and Personality. 39. 027623661882051. 10.1177/0276236618820519.

Lloyd, K., & Devine, P. (2012). Psychometric Properties of the Warwick–Edinburgh mental well-being scale (WEMWBS) in Northern Ireland. Journal of Mental Health, 21(3), 257-263. https://doi.org/10.3109/09638237.2012.670883

Malhotra, N. K., Birks, D. F., & Wills, P. (2012). Marketing Research: An Applied Approach. Financial Times/Prentice Hall.

Mayr, S., Erdfelder, E., Buchner, A., & Faul, F. (2007). A short tutorial of Gpower. Tutorials in quantitative methods for psychology, 3(2), 51–59. https://doi.org/10.20982/tqmp.03.2.p051

Olivera-La Rosa, A., Arango-Tobón, O. E., & Ingram, G. P. D. (2019). Swiping right: face perception in the age of Tinder. Heliyon, 5(12), e02949. https://doi.org/10.1016/j.heliyon.2019.e02949

Pronk, T., & Denissen, J. (2020). A rejection mind-set: Choice overload in online dating. *Social Psychological and Personality Science, 11*(3), 388-396. https://doi.org/10.1177/1948550619866189

Rees, E. (z.d.). Personal well-being user guidance – Office for National Statistics. https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/personalwellbeingsurveyuserguide

Rex Hartson, Pardha Pyla, in The UX Book (Second Edition), 2019

Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1998). The self-serving bias in relational context. Journal of Personality and Social Psychology, 74(2), 378–386. https://doi.org/10.1037/0022-3514.74.2.378

Sommer, K. (2001). Coping with rejection: Ego defensive strategies, self-esteem, and interpersonal relationships. In M. R. Leary (Ed.), Interpersonal rejection (pp. 167–188). Oxford University Press.

Stoicescu, M. (2019). The globalized online dating culture: Reframing the dating process through online dating. *DOAJ (DOAJ: Directory of Open Access Journals)*. https://doaj.org/article/945696178373497bae0796e9e4b2fde8

Strubel, J., & Petrie, T. A. (2017). Love me Tinder: Body image and psychosocial functioning among men and women. Body image, 21, 34-38. https://doi.org/10.1016/j.bodyim.2017.02.006

Sumter, S. R., Vandenbosch, L., & Ligtenberg, L. (2017). Love me Tinder: Untangling emerging adults' motivations for using the dating application Tinder. Telematics and informatics, 34(1), 67-78. https://doi.org/10.1016/j.tele.2016.04.009

Thomas, M. F., Binder, A., Stevic, A., & Matthes, J. (2023). 99 + matches but a spark ain't one: Adverse psychological effects of excessive swiping on dating apps. Telematics and Informatics, 78, 101949. https://doi.org/10.1016/j.tele.2023.101949

Timmermans, E., & Courtois, C. (2018). From swiping to casual sex and/or committed relationships: Exploring the experiences of Tinder users. *The Information Society*, *34*(2), 59–70. https://doi.org/10.1080/01972243.2017.1414093

Timmermans, E., & De Caluwé, E. (2017). To Tinder or not to Tinder, that's the question: An individual differences perspective to Tinder use and motives. *Personality and Individual Differences*, *110*, 74–79. https://doi.org/10.1016/j.paid.2017.01.026

Timmermans, E., Hermans, A., & Opree, S. J. (2020). Gone with the wind: Exploring mobile daters' ghosting experiences. Journal of Social and Personal Relationships, 38(2), 783–801. https://doi.org/10.1177/0265407520970287

Tinder. (2021). Ontdek waarom Tinder® 's werelds beste dating app is | Tinder. *Tinder*. https://tinder.com/nl/about

Tinder Revenue and Usage Statistics (2023) – Business of Apps. (2023, 1 februari). Business of Apps. https://www.businessofapps.com/data/tinder-statistics

Toma, C. L. (2022). Online dating and psychological wellbeing: A social compensation perspective. *Current Opinion in Psychology*, *46,* 101331. https://doi.org/10.1016/j.copsyc.2022.101331

Tyson, G., Perta, V. C., Haddadi, H., & Seto, M. C. (2016). A first look at user activity on tinder. International Conference on Advances in Social Networks Analysis and Mining. https://doi.org/10.48550/arXiv.1607.01952

Van Der Veen, F., Burdzina, A., & Langeslag, S. J. E. (2019). Don't you want me, baby? Cardiac and electrocortical concomitants of romantic interest and rejection. *Biological Psychology*, *146*, 107707. https://doi.org/10.1016/j.biopsycho.2019.05.007

Waleson, T. (2022). Swipe Worth the Hype? [Masters' thesis]. Tilburg University.

Watsen, J., & Nesdale, D. (2012). Rejection Sensitivity, Social Withdrawal, and Loneliness in Young Adults. Journal of Applied Social Psychology, 42(8), 1984–2005. doi:10.1111/j.1559-1816.2012.00927.x

Zeigler-Hill, V., & Myers, E. M. (2012). A review of gender differences in self-esteem. In S. P. McGeown (Ed.), Psychology of gender differences (pp. 131–143). Nova Science Publishers.

Zervoulis, Karyofyllis & Smith, David & Reed, Rhiannon & Dinos, Sokratis. (2019). Use of 'gay dating apps' and its relationship with individual well-being and sense of community in men who have sex with men. Psychology & Sexuality. 11. 10.1080/19419899.2019.1684354.

Zhang, Xukai & van der Molen, Melle & Otieno, Susannah & He, Zongling & Leppanen, Paavo & Li, Hong. (2021). Neural correlates of acceptance and rejection in online speed dating: An electroencephalography study. Cognitive Affective & Behavioral Neuroscience. 22. 10.3758/s13415-021-00949-y.

Zuckerman, M., Li, C., & Hall, J. G. (2016). When men and women differ in self-esteem and when they don't: A meta-analysis. *Journal of Research in Personality, 64*, 34–51. https://doi.org/10.1016/j.jrp.2016.07.007

# Appendices

## Appendix A

Introduction and consent form pre-test

### Introduction

Thank you for your participation in this research! For our master's thesis at Tilburg University, we are researching the user experience of a prototype online dating app. We are especially curious to what extent you, as a user, experience the dating app as realistic and why you choose to swipe left or right for someone. Ultimately, we hope to use your insights to optimize the user experience of this prototype to make it even more realistic.

### How does it work?

Once you have read this introduction, the survey will start. It will take a maximum of 15 minutes. You will be shown a prototype mobile dating app. In the app, 30 potential partner suggestions will be presented. We would like to ask you to rate these people fairly. Please try to imagine that you are the person who is using this dating app. Do you like someone? Then swipe right. If you don't want to like someone, swipe left. Meanwhile, we ask you to speak your thoughts out loud. We are mainly interested in how realistic you find dating app prototype and why you decide to make a certain choice. Please try to take this into account during your aloud thinking process. When you are done swiping, we will ask you a few more questions about your experience.

Your participation in this study is entirely voluntary and you can withdraw at any time. There are no right or wrong thoughts or answers to the questions. Try to go along with the first thoughts you have.

Have fun swiping and good luck!

---

**Consent Form**

**Dating app prototype - evaluation**

I agree to participate in the research project to evaluate the presented dating app prototype, conducted by Dick, Esmay and Janiek who have discussed the research project with me.
I have had the opportunity to ask questions about this research and I have received satisfactory answers. I understand the general purposes, risks and methods of this research.
I consent to participate in the research project and agree with the following statements:

- I have read the information above carefully
- my participation is completely voluntary
- I have the right to withdraw from the study at any time without any implications to me
- I know what I am expected and required to do
- I know that I can contact the researchers or principal investigator for any complaints with the research or the conduct of the research
- I am able to request a copy of the research findings and reports
- I agree that my anonymized data will be stored for 10 years

- I agree that my anonymized data will be used for potential future studies or scientific publication
- I agree that my anonymized data can be shared with others (for non-commercial purposes)

In addition, I consent to:

- audio-visual recording of any part of or all research activities (if applicable)
- publication of results from this study on the condition that my identify will not be revealed.

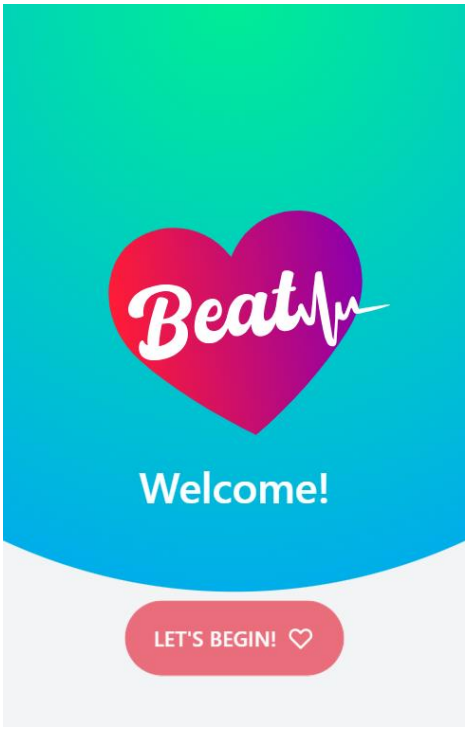
Name: _____

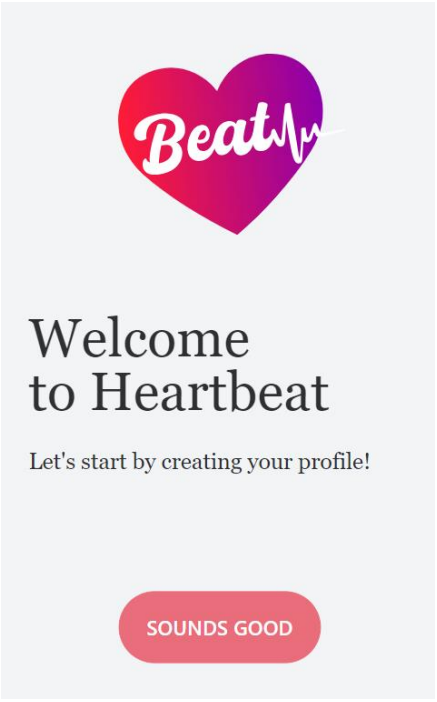
Signature: _____

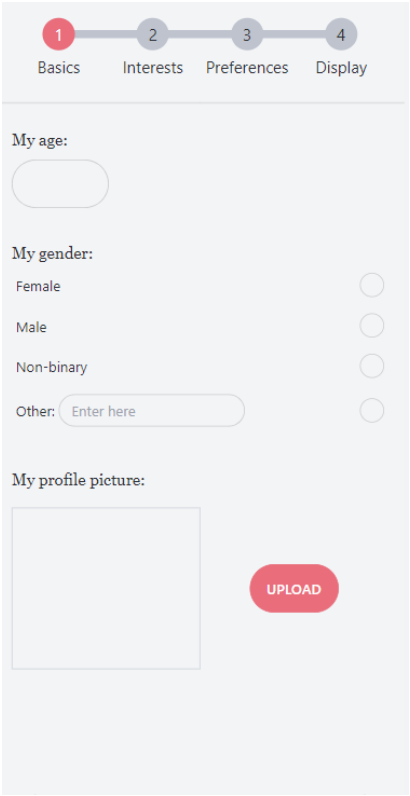
Date: _____

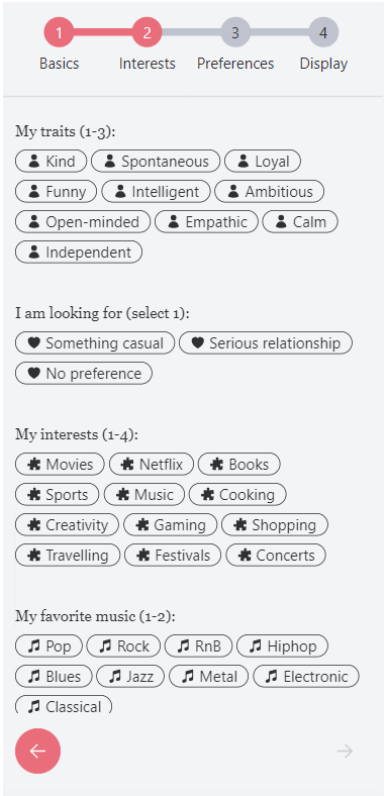
# Appendix B

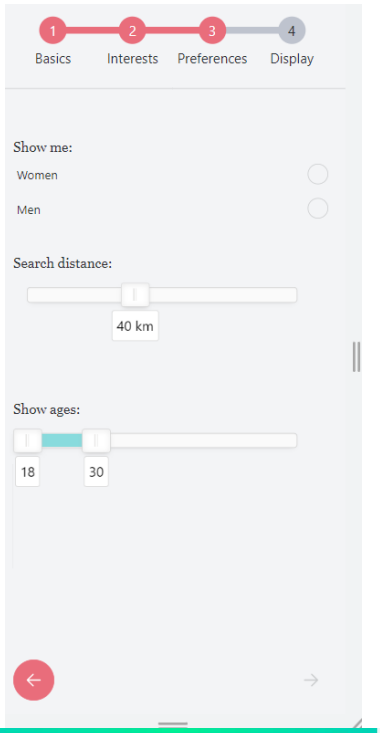
Screenshots of the final version of the prototype dating app

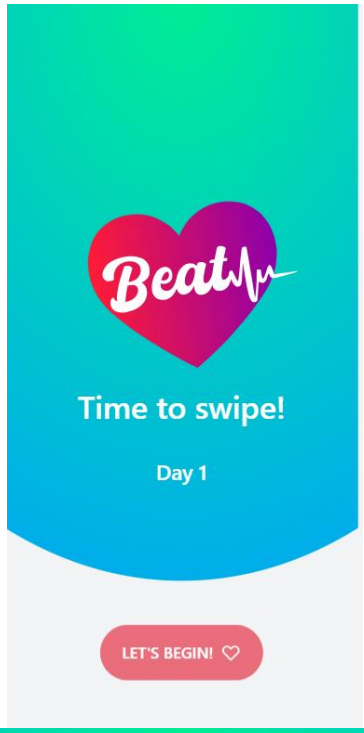


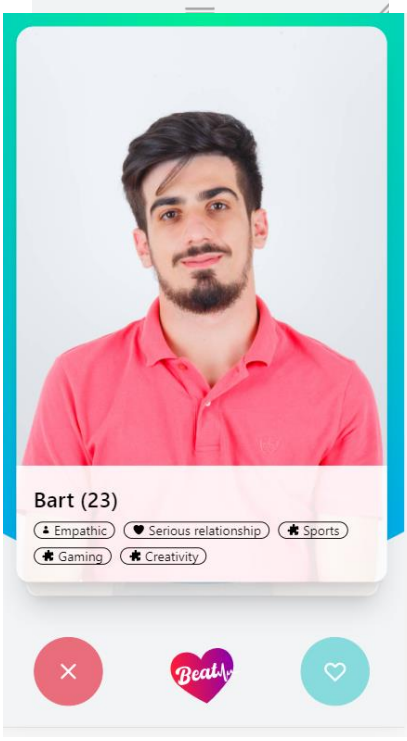



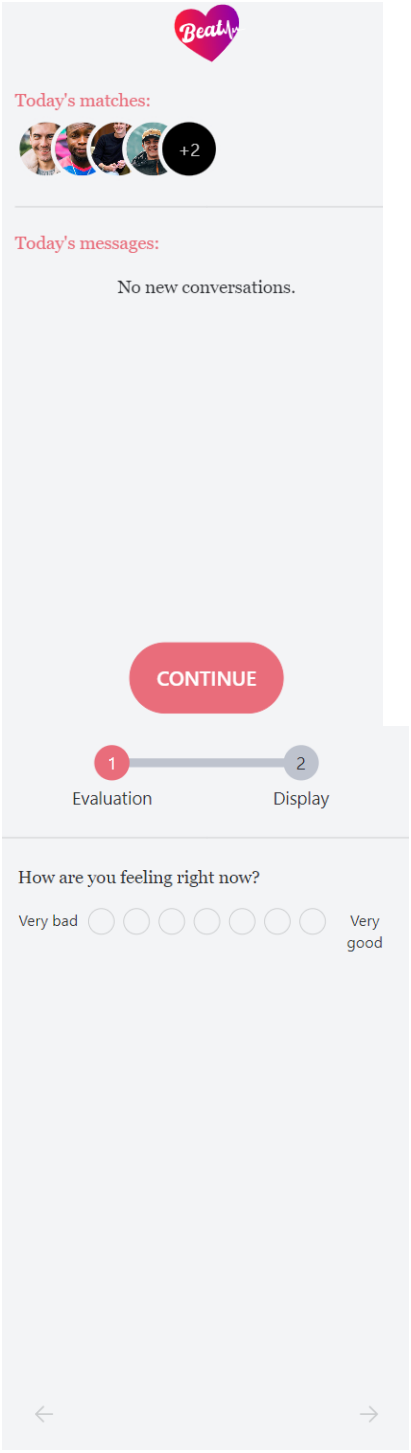



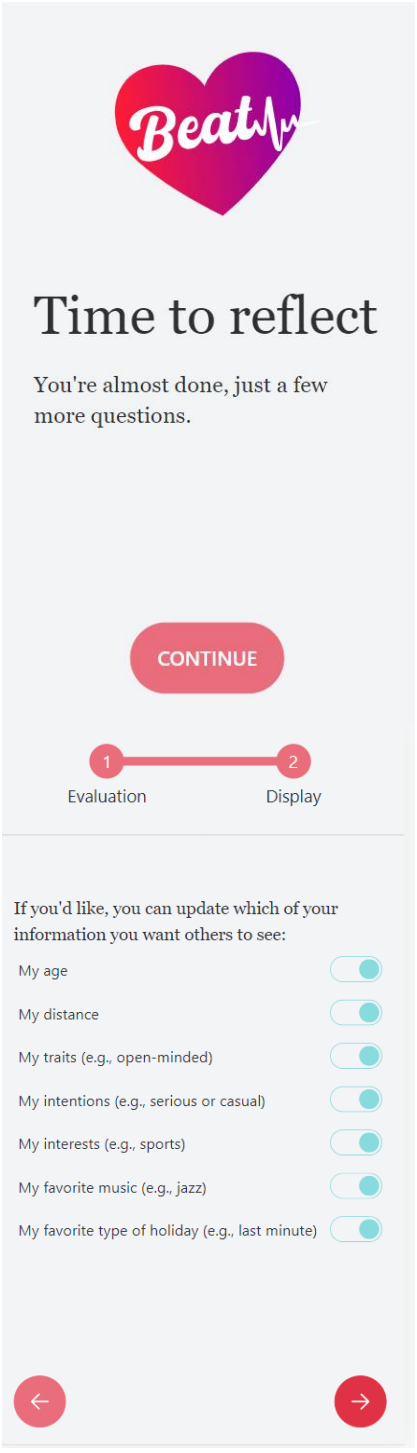

1
Basics
2
Interests
3
Preferences
4
Display
Show me:
Women
Men
Search distance:
40 km
Show ages:
18
30


Beat
Time to swipe!
Day 1
LET'S BEGIN!


Bart (23)
Empathic
Serious relationship
Sports
Gaming
Creativity
Beat


Wouter (22) 24 km away
Something casual
Hiphop
Last minute
Party
Beat

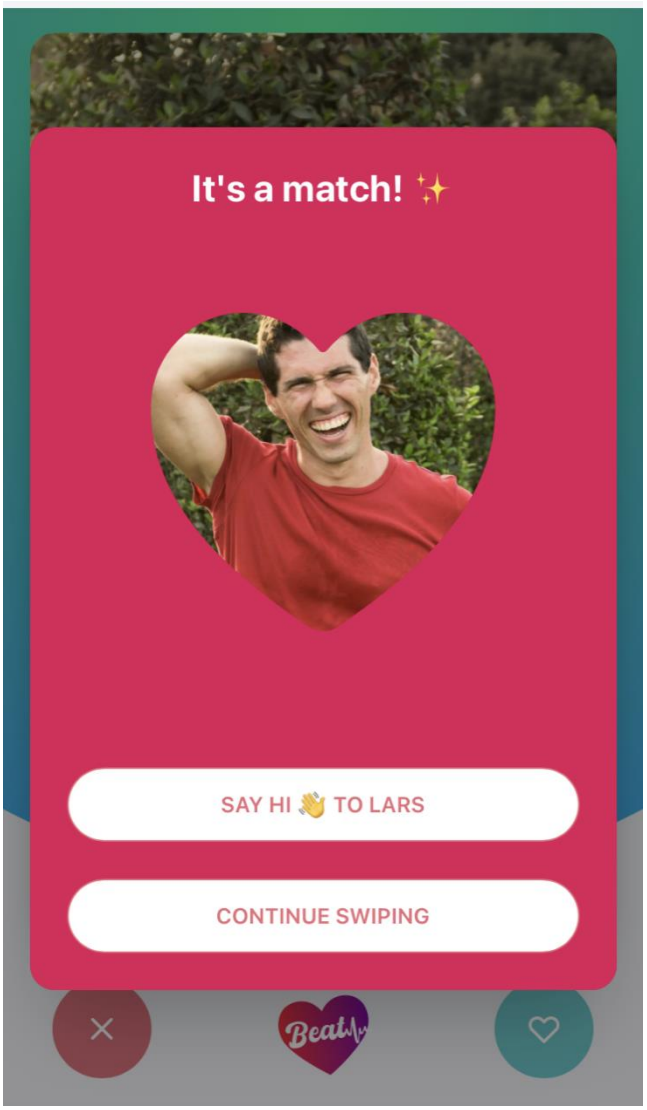

Today's matches:
+2
Today's messages:
No new conversations.
CONTINUE
1
2
Evaluation
Display
How are you feeling right now?
Very bad
Very good

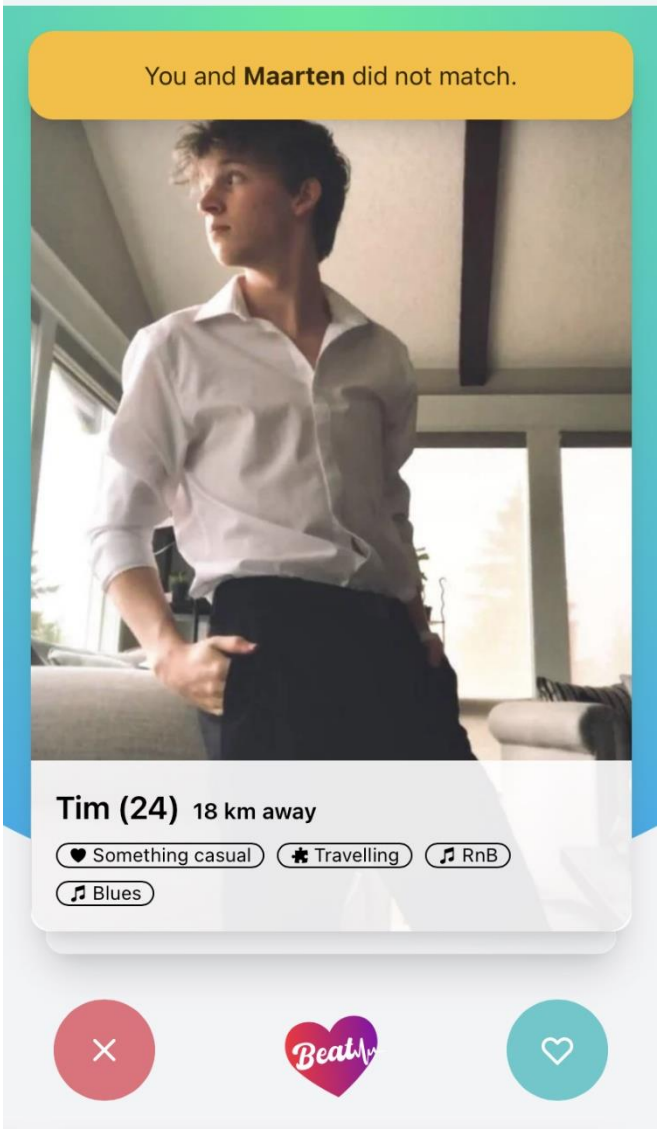

Time to reflect
You're almost done, just a few more questions.
CONTINUE
1
2
Evaluation
Display
If you'd like, you can update which of your information you want others to see:
My age
My distance
My traits (e.g., open-minded)
My intentions (e.g., serious or casual)
My interests (e.g., sports)
My favorite music (e.g., jazz)
My favorite type of holiday (e.g., last minute)

You are done with the app for today. Please close this window and return to Qualtrics to continue the study.

## Appendix C

Match vs. no match notification examples



# Appendix D

Questionnaire experiment

**Recruitment text**

YOU'VE GOT A MATCH! 💘 Are you open to a relationship and are you maximum 30 years old? Then we are looking for you! We are looking for participants for our master study on online dating. All you have to do is swipe five days in a row on a dating app (similar to Tinder) and who knows, you might find a nice match! It only takes a few minutes a day and you would help us a lot. LINK: https://tiu.nu/day1

**Information letter**

Welcome,

Thank you very much for participating in this study of Tilburg University! In this text you can read all the information that is necessary to start with this study, so please read it carefully.

With this research, we want to gain insights into people's behavior when using a prototype of an online dating app for a longer period of time. Therefore, we would like to ask you to interact with the mock-up online dating app HeartBeat for five consecutive days on your phone. Please make sure that you have a steady WIFI connection. You are asked to swipe some profiles in HeartBeat every day. If you have swiped right (thus liked) a profile, you will receive a notification indicating whether you have a match with this person or not. You may thus also be rejected, which may cause discomfort.

On the first and fifth (last) day, you are asked to answer a set of additional questions. On average, partaking in this study will take around 5 minutes a day. The first day will take around 15 minutes as it consists of more questions. To recognize you in subsequent days, a cookie with your unique participant ID will be installed on your device on the first day. On this first day, you'll also be asked to share your email address, which we will use to send you an e-mail every day at 8am with the participation link for that day. Please check your spam folder when participating the study, as the follow up e-mails may end up there. Make sure you swipe the profiles of that day before 23:59pm. Your email address will be removed as soon as the data collection has been finished.

There are no risks for participating in this study. All data collection will be done according to the General Data Protection Regulations (GDPR). The Research Ethics and Data Management Committee (REDC) of Tilburg School of Humanities and Digital Sciences (TSHD) has given permission for conducting this study (REDC.2022.16ab). The collected data will be anonymized and treated with utmost confidentiality. By no means, your email address can be associated with the results after data collection has been finished. The anonymized data of this study will be stored for 10 years and can be shared with other researchers (for non-commercial purposes).

Participating in this study is completely voluntary and during this study you have the right to withdraw at any time, for any reason and without negative consequences. If you have any questions about this study at a later time, you can contact the researchers on datingappresearch@tilburguniversity.edu. For comments or complaints about this study, you can also contact the REDC of TSHD via tshd.redc@tilburguniversity.edu.

**Consent form**

When you want to participate in this study, you agree with the following statements:

- You have read the information above carefully;
- You are 18 years or older;
- You know that if you have any questions, you can contact the researchers;
- You know that you may be rejected when liking profiles in the mock-up dating app HeartBeat;
- You accept that a cookie will be installed on your device that will only store your unique participant ID;
- You know that you can withdraw from this study at any times without reason and without negative consequences;
- You agree that your anonymized data will be stored for 10 years;
- You agree that your anonymized data will be used for potential future studies or a scientific publication;
- You agree that your anonymized data can be shared with others (for non-commercial purposes).

☐ I agree with this and would like to start with the study.

☐ I do not agree with this and I do not want to participate in this study.

**Demographic questions**

What is your age? (fill in your age in numbers)

_____

What gender do you identify most with?

o Male

o Female

o Non-binary

o Other, namely _____

o Prefer not to say

Which gender do you feel most attracted to?

o Males

o Females

o Both

o Other, namely: _____

o Prefer not to say

Are you currently open for a relationship?

o Yes

o No

Are you currently using one or more dating platforms?

o Yes

o No

o Prefer not to say

Approximately how often do you use this/these platforms per month?

o Once a month

o 2-3 times a month

o Once a week

o 2-3 times a week

o 4-5 times a week

o Once a day

o 2-3 times a day

o More than 2-3 times a day

**E-mail**

In order to contact you the upcoming days, we need your email address.*

*This email address will only be used to contact you during the five-day study, will not be linked to your answers, and will be removed from our database as soon as we're done with data collection.

** Please make sure you check your **spam mailbox** every day as the emails we send may end up in your spam folder.

---

**Personality**

We will now ask you to answer some statements about your personality. Indicate to what extent you agree with the following statements.

I see myself as someone who ...

| | Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |
|---|---|---|---|---|---|---|---|
| ... is reserved (1) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … is generally trusting (2) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … tends to be lazy (3) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … is relaxed, handles stress well (4) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … has few artistic interests (5) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … is outgoing, sociable (6) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … tends to find fault with others (7) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … does a thorough job (8) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … gets nervous easily (9) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| … has an active imagination (10) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**Well-being**

Below are some statements about your feelings and thoughts. Please tick the box that best describes your experiences.

Over the past 5 days...

| | Totally disagree (1) | Disagree (2) | Neither agree nor disagree (3) | Agree (4) | Totally agree (5) |
|---|---|---|---|---|---|
| I've been feeling relaxed (3) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling interested in other people (4) | ○ | ○ | ○ | ○ | ○ |
| I've had energy to spare (5) | ○ | ○ | ○ | ○ | ○ |
| I've been dealing with problems well (6) | ○ | ○ | ○ | ○ | ○ |
| I've been thinking clearly (7) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling good about myself (8) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling close to other people (9) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling confident (10) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling loved (12) | ○ | ○ | ○ | ○ | ○ |
| I've been interested in new things (13) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling cheerful (14) | ○ | ○ | ○ | ○ | ○ |

## Dating confidence

Indicate to what extent you agree with the following items

| | Totally disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Totally agree (7) |
|---|---|---|---|---|---|---|---|
| I lack confidence in my ability to find romantic connections in real life or on online dating apps (1) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| I often feel that I am a failure at dating (2) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| In general I feel satisfied with my dating life (3) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| I often worry about my future dating life (4) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

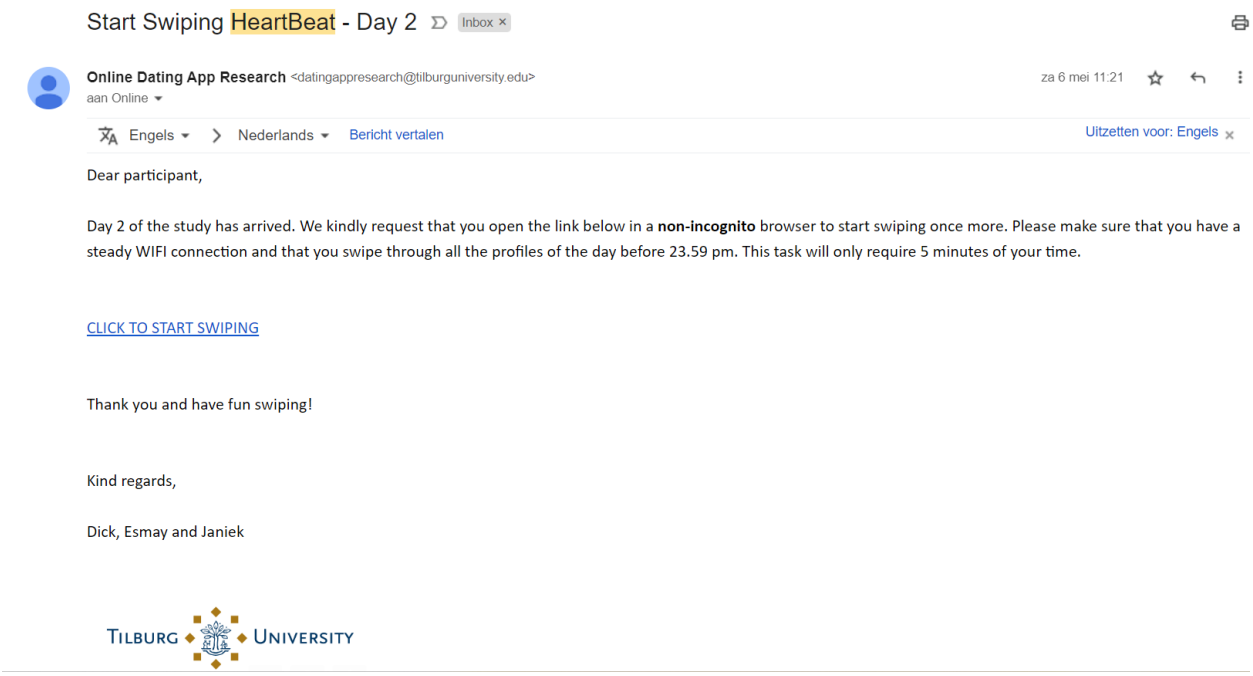
## Prototype

Click here to open the prototype

*Please click on the arrow button below after you are done with swiping on the prototype.*

## Day 2, 3 and 4

## Example of mail



Start Swiping HeartBeat - Day 2 Inbox ×

**Online Dating App Research** <datingappresearch@tilburguniversity.edu>
aan Online

za 6 mei 11:21

Engels Nederlands Bericht vertalen Uitzetten voor: Engels ×

Dear participant,

Day 2 of the study has arrived. We kindly request that you open the link below in a **non-incognito** browser to start swiping once more. Please make sure that you have a steady WIFI connection and that you swipe through all the profiles of the day before 23.59 pm. This task will only require 5 minutes of your time.

CLICK TO START SWIPING

Thank you and have fun swiping!

Kind regards,

Dick, Esmay and Janiek

TILBURG UNIVERSITY

## Introduction

Welcome back! It's time to swipe again. Have fun!

Click here to open the prototype

*Please click on the arrow button below after you are done with swiping on the prototype.*

**Day 5**

Welcome back!  It's time to swipe again.

Today is the last day of the survey.

After you finish swiping, a few more additional questions will be asked. Please make sure you don't forget to answer these.

Have fun!

Click here to open the prototype

*Please click on the arrow button below after you are done with swiping on the prototype.*

**Well-being**

Below are some statements about your feelings and thoughts. Please tick the box that best describes your experiences.

Over the past 5 days...

| | Totally disagree (1) | Disagree (2) | Neither agree nor disagree (3) | Agree (4) | Totally agree (5) |
|---|---|---|---|---|---|
| I've been feeling relaxed (3) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling interested in other people (4) | ○ | ○ | ○ | ○ | ○ |
| I've had energy to spare (5) | ○ | ○ | ○ | ○ | ○ |
| I've been dealing with problems well (6) | ○ | ○ | ○ | ○ | ○ |
| I've been thinking clearly (7) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling good about myself (8) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling close to other people (9) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling confident (10) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling loved (12) | ○ | ○ | ○ | ○ | ○ |
| I've been interested in new things (13) | ○ | ○ | ○ | ○ | ○ |
| I've been feeling cheerful (14) | ○ | ○ | ○ | ○ | ○ |

## Dating confidence

Indicate to what extent you agree with the following items

| | Totally disagree (1) | Disagree (2) | Somewhat disagree (3) | Neither agree nor disagree (4) | Somewhat agree (5) | Agree (6) | Totally agree (7) |
|---|---|---|---|---|---|---|---|
| I lack confidence in my ability to find romantic connections in real life or on online dating apps (1) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| I often feel that I am a failure at dating (2) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| In general I feel satisfied with my dating life (3) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| I often worry about my future dating life (4) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

## Debriefing

You've reached the end of the study! Again, thank you very much for your involved participation. In this study, you have interacted for five days with the dating app prototype HeartBeat in one of two conditions. This was thus not an actual online dating app, and so you've not created a profile yourself and the profiles you swiped were also fictitious. You either interacted with the version of HeartBeat in which you predominantly matched with the profiles you swiped right, or with the version in which you predominantly did not match with the profiles your swiped right. We want to highlight again that the degree of dating success does in no way reflect reality, as you were just randomly assigned to a match or no match experimental condition.

The main goal of this study is to examine the effects of dating success on online dating behaviors and mental well-being on the long-term. In previous studies, dating success did not seem to impact well-being much, but in these studies participants only interacted with the prototype for one short period of time. Therefore, we first of all want to examine if participants' well-being is affected when they receive matches or no matches for a longer period of time. Second, we want to examine if one's dating success affects online dating behavior. It may for example happen that someone who is often rejected starts to like more profiles over time to increase chances of receiving matches or likes fewer profiles to diminish feelings of rejection. Or that people who receive fewer matches are more willing to start a conversation with a person with whom they match. Finally, we want to investigate if individual differences play a role here. For example, men might like more profiles and make quicker decisions, and introverts may be less willing to engage in a conversation once they have a match than extraverts and those open to experience.

Do you still want to withdraw your participation? Please mail your unique code presented on top of this page to the researchers (datingappresearch@tilburguniversity.edu). All your data will then be removed from the database. You can do this as long as the results of this study have not been published. For questions or comments, you can send an e-mail to the researchers using the email address above.

For any comments or complaints about the study, you can also contact the Research Ethics and Data Management Committee of Tilburg School of Humanities and Digital Sciences (REDC.2022.16ab) at tshd.redc@tilburguniversity.edu.

Don’t forget to submit your answers by clicking on the arrow at the bottom of the page.