




Do We Love or Hate Tinder? Exploring Implicit Bias in Online Relationships through Story Completion Method

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ABSTRACT

Online dating is increasingly used to form romantic relationships but remains negatively portrayed in public and academic discourse. This study examines implicit representations of relationships initiated through online dating apps and how they compare to traditional and other online methods. In a between-subject experiment using a story completion method, participants (N=367) were presented with scenarios varying by the method of relationship initiation (e.g., in-person, dating apps, online communities). They continued the stories and evaluated the relationships for quality, outcomes, and duration. Results revealed a significant difference in perceived relationship quality. Relationships initiated in online communities were rated more negatively than those formed in person or via Tinder-assisted in-person dates. However, no significant differences were observed in positive evaluations or relationship duration across initiation methods. Notably, Tinder-initiated relationships showed no negative associations, suggesting growing acceptance of Tinder as a platform for forming committed relationships. These findings underscore increasing societal acceptance of online dating while highlighting persistent biases against specific online contexts.

Keywords: online dating, online relationships, online forum, story-completion task, social representations

1. Introduction

Online dating has transformed romantic relationships, evolving from personal ads and early matchmaking websites in the 1990s into a global phenomenon powered by mobile and location-based apps (Matthews, 2023). Today, with over 300 million users worldwide (Statista, 2024), online dating has shifted from a niche activity to a widely accepted and normalized way of meeting people. In the United States, for example, nearly as many individuals

have tried online dating as there are single people, reflecting its integration into modern lives and relationship practices (Matthews, 2023).

Despite its widespread adoption, the rise of online dating has not been without controversy. In the early days, stigma surrounded the idea of seeking love online (Cali et al., 2013; Peris et al., 2002), and concerns about health, safety, addiction, and problematic use are still prevalent (Bonilla-Zorita et al., 2021). Negative discourses often

overshadowed the potential benefits, painting online dating as fraught with risks and detrimental to meaningful connections.

Over time, as online dating became the leading way to search for a partner and many couples formed relationships this way (Rosenfeld et al., 2019), the stigma diminished, and its advantages became more evident. Studies have highlighted its accessibility, inclusivity, and success in fostering meaningful relationships (Wiederhold, 2020), with user experiences and attitudes generally becoming more positive (Pew Research Centre, 2023). However, skepticism and lingering stigma continue, with evidence suggesting biases against online relationships compared to those established face-to-face or through other online methods (Johanis et al., 2024; Pilek & De Saint Laurent, 2024).

Given its ubiquitous use and evolving representations, key questions emerge: What are our current representations of online dating and the relationships it fosters? Has it become more normalized, or do doubts and biases persist? Are relationships formed through dating apps seen as equivalent to those in person or through other digital means?

This study addresses these questions by exploring societal representations of online dating. Rather than directly asking participants about their views, it employs a story completion method to analyze implicit assumptions and ways of thinking about relationships formed online. This implicit approach is particularly valuable given the observed discrepancy between the growing use of online dating and persistent concerns and negative representations around it. Examining participants' judgments of fictional characters' relationships across different scenarios— in-person, alternative online methods, Tinder-only, and hybrid modes —the study aims to uncover overt and subtle factors that shape societal views of online dating.

1.1. *Evolving representations of online dating*

Like many emerging technologies, online dating has faced substantial concerns and criticisms, particularly in its beginning. Earlier studies on attitudes and beliefs about online romantic relationships and dating sites revealed a predominantly negative perception and even stigma (Anderson, 2005). Individuals looking for a partner online were stereotyped as desperate, deviant, shy, or socially inept and primarily interested in sexual and casual encounters (Peris et al., 2002). Additionally, concerns about the lack of honesty and strategic misrepresentation

were common among online daters (Gibbs et al., 2006), and the concept itself was considered risky for many, especially those who had never used it (Anderson, 2005).

While the stigma has diminished with the increased use of online dating (Dinh et al., 2018), significant critiques remain prevalent. Recent discourses highlight the commodification of love (Bandinelli & Gandini, 2022), where relationships are negatively impacted by the efficiency and rationality that characterize dating app usage. Dating apps are also frequently accused of promoting a hook-up culture (Timmermans & De Caluwé, 2017), where the solidity of human relationships has been 'liquified' (Bauman, 2003). Some even argued that Tinder users tend to report a higher need for sex and more sexual partners (Shapiro et al., 2017). These fears are reflected in the media's growing negativity and increased focus on the superficial nature of relationships fostered online (Pilek & de Saint-Laurent, submitted). Moreover, such apprehensions appear to resonate even among younger generations, who express concerns about the dehumanizing and addictive aspects of online dating (Pilek & De Saint Laurent, 2024).

The risks surrounding dating apps remain significant and are a central focus in much of the literature on online dating (Castro & Barrada, 2020). Dating apps have been associated with compulsive use and addiction (Hu & Rui, 2023) and with unethical sexual practices, with sexual harassment being especially prevalent among younger women and sexual minorities (Badal et al., 2018; Gillett, 2018). Sevi (2019) found that Tinder users exhibited higher levels of dark triad traits compared to non-users, a perspective that aligns with reports of crime and deceit on these platforms (Sevi, 2019). Additionally, dating apps can foster behaviors such as ghosting, deception, and toxicity (Timmermans et al., 2021), and they place significant pressure on physical attractiveness, which can negatively impact mental health (Strubel & Petrie, 2017).

Despite widespread concerns, many academic studies have failed to provide substantive evidence supporting these criticisms, offering a more balanced perspective. Earlier findings even suggested that individuals who use online dating are socially skilled, active internet users who view the internet as an additional avenue for finding love (Kim et al., 2009). Users of dating apps exhibit various personality traits and motivations, including personal exploration, sexual connections, and information seeking (Sumter et al., 2017). Moreover, online daters continue to value commitment and love, challenging stereotypes of

superficiality and the erosion of strong bonds (Hobbs et al., 2017). Likewise, contrary to popular beliefs about deception and authenticity, most instances of misrepresentation online are minor, and users value authenticity as they strive to balance idealized and genuine self-presentation in their profiles (Ellison et al., 2006; Pilek & De Saint Laurent, 2024).

The affordances of dating apps, such as availability, mobility, and access to a large pool of potential partners, make dating more convenient and efficient, particularly for individuals from marginalized groups (Goldenberg, 2019). Users of dating apps tend to be generally satisfied and have a more positive outlook on online dating, as they often find the types of relationships they are looking for and enjoy more frequent dates (Pew Research Centre, 2023). A 2019 survey found that nearly 40% of couples had met online, more than through any other individual method (Rosenfeld et al., 2019), highlighting their efficiency in forming relationships. Furthermore, many relationships formed online progress to marriage and are characterized by lasting quality (Cacioppo et al., 2013).

Ongoing tensions and debates between acceptance and concerns surrounding online dating reflect our broader representations of social technologies' impact on our connectedness and well-being. In the early days of the Internet, there were fears that time spent socializing online would diminish the quality of face-to-face interactions and contribute to loneliness (Kraut et al., 1998). The finding was disputed in the subsequent study (Kraut et al., 2002), but similar claims continue to emerge regarding social media use (Braghieri et al., 2022). Although the Internet and social technologies undoubtedly brought unprecedented challenges, we often overemphasize their detrimental effects.

While online relationships have become increasingly common and widely accepted, they are often viewed more negatively or associated with greater challenges and risks compared to traditional face-to-face interactions. Recent reports on users' experiences and attitudes toward online dating reveal a growing positivity toward meeting potential partners online. However, skepticism remains about the effectiveness of dating algorithms in predicting love, and opinions are sharply divided on the safety of online dating, particularly regarding scams (Pew Research Centre, 2023). Additionally, a 2020 Pew Research Center study found that nearly half of the general public believes dating has become more difficult over the past decade, with concerns

about physical fraud and emotional safety being the most frequently cited risks (Pew Research Centre, 2020).

Perceptions of online relationships may also vary depending on the medium used to form them and whether they are specifically designed for dating. Research by Pilek & de Saint-Laurent (2024) found that online dating is sometimes perceived as a less natural way of meeting people than other, more serendipitous methods, such as online podcasts or forums, indicating that the bias could stem from the medium itself, or from looking intentionally for love (Pilek & De Saint Laurent, 2024). Hence, our study will include various online methods, enabling us to examine differences in how relationships are evaluated based on the type of medium and whether the couples eventually met in person. Understanding the representations surrounding these mediums is important, as they can significantly impact expectations, relationship satisfaction, maintenance, development, and success.

This study aimed to explore implicit representations of how different modes of relationship initiation influence the perceived quality, anticipated outcomes, and estimated duration of relationships. Using the story completion method, it examines *how participants continue relationship scenarios and evaluate the relationships based on various initiation contexts, including in-person, Tinder, Tinder-assisted in-person dates, and online communities*.

We hypothesized that the mode of relationship initiation would significantly influence perceptions of relationship quality, future outcomes, and estimated duration. Specifically, (1a) relationships initiated in person were expected to be evaluated as having the highest quality, better outcomes, and longer durations. Conversely, (1b) those initiated through Tinder without transitioning in person were anticipated to be perceived the least favorably. Additionally, (1c) relationships initiated within online communities were predicted to be evaluated more positively than those initiated via Tinder or Tinder-assisted in-person dates. Lastly, (1d) relationships transitioning from Tinder to in-person interactions were expected to be perceived more positively than those that remain exclusively on Tinder but less positively than those initiated through online communities or in-person interactions.

2. Methods

2.1. Participants

Participants were recruited through the Prolific platform and informed that the study focused on people's experiences developing romantic relationships. Data were collected in October 2025 and included only participants from the UK. In total, 642 people completed the survey, but in line with our preregistration, participants who failed an attention check (N=275) were removed from the study. The attention check consisted of a simple factual question ('The Sun is revolving around the Earth'), designed to ensure that participants were attentive and motivated to complete the task as instructed, which is an essential requirement given the nature of the experiment. Therefore, the final sample included 367 participants (F=282, M=285; non-binary=4, and preferred not to say=2).

Of the 367 participants, 45 were current users of dating apps. Regarding past usage, approximately half of the sample reported either never using dating apps (N = 123) or using them very rarely (N = 63). The remaining half indicated occasional or sometimes usage. In terms of experiences with dating apps, most participants reported neutral or somewhat positive/negative experiences, with fewer than 10% describing their experiences as either very positive or very negative.

2.2. Design

This was a between-subject 1x4 design, where participants were randomly assigned to one of four conditions: (1) meeting on Tinder (N=96: M=49, F=46, and preferred not say=4), (2) online community (N=93: F=47, M=44, 1 non-binary, and 1 preferred not say), (3) meeting in person (N=91: F=54, M=37)), and (4) Tinder-assisted date in person (N=87: F=41, M=44, non-binary =2).

2.3. Materials

2.3.1. Story stems

The design of the story stems was informed by two studies (Clarke et al., 2019; Kitzinger & Powell, 1995). This approach is based on the premise that participants project their hidden motives, feelings, and thoughts onto the stimuli, providing deeper insights into their perceptions and responses. The stories were crafted in the third person to depict scenarios where characters developed feelings for one another. However, intentional ambiguity was introduced regarding the relationship's further development

and geographical distance, allowing participants to interpret the situation in their own way.

Participants were randomly assigned to one of four versions of a story-completion task. Each story stem depicted one of four distinct means of romantic relationship initiation, with both male and female versions for each scenario. This allowed for comparisons of relationship quality (RQ), outcomes (RO), and duration (RD) under different conditions: (1) Online Community (OC): Characters meet through an interest-based online group, (2) Tinder Only (TO): Characters connect exclusively through the Tinder app, (3) Characters meet in-person, representing traditional, offline relationship initiation (IP), (4) Tinder-Assisted In-Person Date (T-IP): Characters connect initially on Tinder and arrange their first date in person, blending online and offline elements. Although we did not include gender as a variable, each story was presented in a male and female version, with half of the participants seeing a female and the other half a male version to ensure balance.

An example of story stem:

Maya, a 28-year-old writer from London, joins an online creative community to connect with fellow writers and artists. There, she meets Adam, a 30-year-old artist from Birmingham, and they quickly bond over their shared love for storytelling and artistic expression.

As Maya and Adam discuss ideas for stories and character development, Maya discovers an admiration for Adam's creativity and passion for art. Their interactions extend beyond the forum as they exchange messages, emails, and handwritten letters, sharing personal anecdotes, artistic inspirations, and literary recommendations.

Maya finds herself drawn to Adam's imagination, wit, and vulnerability, leading to deep and intimate conversations about their life experiences and philosophical thoughts. Over six weeks of constant communication, Maya and Adam realized they had developed feelings for each other.

Each version of the story was designed to maintain a comparable structure and level of commitment, differing only in the medium through which the characters initiated their relationship. The remaining stories can be found in supplementary materials.

2.3.2. Relationship outcomes measures

Participants were asked to evaluate the story character's relationship on three key aspects: relationship quality, the

likelihood of positive and negative outcomes, and the estimated duration of the relationship in days, months, or years.

The ‘Likelihood of Possible Outcomes’ scale consisted of five questions on a 5-point Likert scale, three assessing negative outcomes and two assessing positive outcomes (e.g., ‘Maya and Adam never met in person and after a while realized that their connection was more of a fantasy than reality’).

The ‘Relationship Quality’ scale included four questions on a 5-point Likert scale, two measured positive aspects, and two measured negative aspects (e.g., ‘Maya is at risk of falling victim to fraud’).

Both series of questions included an attention check (e.g., ‘It is important that you pay attention to this survey. Please select ‘Agree.’’)

2.4. Procedure

Participants were invited to participate in a survey on modern romantic relationships and were asked to consent. They were then randomly assigned to one of four experimental conditions, where they read a story about a male and female character at the beginning of a romantic relationship. Participants were instructed to write a continuation of the story in at least 30 words.

After completing the story continuation, participants evaluated the quality of the character's relationship and the likelihood of positive and negative outcomes and provided

an estimated duration of the relationship (in days, months, or years).

Finally, participants answered demographic questions, including their age, gender, sexual orientation, relationship status, past and present dating app use frequency, and evaluative experiences.

3. Results

3.1. Direct measures: Relationship Outcomes

The reliability of the scales was assessed using Cronbach's Alpha. The scale for Positive Outcomes demonstrated moderate reliability ($\alpha = 0.561$), while the Negative Outcomes scale showed acceptable reliability ($\alpha = 0.744$). Descriptive statistics, including means (M) and standard deviations (SD), are summarized in Table 1.

We tested the normality of the distributions using the Shapiro-Wilk test, which indicated that both Positive Outcomes ($W = 0.90$, $p < .001$) and Negative Outcomes ($W = 0.97$, $p < .001$) deviate significantly from normality. However, Levene's test confirmed the homogeneity of variances for both Negative Outcomes ($W = 1.19$, $p = 0.315$) and Positive Outcomes ($W = 0.15$, $p = 0.928$), allowing us to proceed with ANOVA.

A one-way ANOVA revealed no significant effects of the experimental conditions on evaluating positive or negative relationship outcomes (see Table 1 for full results).

Table 1

Descriptive Statistics and ANOVA Results for Positive and Negative Relationship Outcomes

Measure	Experimental Condition				Group differences
	In-person M (SD)	Online M (SD)	Tinder M (SD)	Tinder+ met M (SD)	
Positive Outcomes	3.85 (0.77)	3.8 (0.72)	3.73 (0.70)	3.84 (0.66)	$F(3, 363) = 0.51$, $p = .674$, $\eta^2 = 0.004$
Negative Outcomes	2.47 (0.97)	2.91 (0.95)	2.3 (0.82)	2.8 (0.94)	$F(3, 363) = 0.87$, $p = 0.457$, $\eta^2 = 0.007$

Stories with different mediums for relationship initiation yielded no significant effect on the participants' evaluation of possible outcomes. Hence, we cannot reject the null hypothesis.

3.2. Direct measures: Relationship Quality

The reliability of the scales was assessed using Cronbach's Alpha. The Positive Quality scale demonstrated moderate reliability ($\alpha = 0.505$), while the Negative Quality

scale showed acceptable reliability ($\alpha = 0.628$). Descriptive statistics, including means (M) and standard deviations (SD), are summarized in Table 2.

We tested the normality of the distributions using the Shapiro-Wilk test, which indicated significant deviations from normality for both Positive Quality ($W = 0.92$, $p < .001$) and Negative Quality ($W = 0.95$, $p < .001$). However, Levene's test confirmed the homogeneity of variances for both Positive Quality ($W = 0.389$, $p = 0.761$) and Negative

Quality ($W=0.34$, $p=.796$), allowing us to proceed with ANOVA.

A one-way ANOVA revealed significant effects of the experimental conditions on evaluating negative relationship

quality but not on positive relationship quality. The results are summarized in [Table 2](#).

Table 2

Descriptive Statistics and ANOVA Results for Positive and Negative Relationship Quality

Measure	Experimental Condition				Group differences
	In-person M (SD)	Online M (SD)	Tinder M (SD)	Tinder+ met M (SD)	
Positive Quality	3.69 (0.78)	3.73 (0.75)	3.76 (0.68)	3.67 0.78)	$F(3,363) = 0.31$, $p=.819$, $\eta^2=.002$
Negative Quality	2.47 (0.81)	2.91 (0.78)	2.7 (0.74)	2.56 (0.73)	$F(3,363) = 5.85$, $p<.001$, $\eta^2=.046$

A Tukey's HSD post-hoc test was conducted to identify specific differences between experimental conditions. A significant difference was found between the two following conditions: In-person and Online Community ($M_{diff}=.44$, $p<.001$) and Online Community and Tinder-assisted date in-person ($M_{diff}=-0.36$, $p=.01$). These findings suggest that relationships in the online community condition were rated as having the most negative qualities. At the same time, perceptions of negativity decreased in scenarios involving in-person interactions. However, no significant difference was found between the online community and Tinder-only conditions, indicating that participants perceived similar levels of negative relationship quality in these two scenarios.

Table 3

Descriptive Statistics and Welch ANOVA Results for Relationship Durations

Measure	Experimental Condition				Group differences
	In-person M (SD)	Online M (SD)	Tinder M (SD)	Tinder+ met M (SD)	
Months	77.96 (161.13)	76.6 (146.55)	70.43 (144.27)	142.38 (244.45)	$F(3, 196.9) = 2.02$, $p=.112$; $\eta^2=.026$

Experimental conditions had no significant effect on the estimated duration of relationships, so our hypothesis was not confirmed.

3.4. Story Stems

Story stems were analyzed using computer-assisted text analysis tools in Python to identify common words, underlying themes, sentiment, and emotional classifications. Before the analysis, the text data underwent preprocessing steps, including duplicate removal, cleaning, and tokenization, to ensure it was suitable for analysis.

3.3. Indirect measures: Relationship Duration

We tested the normality of the distribution and the homogeneity of variances for relationship duration, which was standardized and converted in months. The Shapiro-Wilk test indicated significant deviations from normality ($W = 0.55$, $p < .001$), and Levene's test revealed a lack of homogeneity of variances ($W = 3.47$, $p = .016$).

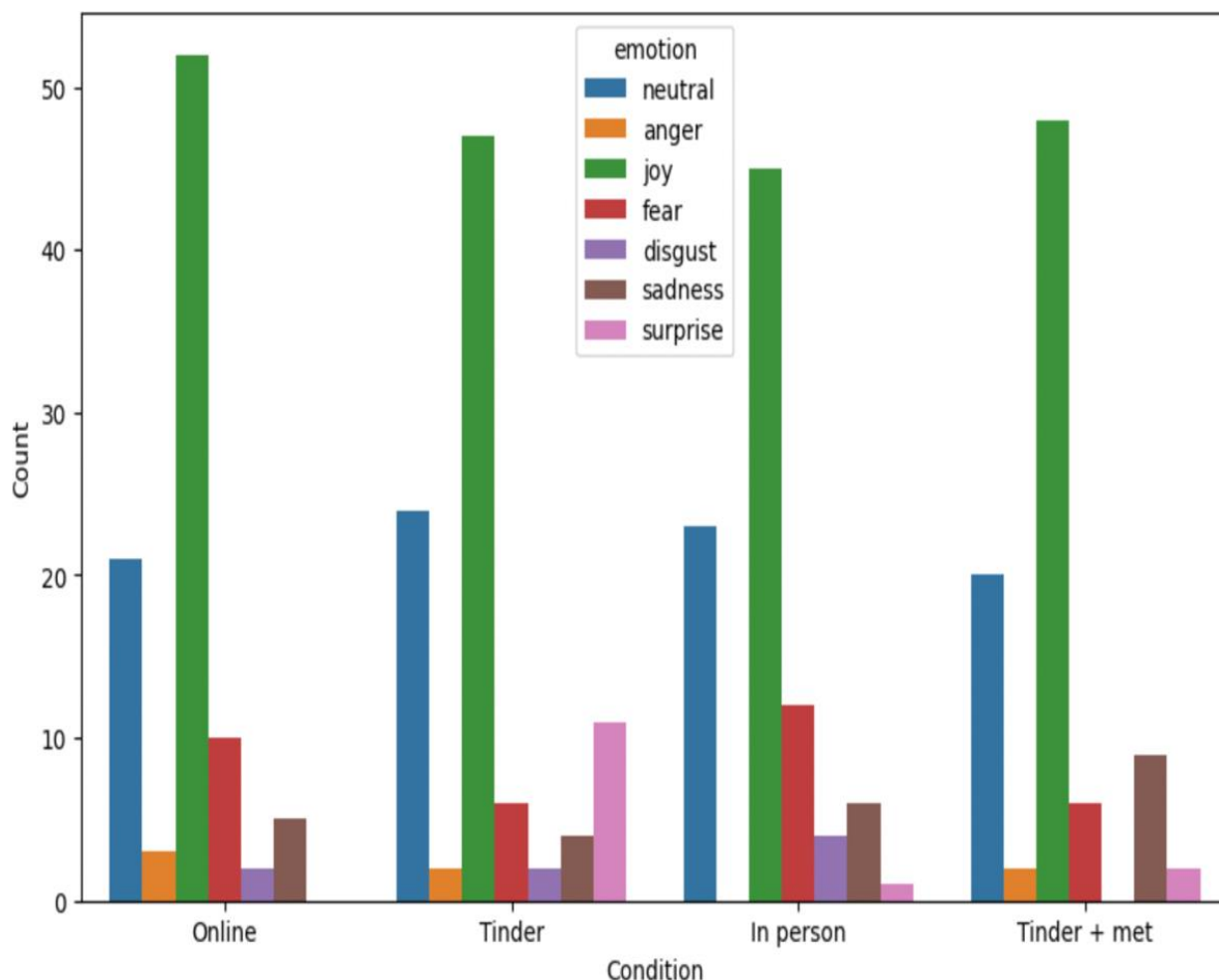
Since the assumptions for ANOVA were not met, we conducted a Welch ANOVA to account for these violations. The results of Welch ANOVA and descriptive statistics are summarized in [Table 3](#).

Results for sentiment analysis and topic proportions, including group differences tested across conditions, are detailed in the supplementary materials. In this section, we present the results of emotional classification along with the accompanying chi-square tests.

To classify the emotional content of the text, we used DistilRoBERTa, a pre-trained natural language processing model in Python. This model classifies text into predefined Ekman's six basic emotions: anger, disgust, fear, joy, neutral, sadness, surprise, and an additional neutral class. The results of this analysis are presented in [Figure 1](#).

Figure 1

Emotion Distribution Across Conditions



The Chi-Square test was used to compare the frequencies of emotions across the different conditions. The test results showed a significant difference in emotion distribution between the conditions ($\chi^2(18) = 34.23, p = 0.012$). This suggests that the emotional tone of the stories varied significantly across the experimental groups.

The post-hoc analysis was conducted using standardized residuals to identify specific observations with significant deviations from the expected values, as the traditional Chi-Square test's assumptions were violated due to low counts in some groups. Standardized residuals with absolute values greater than 2 are considered significant. In this case, the only significant finding was the overrepresentation of 'Surprise' in Tinder stories, with a residual of 3.834, indicating that surprise occurs more

frequently in Tinder stories than would be expected by chance. Other notable residuals, though not statistically significant, included the underrepresentation of 'Surprise' in Online stories (-1.883) and 'Disgust' in Tinder + met stories (-1.377), as well as 'Anger' in In-person stories (-1.317).

3.5. Exploratory Analyses

3.5.1. Relationship Measures

An item-by-item analysis was conducted to measure the specific effects of independent variables on dependent variables. This analysis was preregistered as exploratory. The results are presented in [Table 4](#).

Table 4

An item-by-item analysis of perceived relationship outcomes and qualities

Items	Experimental Condition				Group Differences
Possible Outcomes	In-person M (SD)	Online M (SD)	Tinder M (SD)	Tinder + met M (SD)	
Not real	2.47 (1.12)	2.63 (1.2)	2.76 (1.1)	2.48 (1.19)	F (3, 363) = 1.28, p=0.282, $\eta^2=0.01$
Too far	3.11 (1.17)	3.09 (1.19)	3.24 (1.14)	3.16 (1.22)	F (3, 363)= 0.3, p=0.816, $\eta^2=0.002$
Moved city	3.71 (0.99)	3.54 (0.94)	3.47 (0.88)	3.67 (0.87)	F (3, 363) =1.36, p=0.254, $\eta^2=0.011$
Long distance	3.99 (0.781)	4.04 (0.78)	4.00 (0.81)	4.01 (0.77)	F (3, 363) = 0.08, p=.97, $\eta^2=0.001$
Not honest	2.85 (1.05)	2.94 (0.99)	2.93 (1.11)	2.68 (1.04)	F (3, 363) =1.16, p=.325, $\eta^2=0.009$
Relationship Quality					
Deep connection	3.6 (0.89)	3.78 (0.86)	3.67 (0.86)	3.77 (0.84)	F (3, 363) = 0.830 p=.478, $\eta^2=0.006$
Hurt	2.64 (0.88)	2.89 (0.85)	2.7 (0.82)	2.66 (0.79)	F (3, 363) =1.811, p=.145, $\eta^2=0.015$
Fulfilling tech	3.78 (1.02)	3.68 (0.98)	3.83 (0.85)	3.56 (0.98)	F (3, 363) =1.397, p=.243, $\eta^2=0.011$
Fraud	2.31 (0.97)	2.94 (0.95)	2.71 (0.92)	2.46 (0.99)	F (3, 363) =7.664, p<.01, $\eta^2=0.059$

Significant results were found for the Fraud item only. A post-hoc Tukey analysis revealed significant pairwise differences among groups: In-person vs. Online ($M_{diff} = 0.63$, $p < 0.001$), In-person vs. Tinder ($M_{diff} = 0.4$, $p = .023$) and Online vs. Tinder + met ($M_{diff} = -0.4757$, $p = 0.005$). In other words, participants in conditions where characters had never met in person were more likely to perceive the risk of fraud. This risk, however, was independent of the type of online media.

Table 5

ANCOVA Results for the Effect of Online Dating Experience on Outcome Variables

Outcome	Dating App (DA) Past use	DA Current use	DA Experience	Experimental Condition
Positive Quality	F(1,360)=2.266, p=.133; $\eta^2=0.006$	F(1,360)=.0448, p=.503; $\eta^2=0.001$	F(1,360)=6.964, p=.009; $\eta^2=0.019$	F(3,360)= 0.28, p=.836; $\eta^2=0.02$
Negative Quality	F(1,360)=4.7, p=.031; $\eta^2=0.013$	F(1,360)=0.06, p=.806; $\eta^2=0.0001$	F(1,360)=1.491, p=.223; $\eta^2=0.004$	F(3,360)=6.234, p<.001; $\eta^2=0.049$
Positive Outcomes	F(1,360)=0.268, p=.605; $\eta^2=0.0007$	F(1,360)=1.086, p=.298; $\eta^2=0.003$	F(1,360)=3.111, p=.079; $\eta^2=0.008$	F(3,360)= 0.57, p=.635; $\eta^2=0.005$
Negative Outcomes	F(1,360)=0.742, p=.389; $\eta^2=0.002$	F(1,360)=0.936, p=.334; $\eta^2=0.002$	F(1,360)=3.971, p=.047; $\eta^2=0.011$	F(3,360)=0.875, p=.454; $\eta^2=0.007$

Due to the assumptions for ANCOVA not being met for the outcome variable Duration (in months), a Kruskal-Wallis H-test was conducted, accounting for the covariates. The analysis revealed no significant differences between experimental groups, even after controlling for covariates ($H = 1.157$, $p = .763$).

3.6. Experiences with Dating Apps

Analyses of covariance (ANCOVA) were conducted to control for the effects of online dating experiences and past and present usage of dating apps on participants' evaluations of relationship outcomes, quality, and duration. The results of this analysis are presented in Table 5.

A significant effect of Dating App Experience was found for Positive Quality and Negative Outcomes, while Dating App Past Use significantly influenced Negative Quality. A regression analysis was conducted to examine the nature of these effects. The results are presented in Table 6.

Table 6

Regression Analysis Results of Online Dating Variables as Predictors of Relationship Outcomes

Outcome	DA Past use	DA Current use	DA Experience	Constant (c)	R ²
Negative Quality	$\beta=-0.038, p=0.044$	$\beta=-0.017, p=0.613$	$\beta=0.0497, p=0.216$	$c=2.633$	0.021, $p=.048$
Positive Quality	$\beta=0.0280, p=0.119$	$\beta=0.0195, p=0.544$	$\beta=-0.0999, p=0.009$	$c=3.927$	0.034, $p<.001$
Negative Outcomes	$\beta=-0.0169, p=0.448$	$\beta=-0.0422, p=0.291$	$\beta=0.0958, p=0.044$	$c=2.643$	0.018, $p=.088$

The results of ANCOVA and regression analyses identified significant predictors for relationship outcomes and qualities. Dating App Experience significantly predicted both Positive Quality and Negative Outcomes, with more negative experiences associated with decreased Positive Quality and increased Negative Outcomes. Additionally, Past Use of Dating Apps significantly predicted Negative Quality, with greater past use linked to lower perceptions of negative quality in relationships.

4. Discussion

This study aimed to examine the continuing prevalence of negative representations of online dating in the context of relationship quality, outcomes, and duration. We hypothesized that relationships initiated through dating apps would be judged as having lower quality, shorter duration, and more negative outcomes than those initiated in person or through other online methods. However, the data did not support this hypothesis.

Relationships initiated on dating apps were evaluated to have comparable quality to those initiated in person or through other online methods. The only significant difference emerged for negative quality between in-person and online community groups, with online conditions generally perceived as less satisfying. It seems, however, that once the relationship has transitioned or been experienced in person, there are no differences in how its representation is based on a medium. Moreover, an exploratory item-by-item analysis revealed that the risk of fraud was significantly more pronounced in all online conditions, regardless of the specific medium. This indicates that while online relationships may be considered riskier, concerns about fraud are not tied to any particular platform but rather to the online environment.

These findings align with societal shifts toward greater acceptance of online dating. While recent research highlights negative stereotypes and experiences associated

with online dating (Johanis et al., 2024; Pilek & De Saint Laurent, 2024), our results suggest that such stereotypes may be waning. Relationships initiated online are increasingly viewed as capable of fostering meaningful, long-term connections. What was once considered risky or insincere is now more widely accepted. This normalization may reflect the broader integration of dating apps into everyday life and the recognition that such platforms can support successful relationships. It could also mean the judgment was more attached to looking for love online (Johanis et al., 2024), or even in other places (Knee, 1998) rather than the relationships themselves. Nonetheless, the studies of outcomes and people's representations show that these platforms can be associated with long-term and meaningful relationships.

Interestingly, this acceptance does not eliminate lingering skepticism. Our additional analyses revealed that individuals with less experience using dating apps were more likely to attribute negative qualities to online relationships—a pattern observed in previous research (Cali et al., 2013; Johanis et al., 2024). This finding suggests that negative perceptions may be influenced by public discourse, media representations, or anxieties surrounding new technologies rather than firsthand experience. Additionally, and perhaps unsurprisingly, individuals who reported negative experiences with dating apps were more likely to evaluate online relationships negatively. This observation indicates that negative representations may stem both from direct negative experiences and from a lack of familiarity with dating apps. Interestingly, despite an unexpectedly high number of individuals having no or very limited experience with dating apps, many did not evaluate Tinder relationships negatively, highlighting the growing positive associations with dating apps and the diminishing stigma surrounding them.

An unexpected finding was that relationships formed via online forums were associated with more negative quality than dating apps. This result contrasts with participants'

reports in Pilek and de Saint-Laurent's (2024) study, where spontaneous interactions on forums were perceived as more authentic and genuine. One possible explanation is that forums, like social media platforms, are often used for purposes other than romantic relationships, leading such behaviors to be interpreted as inappropriate or harassing (Pilek & De Saint Laurent, 2024). In contrast, dating apps are explicitly designed to facilitate romantic relationships, potentially creating more unequivocal expectations and norms of behavior for users. This distinction may contribute to the more favorable evaluations of relationships formed through dating apps. It is also possible that the participants had a limited first-hand experience with these forums. Indeed, they are quite a niche, and while they are natural ways of meeting people for those participating in them, there might be an underlying suspicion about individuals who form relationships or look for relationships in that way. Also, a lack of clarity in relational intentions, often overshadowed by other priorities on these platforms, further complicates the establishment of clear expectations, potentially fueling skepticism or mixed evaluations of relationships formed through them.

On the other hand, relationships initiated through Tinder-assisted in-person dates were perceived less negatively than those formed in online communities. An intriguing observation, though not statistically significant due to high data variability, is that relationships initiated through Tinder-assisted in-person dates were given the longest estimated duration ($M = 2444.45$), compared to the next longest for purely in-person relationships ($M = 161.13$), or in Tinder only ($M=144.27$). These findings suggest a decreasing stigma associated with dating apps and the potential for longer-lasting relationships, indicating that this mode of relationship initiation is evaluated quite favorably.

Several possible explanations merit further exploration. First, as previously noted, meeting people through Tinder inherently involves an understanding that participants are seeking some kind of relationship, creating an environment that encourages directness. While concerns about hookup culture, fraud, or misrepresentation may be prevalent, meeting in person might alleviate some of these anxieties by enabling individuals to judge compatibility and provide security against potential deception. Additionally, dating apps often facilitate conversations about relational aspirations and expectations, which could guide relationship development. If a mutual bond or compatibility is perceived and the relationship transitions to in-person

interactions, it might provide a stronger foundation, accompanied by hopes or promises that the relationship could endure over the long term. However, given the lack of statistically significant findings, these interpretations should be approached with caution and warrant further investigation.

Finally, it is worth noting that participants tended to construct quite positive relationship narratives across all conditions. While the story stems allowed for a variety of outcomes, they often elicited optimistic responses, potentially reflecting a cultural inclination toward romance and traditional scripts of building a life together - such as buying a house, having children, or moving in. These narratives suggest a continued hold on values of commitment and long-term relationships. Despite the negative connotations often associated with Tinder - such as scams, harassment, and hookups - this way of meeting people did not evoke such responses or carry those stigmas. The only notable difference was the presence of 'surprise' in online conditions, which may reflect lingering novelty, risk, or the serendipitous nature of online dating. These findings could suggest evolving dynamics in romantic expectations, where the unpredictability of online dating becomes part of its appeal.

This study is not without its limitations. The predominantly positive story stems may have primed participants to respond more favorably. Furthermore, a surprisingly high number of participants reported limited or no experience with dating apps, which may reduce the representativeness of the findings for the broader population of dating app users.

Future research could explore how societal perceptions of online dating continue to evolve, particularly with the rise of emerging technologies like AI-assisted dating platforms. Understanding whether these technologies reinforce or challenge existing narratives about online relationships could provide valuable insights. Examining potential differences between stereotypes attached to individuals looking for love and relationships initiated this way can provide further insights into stereotypes' persistence and eventual decline. ...

5. Conclusion

The findings reflect a growing acceptance of online dating apps, likely due to their design, which facilitates relationship formation and clarifies expectations and intentions. Despite lingering societal and academic

concerns about dating apps fostering a hookup culture and being risky, participants' representations suggest that relationships formed through dating apps can be as meaningful, committed, and lasting as those initiated through traditional or other online methods.

The negativity associated with alternative online platforms underscores the variability in representations depending on the medium used to initiate relationships. This may suggest that the intentional design of dating apps, which emphasizes communication and relationship-building, is perceived as conducive to fostering meaningful connections. Overall, the story narratives were predominantly positive, with an element of surprise in the Tinder condition, reflecting its reputation as a platform where unexpectedly positive and rewarding connections can emerge.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

This study was preregistered at <https://aspredicted.org/c4w6-6hfb.pdf>. Ethical approval was obtained from the Maynooth University of Ireland Human Research Ethics Committee.

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