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Perceptions of deceptive self-presentation in online dating: unacceptable or not? The role of gender and dark personality traits

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ABSTRACT

This study examined the role of gender and dark personality traits in perceptions of deceptive self-presentation in online dating. A total of 796 participants (49.9% female) completed an online survey and evaluated six vignettes depicting deception regarding age, gender, appearance, weight, social status, and relationship status on online dating platforms. Participants rated the (un)acceptability of each behaviour on a 7-point Likert scale and completed the Short Dark Tetrad measure. Negative binomial and gamma regression models were used to examine predictors of perceived (un)acceptability of deception. Higher psychopathy predicted perceiving deception regarding gender and relationship status as not unacceptable, while male gender additionally predicted lower perceived unacceptability of deception regarding relationship status. Among participants who did not evaluate deception as unacceptable, higher psychopathy consistently predicted greater perceived acceptability of deception, whereas lower education and lower Machiavellianism predicted greater acceptability for some deception topics. Chi-square analyses additionally indicated that men were less likely to perceive deception regarding age, socio-economic status, and relationship status as unacceptable. Women evaluated deception regarding age and relationship status less harshly when the deceiver was female. These findings highlight the role of dark personality traits and gender in shaping perceptions of deceptive self-presentation in online dating.

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Online dating; dark personality traits; dark tetrad; deception; online deception

1.1. Online dating: a brief history

While online dating is largely thought of as a feature characteristic of modern life, using available media for the purposes of finding a romantic partner dates back to 1695, when the first known personal ad was published in a popular London pamphlet (Beauman 2011). Initially geared almost exclusively towards matrimony, personal advertisements took on a more playful tone in the late nineteenth century and maintained it until falling into decline in the 1920s, only to re-emerge again in the 1960s (Beauman 2020). For most of the history of personal advertisement, searching for romantic companionship through media outlets was portrayed and stigmatised as desperate and, potentially, dangerous behaviour (Merskin and Huberlie 1996). However, with the emergence of the first Internet dating sites in the mid-1990s, the idea of meeting possible romantic partners online gradually began to be seen as socially acceptable (Cali, Coleman, and Campbell 2013; Hall 2014; Hogan, Li, and Dutton 2011).

Between 2006 and 2014, with the advent of location-based real-time dating applications (LBRTD apps) such as MeetMoi (2006), Grindr (2009), Tinder (2012), and Bumble (2014), online dating entered a new era. As opposed to the earlier dating sites, which did not narrow down the users' location beyond a general geographic area and implied a period of online communication before setting up an actual date, LBRTD apps allow (and often require) a more precise geolocation of possible partners and facilitate immediate encounters (Blackwell, Birnholtz, and Abbott 2015). LBRTD apps have quickly reached high levels of popularity and acceptability, and became an integral part of modern life (Timmermans and De Caluwé 2017). Terms such as 'swipe' (sliding a person's profile left or right on the screen with your finger to show interest or disinterest) and 'match' (when two users both show interest in each other, usually by swiping right on one another's profiles) are now widely recognised and have become a part of everyday vocabulary (Krüger and Charlotte Spilde 2020).

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In 2022, online dating services had over 366 million active users (Dixon 2023) and this number is expected to reach 462.5 million by 2029 (Statista 2024). Of all the available dating platforms and applications, Tinder remains the most widely used, with 46% of online dating services' users in the U.S. having used Tinder at some point (Vogels and McClain 2023) and with the biggest number of app downloads worldwide (Dixon 2024). Other similar applications, such as Bumble (28% of users), follow close behind (Vogels and McClain 2023).

1.2. Harmful behaviours and deception in the context of online dating

Online dating applications offer users a number of benefits, including access to a wider pool of potential partners, the ability to tailor searches to specific preferences (e.g. sexual orientation, age, or political and religious views), reduced anxiety associated with in-person interaction, a greater sense of control, and opportunities to explore identity and preferences with reduced risk of stigmatisation (Fink et al. 2023; March et al. 2017; Pingel et al. 2013). At the same time, online dating environments are also associated with a variety of negative effects and experiences. LBRTD applications, and the 'swipe culture' stemming from them, attract significant criticism as facilitators of commodification and objectification in romantic and sexual relationships (Krüger and Charlotte Spilde 2020).

Harmful behaviours, such as harassment and expressions of misogyny, cyber dating abuse, technology-facilitated sexual assault, and cyberstalking, have been noted to occur on dating apps or in association with them (Branson and March 2021; Centelles, Powers, and Moule 2021; Filice et al. 2022; Thompson 2018). Moreover, a broad range of maladaptive use patterns of online dating applications has been identified. These include compulsive use, high-risk behaviours, engagement in trolling, and deceptive self-presentation (Her and Timmermans 2021; March et al. 2017; Sawyer, Smith, and Benotsch 2018).

Recent qualitative research has also drawn attention to the phenomenon of online dating fatigue, referring to users' growing frustration and emotional exhaustion associated with the negative practices and behaviours on dating platforms. These studies suggest that repetitive communication patterns, perceived inauthenticity of other users, and generalised mistrust may contribute to feelings of dissatisfaction and disengagement (Adamczyk, Janowicz, and Mrozowicz-Wrońska 2024; Degen and Kleeberg-Niepage 2025). While this literature provides valuable insight into the broader social dynamics and emotional consequences of online dating

environments, it primarily focuses on users' experiences of app use rather than on deception specifically.

When it comes to deception, its forms in online dating vary, ranging from criminal activity associated with catfishing and romance fraud (defined as creating a false identity or using misleading information and photos to form relationships under false pretenses), which appears to be relatively rare, to significantly more common and, at the same time, less dramatic forms of self-presentation alterations aimed at enhancing one's value as a mate in the dating market (Tomas and Van Der Zanden 2024). Users of online dating services have been found to engage in different forms of deceptive self-presentation, misrepresenting their personal assets, relationship goals, weight, age, appearance, and other characteristics (Centelles, Powers, and Moule 2021; Hall et al. 2010). Both male and female users of dating apps engage in deception for the purposes of maximising their chances of attracting a mate, and the subjects of these deceptions seem to align with evolved preferences for certain traits in a romantic partner, differentiated by gender (Desrochers et al. 2021). For instance, women are more likely to misrepresent their body weight, whereas men are more likely to exaggerate personal assets, relationship goals, and height (Guadagno, Okdie, and Kruse 2012; Hall et al. 2010; Toma, Hancock, and Ellison 2008). In the current literature, negative consequences of deception in the context of online dating are primarily discussed in relation to instances of romance scams and catfishing. Victims of such fraudulent actions are likely to experience psychological distress and something that has been labelled as a 'double hit' in research literature – a simultaneous loss of an emotionally significant connection and a financial injury (Campbell and Parker 2022; Lauckner et al. 2019; Whitty 2018). While more common forms of deceptive self-presentation in the context of online dating are less severe, they can also lead to negative outcomes. Primarily, these are the negative outcomes that impede the development of a relationship. Studies show that perception of the prospective partner's deception is detrimental to the success of the first offline date and can result in a refusal to begin or continue the romantic relationship (Sharabi and Caughlin 2019; Peng et al., 2022). Another area of concern is the potential association between deceptive self-presentation and a heightened risk of coercive behaviours and sexual assault. Emerging evidence suggests that misrepresentation of identity characteristics and relationship goals may be used as a tactic for gaining access to potential victims in online dating environments (Henry and Powell 2018; Lauckner et al. 2019; Manta et al. 2019; Rowse et al. 2022).

In sum, deceptive self-presentation in the context of online dating takes many forms and is associated with a wide range of possible harms. A more in-depth understanding of this form of deceptive behaviour is needed to ensure users' safety and wellbeing. However, empirical data on the subject is still limited.

1.3. Personality traits as predictors of deception in the context of online dating

In the broader field of deception research, personality characteristics have long been considered important predictors of deceptive behaviour, with particular attention given to traits such as emotional intelligence, HEXACO personality traits, and the Dark Triad/Tetrad (Forsyth et al. 2021; Semrad, Scott-Parker, and Nagel 2019). In research on online behaviour specifically, deception has most often been examined through the lens of dark personality traits, which are associated with manipulative interpersonal strategies and self-promotional behaviour. Studies across social media platforms consistently suggest that these traits are linked to deceptive or inauthentic forms of online self-presentation. For example, narcissism has been associated with deceptive like-seeking on Instagram (Dumas et al. 2017), while vulnerable narcissism and Machiavellianism have been shown to predict inauthentic self-presentation on the same platform (Geary, March, and Grieve 2021). Similarly, examining multiple forms of identity-based deception across online platforms, McArthur, Dunsworth, and Ternes (2023) identified Machiavellianism and narcissism as significant predictors of deceptive online behaviours, including misrepresentation of personal characteristics and the use of manipulated or fabricated profile information.

Within online dating research specifically, research of personality factors is dominated by the Big Five and dark personality frameworks. Studies applying the Big Five model include investigations of personality contributions to impersonation behaviours and strategic misrepresentation. For example, Campbell and Parker (2022) found that narcissism and low conscientiousness predicted the likelihood of perpetrating catfishing, while earlier work by Hall et al. (2010) indicated that more extraverted individuals were more likely to misrepresent aspects of their relationship history. More recent research has increasingly focused on dark personality traits as predictors of deceptive behaviour in online dating. For instance, Lauder and March (2023) examined the Dark Tetrad and found that, with the exception of Machiavellianism, all dark traits significantly predicted engagement in catfishing. Similarly, Willis, Oliver, and March (2023) reported that vulnerable narcissism was

a significant predictor of inauthentic self-presentation in online dating contexts. These results suggest that both general and dark personality traits can be associated with a greater propensity to engage in deceptive self-presentation in online dating environments. However, existing research has almost exclusively focused on predictors of engaging in deceptive behaviours, while the perception and evaluation of such deceptive practices, particularly in the context of online dating, has remained largely unexplored.

1.4. The present study

The present study seeks to expand the existing scholarship on the topic of deception in online dating by examining gender and personality traits as predictors of perceived unacceptability of deceptive self-presentation.

1.4.1. Perceived unacceptability

Dating is a form of social behaviour, and is, therefore, guided by perceived social norms (Lapinski and Rimal 2005; Selvanathan and Leidner 2022). Perceived acceptability of behaviour has been used as a marker of perceived social norms in a number of studies (Bhagal et al. 2024; Busch 2020; Selvanathan and Leidner 2022). In keeping with this approach to studying perceived social norms, the first two research questions of the present research study were put forward as follows:

RQ1. Do study participants perceive deceptive self-presentation in the context of online dating as acceptable or unacceptable?

RQ2: Does perceived (un)acceptability of deceptive self-presentation in online dating vary by the subject of deception (i.e. deception about age, marital status, etc.)?

1.5. Dark personality traits

As was discussed in the previous section of this paper, personality traits have been found to predict engagement in deceptive behaviours in a number of studies. However, few have addressed deception in online dating specifically, and the association of dark personality traits with perceived (un)acceptability of deception has to date been considered in one study only (Collisson, Howell, and Harig 2020), which was focused on a very specific form of deception (i.e. feigning romantic interest to dine for free). The association between dark personality traits and perceived (un)acceptability of deceptive self-presentation in online dating has not been previously explored. The present study aims to fill this gap by proposing the following research question:

RQ3. Do dark personality traits predict perceived (un)acceptability of deception in the context of online dating?

1.5.1. The role of gender

Dating, whether offline or online, is a gendered experience. Despite significant changes in attitudes towards gender equality, research points to a remarkable persistence of gendered dating scripts (Lamont 2021), which is not limited to offline interactions but can also be observed in online spaces, where users' experience of online dating applications, their motivations, preferences, and behaviours, as well as their experiences of risks and rewards differ by gender (Abramova et al. 2016; Berkowitz et al. 2021; Ranzini and Lutz 2017). Deceptive self-presentation in the context of online dating also appears to be gendered, with topics of misrepresentation aligning with evolutionary mating preferences, such as men tending to exaggerate indicators of status, resources, or physical prowess, and women tending to overstate cues related to youth and physical attractiveness (Desrochers et al. 2021; Guadagno, Okdie, and Kruse 2012; Hall et al. 2010; Kolesnyk, de Jong, and Pieters 2021; Toma, Hancock, and Ellison 2008).

The present study aims to expand this area of research by exploring whether gender plays a role in perceived (un)acceptability of deceptive self-presentation:

RQ4. Are there differences in perceived (un)acceptability of deceptive self-presentation in the context of online dating, depending on the gender of an individual perceiving deception (4a) and/or on the gender of an individual engaging in deception (4b)?

2. Method

2.1. Participants and procedure

Data collection was conducted via an anonymous online survey. Participants were recruited via Prolific, a popular platform for the recruitment of research participants, and were reimbursed for their time. Inclusion criteria required that participants spoke English and were either current or past users of dating app(s). Participants provided informed consent prior to commencing the study. This research was conducted in conformity with the University of Malta's Research Code of Practice and Research Ethics Review Procedures. The study sample included 796 adult respondents between the ages of 18 and 67 (mean age = 27.96 (SD = 8.97); median = 25). Out of the total number of study participants, 49.4% ($n = 393$) identified as male; 49.2% ($n = 392$) identified as female; 1% ($n = 8$) chose 'Other' as the response option

for gender, while 0.4% ($n = 3$) chose not to indicate their gender. Participants' education attainment was as follows: 24.4% ($n = 194$) attained a high school diploma; 20.1% ($n = 160$) had higher education (associate degree or higher); and only 3.4% did not complete high school.

2.2. Measures

2.2.1. Demographic characteristics

Participants indicated their age, gender, and the level of education attained.

2.2.2. Online deception vignettes

For the purposes of this study, six vignettes, each presenting a short case description of deception in the context of online dating, were developed. Vignettes differed by the subject of the protagonist's deceptive self-presentation in the vignette. In total, six different subjects/topics of deception were presented to participants: age; gender; appearance; weight; socio-economic status; relationship status. For the detailed description, see Table 1.

Each vignette was developed in two versions – one with a female and one with a male protagonist – to account for the possible protagonist gender effects. Study participants were randomised to one of the two versions of each vignette.

After viewing each of the vignettes, participants had to answer the following question: 'In your opinion, how acceptable is this behavior?' Response was measured on a 7-point Likert scale, where 1 = 'Entirely unacceptable' and 7 = 'Entirely acceptable'.

2.2.3. The short dark tetrad scale

The personality characteristics of interest were assessed using the Short Dark Tetrad scale (SD4; Paulhus et al. 2021). This 28-item measure includes four subscales: psychopathy, narcissism, Machiavellianism, and sadism (seven items per trait; each item measured on a 5-point Likert scale). The measure is widely used in research and has been reported to have acceptable validity indices and structural characteristics (Neumann, Jones, and Paulhus 2022; Welsh et al. 2024). In the present study, Cronbach α for the subscales were as follows: psychopathy ($\alpha = .64$), narcissism ($\alpha = .75$), Machiavellianism ($\alpha = .56$), and sadism ($\alpha = .72$).

2.3. Data analysis

Data cleaning and preparation. Statistical analysis was conducted using IBM SPSS 29. As the number of participants who chose 'Other' to describe their gender was low, these cases were removed from the statistical

Table 1. Online deception vignettes.

Topic	Male protagonist	Female protagonist
Age	Derek is a 47-year-old male. He thinks that he would be more attractive to potential partners if they thought he was younger. On his Tinder profile he indicates that he is 35 years old and posts a photo of his younger self.	Dina is a 47-year-old female. She thinks that she would be more attractive to potential partners if they thought she was younger. On her Tinder profile she indicates that she is 35 years old and posts a photo of her younger self.
Gender	One evening, Adam (25 years old) is bored and decides to create a Tinder profile posing as a woman named Anna. He is having a lot of fun interacting with other users and making them believe his ruse. When his matches propose a date, he usually unmatched and cuts off communication, but, on occasion, he has gone to the agreed-upon venue to check out the person who showed up for the date.	One evening, Anna (25 years old) is bored and decides to create a Tinder profile posing as a man named Adam. She is having a lot of fun interacting with other users and making them believe her ruse. When her matches propose a date, she usually unmatched and cuts off communication, but, on occasion, she has gone to the agreed-upon venue to check out the person who showed up for the date.
Appearance	Ron is a 30-year-old man of average height and built; however, he believes that women don't find his looks attractive. To enhance his chances of getting a date, he posts a photo of a male model he has found on the Internet on his Tinder profile.	Rita is a 30-year-old woman of average height and built; however, she believes that men don't find her looks attractive. To enhance her chances of getting a date, she posts a photo of a female model she has found on the Internet on her Tinder profile.
Weight	Sam is a 35-year-old man who is somewhat overweight. He believes that this makes him less attractive to potential partners. While his actual weight is 220 pounds, on his Tinder profile he states that it's 180 pounds. To conceal his real size, he does not post any full-body photos.	Sarah is a 35-year-old woman who is somewhat overweight. She believes that this makes her less attractive to potential partners. While her actual weight is 180 pounds, on her Tinder profile she states that it's 140 pounds. To conceal her real size, she does not post any full-body photos.
Socio-Economic Status	Brian (32 years old) is a dental assistant and has been unemployed for over a year. On his Tinder profile, he states that he is a successful lawyer. To support this image, he posts a photo of himself next to an expensive car that doesn't belong to him.	Brianna (32 years old) is a dental assistant and has been unemployed for over a year. On her Tinder profile, she states that she is a successful lawyer. To support this image, she posts a photo of herself next to an expensive car that doesn't belong to her.
Relationship Status	Leo is 40 years old and has been married for fifteen years. Lately, he has been feeling alienated from his spouse and unhappy. While he's not ready to make any big decisions, he decides to explore other possible relationships. He sets up a Tinder profile, indicating his relationship status as 'single'.	Leah is 40 years old and has been married for fifteen years. Lately, she has been feeling alienated from her spouse and unhappy. While she's not ready to make any big decisions, she decides to explore other possible relationships. She sets up a Tinder profile, indicating her relationship status as 'single'.

tests described below, resulting in a smaller sample size for the inferential statistics analysis ($n = 785$).

Since the amount of missing data across all variables was under 2%, the pairwise deletion method was applied, as this percentage of missing data does not pose a threat to statistical power and parameter estimation (Dong and Peng 2013; Lodder 2013).

As can be seen in Table 2, the majority of participants chose 'Unacceptable' and 'Entirely Unacceptable' response options for the behaviours depicted in all of the vignettes, with the exception of Vignette 4. To account for this highly skewed distribution, the 7-point 'Perceived (Un)acceptability' variable was recoded into a binary variable for use in negative binomial regression modelling and in chi square tests (responses 'Unacceptable' (1) and 'Entirely Unacceptable' (2) were coded as '0' and the remaining response options (3–7) were coded as '1'). Treating the variable as ordinal or continuous could have risked overstating the precision

of the measurement and would have imposed unsustainable assumptions about the equivalence of distances between response options. The binary re-coding captured the distinction between strong disapproval (scores 1–2) and other responses, consistent with the data structure and the thematic focus of the study.

Data analytic strategy. Descriptive statistics were calculated for demographic characteristics, dark personality traits' scores, and perceived acceptability of all forms of deceptive self-presentation.

Cochran's Q test, a non-parametric statistical test used to determine whether three or more related proportions (binary outcomes) differ across matched or repeated measures, was used to assess possible differences in perceived acceptability of the different forms of deceptive self-presentation.

The role of participant gender in perceived acceptability of deception across vignettes, as well as the role of vignette protagonist gender, was assessed using a series of chi square tests.

Since the data were zero-inflated, a standard regression model could not be utilised, and a two-step modelling approach described in McArthur, Duns-worth, and Ternes (2023) and Boulton and Williford (2018) was followed:

In the first part of the two-step modelling procedure, negative binomial regression modelling was used to evaluate which of the independent variables (age, gender,

Table 2. Perceived acceptability of the different forms of deceptive self-presentation.

Vignette	Mean	S.D.	Unacceptable (%)
Vignette 1 (Age)	1.93	1.09	81.6%
Vignette 2 (Gender)	1.39	.85	93.1%
Vignette 3 (Appearance)	1.56	.83	90.6%
Vignette 4 (Weight)	3.03	1.4	37.7%
Vignette 5 (Social Status)	2.08	1.21	71%
Vignette 6 (Relationship Status)	1.86	1.28	78.5%

Note. $n = 796$.

education, and dark personality traits) are statistically significant in predicting a binary outcome (i.e. finding deception unacceptable vs. evaluating it as not unacceptable). Negative binomial regressions were used to account for the uneven distribution between 0 and 1 categories of the dependent variable (Green 2021). A total of six models were computed (one for each of the deception vignettes).

In the second part of the procedure, gamma regression models (Ng and Cribbie 2017) were used to assess which predictors contribute to higher perceived acceptability of deception among the subset of respondents who did not find this form of behaviour unacceptable. A total of six gamma regression models were computed. The dependent variable in each of the models was continuous and positive, satisfying the primary requirement for gamma regression. Given the right-skewed distribution and increasing variance with higher values, a gamma distribution was appropriate, and a log link function was used to relate predictors to the expected outcome. Observations were independent, and predictors were assumed to have a linear relationship with the transformed mean. Model fit was evaluated through inspection of residuals and predicted values to ensure the assumptions of the regression were reasonably met.

3. Results

3.1. Dark personality traits

In the study sample, the mean scores and standard deviations for the dark personality traits were as follows: Machiavellianism ($M = 23.9$, $SD = 3.73$), narcissism ($M = 20.62$, $SD = 4.76$), psychopathy ($M = 14.66$, $SD = 4.08$), and sadism ($M = 17.27$, $SD = 5.14$).

3.2. Acceptability of deception

For five out of six vignettes portraying deception in the context of online dating, study participants indicated high perceived unacceptability, with the majority responding 'Unacceptable' or 'Entirely unacceptable'. The only vignette, where depicted deception was deemed unacceptable by less than 40% of participants, was concerned with deception regarding the protagonist's body weight. See Table 2 for more details.

3.3. Differences in acceptability by the subject of deception

The percentage of participants indicating that they perceived a form of deception presented in vignette to be unacceptable differed by the subject of deception depicted according to the results of the Cochran's Q

test ($\chi^2(5) = 949.459$, $p < .001$). Pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. All adjusted p values for pairwise comparisons were statistically significant, with the exception of two pairs: there were no statistically significant differences in perceived acceptability for deception regarding gender (93.1%) and appearance (90.6%), as well as for age (81.6%) and relationship status (78.5%).

3.4. Deception in online dating: unacceptable or not?

Of the six negative binomial regressions, two were statistically significant: for unacceptability of deception on the subject of gender ($\chi^2(7) = 16.409$, $p = .022$) and on the subject of relationship status ($\chi^2(7) = 30.090$, $p < .001$). Not evaluating deception regarding one's gender as unacceptable was predicted by psychopathy ($\chi^2(1) = 3.979$, $p = .046$). Male gender ($\chi^2(1) = 10.327$, $p = .001$) and psychopathy ($\chi^2(1) = 4.583$, $p = .032$) were the statistically significant predictors of not evaluating deception regarding one's relationship status as unacceptable. Detailed information is presented in Table 3.

3.5. Predictors of greater perceived acceptability

Three gamma regression models were found to be statistically significant: for perceived acceptability regarding one's age ($\chi^2(7) = 28.618$, $p < .001$), appearance ($\chi^2(7) = 27.411$, $p < .001$), and relationship status ($\chi^2(7) = 19.572$, $p = .007$).

Greater subjective acceptability of deception regarding one's age was predicted by a lower level of education ($\chi^2(1) = 6.312$, $p = .012$); a lower level of Machiavellianism ($\chi^2(1) = 4.553$, $p = .033$), and a higher level of psychopathy ($\chi^2(1) = 5.753$, $p = .016$). A lower level of education ($\chi^2(1) = 9.944$, $p = .002$) and a higher level of psychopathy ($\chi^2(1) = 19.410$, $p < .001$) predicted greater acceptability of deception regarding one's appearance; and greater acceptability of deception regarding relationship status was predicted by a higher level of psychopathy ($\chi^2(1) = 5.549$, $p = .018$). For more detail, see Table 4.

3.6. The role of gender in perceived unacceptability of deception

Gender of the respondent. Female participants were more likely to perceive as unacceptable deception regarding age ($\chi^2(1) = 5.118$, $p = .024$, $\phi = -.081$), socio-economic

Table 3. Negative binomial regression models.

Deception type and predictors	β	SE- β	Wald χ^2	p
<i>Deception about Gender (n = 758; χ^2 (7) = 16.409, $p = .022$)*</i>				
Gender of the participant (male)	.305	.327	.871	.351
Education (no college degree)	-.245	.369	.441	.507
Machiavellianism	-.044	.045	.956	.328
Narcissism	.064	.036	3.187	.074
Psychopathy*	.082	.041	3.979	.046
Sadism	-.011	.037	.086	.769
Age	-.045	.024	3.595	.058
<i>Deception about Relationship Status (n = 759; χ^2 (7) = 30.090, $p < .001$)*</i>				
Gender of participant (male)**	.641	.200	10.327	.001
Education (no college degree)	-.049	.220	.049	.825
Machiavellianism	.054	.028	3.810	.051
Narcissism	.002	.021	.012	.912
Psychopathy*	.054	.025	4.583	.032
Sadism	-.006	.022	.070	.791
Age	.017	.009	3.371	.066
<i>Deception about Age (n = 757; χ^2 (7) = 10.925, $p = .142$)</i>				
Gender of participant (male)	.370	.208	3.168	.075
Education (no college degree)	-.061	.369	.066	.797
Machiavellianism	-.039	.028	1.885	.170
Narcissism	.036	.023	2.592	.107
Psychopathy	.040	.027	2.197	.138
Sadism	-.010	.024	.172	.678
Age	-.009	.012	.579	.447
<i>Deception about appearance (n = 759; χ^2 (7) = 6.920, $p = .437$)</i>				
Gender of participant (male)	-.014	.274	.003	.960
Education (no college degree)	-.105	.312	.114	.736
Machiavellianism	.007	.037	.036	.849
Narcissism	.013	.029	.183	.669
Psychopathy	.080	.035	5.135	.023
Sadism	-.010	.016	1.546	.214
Age	.017	.009	.442	.506
<i>Deception about weight (n = 758; χ^2 (7) = 2.165, $p = .950$)</i>				
Gender of participant (male)	-.057	.130	.004	.952
Education (no college degree)	-.067	.150	.200	.654
Machiavellianism	-.001	.180	.007	.935
Narcissism	-.017	.140	1.570	.210
Psychopathy	.012	.018	.472	.492
Sadism	-.003	.015	.039	.843
Age	-.003	.007	.233	.629
<i>Deception about Social Status (n = 758; χ^2 (7) = 9.579, $p = .214$)</i>				
Gender of participant (male)	.331	.710	4.160	.041
Education (no college degree)	.037	.200	.034	.853
Machiavellianism	-.001	.024	.001	.978
Narcissism	-.012	.018	.409	.522
Psychopathy	.038	.025	4.583	.088
Sadism	-.004	.020	.050	.824
Age	-.008	.009	.687	.407

Note. * $p < .05$; ** $p < 0.01$; *** $p < .001$.

status (χ^2 (1) = 11.885, $p < .001$, $\phi = -.123$), and relationship status (χ^2 (1) = 26.835, $p < .001$, $\phi = -.185$).

Gender of the deceiver. In the total sample, there was a statistically significant association between perceived unacceptability of deception and gender of the person engaging in deception (vignette protagonist) for the topics of age (χ^2 (1) = 4.544, $p = .033$, $\phi = .076$), socio-economic status (χ^2 (1) = 4.644, $p = .031$, $\phi = .076$), and relationship status (χ^2 (1) = 7.827, $p = .005$, $\phi = .099$), where deception by a female was perceived as less unacceptable.

Interplay between gender of the respondent and deceiver's gender. When the possible association between the gender of the deceiver and the perception of (un)acceptability was assessed separately for the male and female

subsamples, it was established that for male participants ($n = 393$), there were no statistically significant differences in the perceived (un)acceptability of deception based on the deceiver's gender across all case vignettes. However, female participants ($n = 392$) perceived deception regarding age (χ^2 (1) = 9.197, $p = .002$, $\phi = .064$) and relationship status (χ^2 (1) = 6.513, $p = .011$, $\phi = .154$) to be less unacceptable when the deceiver was female.

4. Discussion

This study sought to expand existing scholarship on the topic of deception in online dating by exploring the following four research questions: (1) Do the study

Table 4. Gamma regression models.

Deception type and predictors	β	SE- β	Wald χ^2	p
<i>Deception about Age</i> ($n = 143$; $\chi^2 (7) = 28.618$, $p < .001$)***				
Gender of participant (male)	-.012	.047	.070	.791
Education (no college degree)*	-.141	.056	6.312	.012
Machiavellianism*	-.014	.007	4.553	.033
Narcissism	.003	.005	.397	.529
Psychopathy*	.014	.006	5.753	.016
Sadism	.008	.005	2.209	.137
Age	.003	.003	.871	.351
<i>Deception about Appearance</i> ($n = 72$; $\chi^2 (7) = 27.411$, $p < .001$)***				
Gender of participant (male)	-.061	.046	1.741	.187
Education (no college degree)**	-.180	.057	9.944	.002
Machiavellianism	.002	.006	.087	.769
Narcissism	-.007	.005	2.009	.156
Psychopathy***	.026	.006	19.410	<.001
Sadism	.000	.006	.001	.972
Age	-.003	.003	.968	.325
<i>Deception about Relationship Status</i> ($n = 163$; $\chi^2 (7) = 19.572$, $p = .007$)**				
Gender of participant (male)	.054	.045	1.432	.231
Education (no college degree)	.050	.052	.949	.330
Machiavellianism	.007	.007	.971	.324
Narcissism	.000	.005	.007	.931
Psychopathy*	.014	.006	5.549	.018
Sadism	.009	.005	2.889	.089
Age	.000	.002	.000	.999
<i>Deception about Gender</i> ($n = 52$; $\chi^2 (7) = 8.994$, $p = .253$)				
Gender of participant (male)	-.010	.079	.018	.895
Education (no college degree)	-.078	.087	.807	.369
Machiavellianism	-.023	.011	4.202	.040
Narcissism	.009	.009	1.148	.284
Psychopathy	.010	.010	.868	.352
Sadism	-.003	.009	.120	.729
Age	-.005	.005	.908	.341
<i>Deception about Weight</i> ($n = 472$; $\chi^2 (7) = 3.300$, $p = .856$)				
Gender of participant (male)	.027	.026	1.118	.290
Education (no college degree)	-.005	.030	.024	.877
Machiavellianism	-.001	.004	.156	.693
Narcissism	.001	.003	.069	.792
Psychopathy	.014	.006	5.549	.018
Sadism	.002	.004	.321	.800
Age	-.001	.001	.730	.393
<i>Deception about Social Status</i> ($n = 223$; $\chi^2 (7) = 8.502$, $p = .290$)				
Gender of participant (male)	.074	.037	4.148	.042
Education (no college degree)	.015	.043	.124	.725
Machiavellianism	.006	.005	1.112	.292
Narcissism	.002	.004	.204	.652
Psychopathy	.005	.005	1.359	.244
Sadism	-.004	.004	.718	.397
Age	.002	.002	.681	.409

Note. * $p < .05$; ** $p < 0.01$; *** $p < .001$.

participants perceive deceptive self-presentation in the context of online dating as unacceptable?; (2) Does perceived (un)acceptability of deceptive self-presentation vary by the focus of deception?; (3) Do dark personality traits predict the perceived (un)acceptability of deception?; and (4) Are there differences in perceived (un)acceptability of deceptive self-presentation depending on the gender of an individual perceiving deception (a) and/or the gender of an individual engaging in deception (b)?

The findings reflecting the answers to these questions (presented below) can be interpreted in light of several theoretical perspectives relevant to deception and self-presentation in online environments. In particular,

research on dark personality traits, evolutionary perspectives on mating strategies, and scholarship on deceptive self-presentation in computer-mediated communication provide useful frameworks for understanding why certain forms of deception may be perceived as more or less unacceptable.

4.1. Perceived unacceptability of deception in the context of online dating was high

Overall, the subjective unacceptability of online dating deception in the study sample appeared to be high. For all of the assessed topics of deception, with the exception of misrepresentation of one's weight, the

majority of the study participants indicated that they perceive deception as ‘unacceptable’ or ‘entirely unacceptable’. When it comes to the relative acceptability of deception regarding one’s weight, this effect might be explained by the fact that the portrayed difference between the real and presented body weight in the vignette was moderate and, possibly, not perceived as a drastic enough deception in comparison to other forms. Further research is necessary to see if this is, indeed, the case.

4.2. Perceived unacceptability of deception differed by topic of deception

Perceived unacceptability varied depending on the subject of deception. Deceptions regarding one’s gender and appearance were evaluated as the most unacceptable. This finding is not surprising, as the scenarios described in the vignettes involved substantial falsification of personal identity.

Deceptions concerning age and relationship status were also widely regarded as unacceptable, though somewhat less strongly than those involving gender and appearance. Unlike the latter, these forms of deception do not involve presenting a fundamentally false identity. Nevertheless, they represent significant deviations from a person’s real characteristics and may substantially affect expectations about the success of a date or the development of a relationship.

Deception regarding socio-economic status was perceived as somewhat less unacceptable than deception about age or relationship status. While misrepresenting social status may involve significant exaggeration of personal circumstances, it may not trigger the same expectations or biases associated with age-related deception. In addition, compared to misrepresenting relationship status, exaggerating socio-economic status may be perceived as having less immediate impact on the potential trajectory of a relationship. This distinction may also depend on the motivations of the person evaluating the deception – for example, whether they are seeking a long-term relationship or a more casual encounter. Because personal motivations were not assessed in the present study, future research could further explore how relationship goals shape evaluations of such deception.

Finally, deception regarding body weight was rated as significantly less unacceptable than the other types of deception. As noted earlier, this may be due to the relatively moderate discrepancy between the declared and actual body weight of the vignette protagonist, which may have led participants to view this type of deception as comparatively trivial.

In summary, deceptions involving falsification of identity and significant misrepresentation of personal characteristics were evaluated by the study participants as the most unacceptable. This finding is consistent with prior research suggesting that deception in online dating typically involves relatively minor embellishments rather than fundamental falsification of identity (Sharabi and Caughlin 2019; Toma, Hancock, and Ellison 2008). Misrepresentation of core identity characteristics may therefore be perceived as a more serious violation of expectations in online dating interactions.

4.3. Psychopathy and gender as predictors

In regression models with binary outcomes, the goal was to identify predictors of group membership in ‘this deception is not unacceptable’ vs. ‘this deception is unacceptable’ groups for each of the six deception topics. Two models were statistically significant: for deception regarding gender and for deception regarding relationship status.

For deception regarding one’s gender, study participants who indicated that deception on this subject is not unacceptable were more likely to be characterised by a higher level of psychopathy. Given the falsification of identity and the use of this falsified identity to engage in communication on a dating app for personal entertainment instead of romantic connection, as described in the vignette, this result is consistent with prior research linking psychopathy to trolling behaviour in online dating (March et al. 2017). On the other hand, this result contradicts findings reported in McArthur, Dunsworth, and Ternes (2023) where no associations between psychopathy and identity-based online deceptions were found. This discrepancy may be related to the differences in research methodology of the studies: in McArthur, Dunsworth, and Ternes (2023) participants were asked about their own deceptive behaviours, while in the present study the focus was on perceived acceptability.

Lack of perceived unacceptability of deception regarding one’s relationship status had two statistically significant predictors: psychopathy and male gender. This association is consistent with existing research on the relationship between dark traits and infidelity (March et al. 2024; Sevi, Urganci, and Sakman 2020); and male gender, as a predictor of perceiving deception regarding one’s relationship status (single vs. married) not to be unacceptable, is in line with Sexual Strategies Theory (Buss and Schmitt 1993), which proposes that men are, on average, more likely than women to pursue short-term mating strategies. Within this framework, deception regarding relationship status may be

perceived as less problematic if it facilitates short-term romantic or sexual opportunities. Prior studies highlighting the role of psychopathy in predicting propensity for short-term mating strategies in men are also relevant in this context (Jonason et al. 2011).

4.4. Perceived acceptability predicted by education and dark traits

Regression analyses were conducted to examine variation in perceived acceptability of each type of deception among participants who did not rate the behaviour as unacceptable. Three models were statistically significant: those for deception about age, appearance, and relationship status.

Psychopathy was a statistically significant predictor of lower perceived unacceptability of deception in all three models. This finding is partially consistent with prior research showing that both psychopathy and Machiavellianism are associated with a greater propensity to engage in deceptive behaviours (Baughman et al. 2014; Forsyth et al. 2021). In the present study, however, only psychopathy emerged as a significant predictor. Instead, Machiavellianism acted as a negative predictor of perceived acceptability of deception regarding one's age (which makes sense if the low strategic value of this type of high-risk deception is considered). It must be noted, however, that a direct comparison between the present study and prior research cannot be made since the present study did not assess participants' own deceptive behaviours but focused on the perceived acceptability of deception. Moreover, the effect size of this result in our study was low, making it necessary to interpret the finding with caution and underscoring the need for replication in larger or more diverse samples. Interpretation of findings involving Machiavellianism and psychopathy should also take into account the relatively low internal consistency of these subscales in the present sample.

Lower levels of education predicted higher levels of perceived relative acceptability of deception regarding one's age and appearance. Given that these subjects of deception may be considered high-risk (i.e. entailing higher risk of discovery and/or potentially more damaging in a relationship context), one possible explanation of this connection may imply a lower capacity for predicting the consequences of deceptive behaviour in participants with lower levels of education; however, there is no clear evidence of such a connection in existing research. Additional studies are necessary to explore the role of educational attainment in shaping deceptive behaviours.

4.5. Female participants evaluated some deceptions less harshly when the deceiver was female

Research on gender differences in deceptive behaviour has produced mixed findings. While some studies suggest that men are more likely than women to engage in self-serving lies, other studies report no consistent gender differences (Elaad and Gonen-Gal 2022). However, these findings largely derive from laboratory deception paradigms, and less is known about how gender relates to perceptions of deception in online dating contexts.

In the present study, male participants were more tolerant of deception regarding age, socio-economic status, and relationship status, indicating that they were more likely to perceive such behaviours as not unacceptable. No gender differences were found for the remaining deception topics. One possible explanation for this pattern is that these particular forms of deception may be perceived as strategically relevant to romantic self-presentation within the online dating environment. For example, misrepresentation of age or socio-economic status may be interpreted as an attempt to increase perceived attractiveness within a competitive dating market, and male participants may therefore be more inclined to view such exaggerations as relatively understandable or instrumental.

When considering the gender of the deceiver, male participants did not demonstrate statistically significant differences in their evaluations of male versus female vignette protagonists. Female participants, however, evaluated deception regarding age and relationship status less harshly when the deceiver was female. This pattern may reflect gender-specific interpretations of deceptive self-presentation in courtship contexts. From the perspective of Sexual Strategies Theory (Buss and Schmitt 1993), characteristics such as youth and relationship availability are often perceived as important signals of attractiveness in female partners. Women may therefore interpret deception regarding these characteristics as a strategic attempt to increase perceived desirability within the dating market rather than as a fundamentally unacceptable form of deception. At the same time, the observed effect sizes were small, suggesting that these gender-based differences in perception should be interpreted cautiously and warrant further investigation in future studies.

4.6. Limitations

The study has a number of limitations that need to be acknowledged. The study employed a convenience

sample, which could result in over- or under-representation of certain demographics and experiences. Data collection relied on self-report, which makes the study results susceptible to bias. The vignettes used in the study are not part of a validated instrument, limiting certainty in the interpretations of the study results. While perceived social norms may have implications for the behavioural outcomes, there is no direct connection with actual behaviour, and declared perceived (un)acceptability of deception in the context of online dating does not necessarily correspond to the actual behaviours of the study participants. Effect sizes for some of the results, notably on gender differences in perceived acceptability as well as on Machiavellianism as a predictor of deception regarding age, were small. Cronbach α values for the Machiavellianism and psychopathy subscales of the SD4 were relatively low, indicating limited internal consistency and warranting caution in the interpretation of findings involving these variables. Finally, the study was descriptive rather than hypothesis-driven.

5. Conclusions

While online dating applications offer users a number of important benefits, engaging with these platforms also carries the risk of encountering deception. In prior research, users of dating apps have been found to misrepresent their social status, relationship goals, appearance, and other characteristics. In the present study, psychopathy emerged as the most consistent individual difference associated with tolerance for deception in online dating, perceiving misrepresentation as less unacceptable, both for dichotomous and continuous outcomes. These findings have several implications.

First, they suggest that personality traits, particularly those associated with the Dark Tetrad, play a significant role in shaping subjective perceptions and, possibly, moral evaluations of online deception in the context of online dating, which may be relevant for designing relationship education programs, informing couple and family counselling approaches, and/or for developing platform policies aimed at promoting transparency and trust.

Second, understanding the contexts in which deception is not tolerated can provide insight into user behaviour and expectations, potentially guiding the development of healthier online dating environments.

Overall, the results of this study contribute to existing scholarship on deception in online environments by highlighting the role of dark personality traits and gender-related mating strategies in shaping how deceptive self-presentation is evaluated by others.

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The dataset is available from the corresponding author upon request.

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References

- Abramova, O., A. Baumann, H. Krasnova, and P. Buxmann. 2016. "Gender Differences in Online Dating: What Do We Know So Far? A Systematic Literature Review." 2016 49th Hawaii International Conference on System Sciences (HICSS), Koloa, HI, USA: 3858–3867. <https://doi.org/10.1109/HICSS.2016.481>.
- Adamczyk, K., K. Janowicz, and M. Mrozowicz-Wrońska. 2024. "Never-Married Single Adults' Experiences with Online Dating Websites and Mobile Applications: A Qualitative Content Analysis." *New Media & Society* 26 (6): 3614–3637. <https://doi.org/10.1177/14614448221097894>.
- Baughman, H. M., P. K. Jonason, M. Lyons, and P. A. Vernon. 2014. "Liar Liar Pants on Fire: Cheater Strategies Linked to the Dark Triad." *Personality and Individual Differences* 71:35–38. <https://doi.org/10.1016/j.paid.2014.07.019>.
- Bauman, F. 2011. *Shapely Ankle Preferr'd: A History of the Lonely Hearts Ad, 1695–2010*. London: Chatto & Windus.
- Bauman, F. 2020. *Matrimony, Inc.: From Personal Ads to Swiping Right: A Story of America Looking for Love*. New York, NY: Pegasus Books.
- Berkowitz, D., J. Tinkler, A. Peck, and L. Coto. 2021. "Tinder: A Game with Gendered Rules and Consequences." *Social Currents* 8 (5): 491–509. <https://doi.org/10.1177/23294965211019486>.
- Bhagal, A. N., V. J. Berrocal, D. M. Romero, M. A. Willis, V. G. V. Vydiswaran, and T. C. Veinot. 2024. "Social Acceptability of Health Behavior Posts on Social Media: An Experiment." *American Journal of Preventive Medicine* 66 (5): 870–876. <https://doi.org/10.1016/j.amepre.2024.01.002>.
- Blackwell, C., J. Birnholtz, and C. Abbott. 2015. "Seeing and Being Seen: Co-situation and Impression Formation Using Grindr, a Location-Aware Gay Dating App." *New*

- Media and Society* 17 (7): 1117–1136. <https://doi.org/10.1177/1461444814521595>.
- Boulton, A. J., and A. Williford. 2018. “Analyzing Skewed Continuous Outcomes with Many Zeros: A Tutorial for Social Work and Youth Prevention Science Researchers.” *Journal of the Society for Social Work and Research* 9 (4): 721–740. <https://doi.org/10.1086/701235>.
- Branson, M., and E. March. 2021. “Dangerous Dating in the Digital Age: Jealousy, Hostility, Narcissism, and Psychopathy as Predictors of Cyber Dating Abuse.” *Computers in Human Behavior* 119: Article 106711. <https://doi.org/10.1016/j.chb.2021.106711>.
- Busch, T. M. 2020. “Perceived Acceptability of Sexual and Romantic Fantasizing.” *Sexuality and Culture* 24 (3): 848–862. <https://doi.org/10.1007/s12119-019-09668-6>.
- Buss, D. M., and D. P. Schmitt. 1993. “Sexual Strategies Theory: An Evolutionary Perspective on Human Mating.” *Psychological Review* 100 (2): 204–232. <https://doi.org/10.1037/0033-295x.100.2.204>.
- Cali, B. E., J. M. Coleman, and C. Campbell. 2013. “Stranger Danger? Women’s Self-protection Intent and the Continuing Stigma of Online Dating.” *Cyberpsychology, Behavior, and Social Networking* 16 (12): 853–857. <https://doi.org/10.1089/cyber.2012.0512>.
- Campbell, K., and M. L. Parker. 2022. “Catfish: Exploring the Individual Predictors and Interpersonal Characteristics of Deceptive Online Romantic Relationships.” *Contemporary Family Therapy* 44 (4): 422–435. <https://doi.org/10.1007/s10591-022-09646-5>.
- Centelles, V., R. A. Powers, and R. K. Moule. 2021. “An Examination of Location-Based Real-Time Dating Application Infrastructure, Profile Features, and Cybervictimization.” *Social Media and Society* 7 (3): Article 20563051211043218. <https://doi.org/10.1177/20563051211043218>.
- Collisson, B., J. L. Howell, and T. Harig. 2020. “Foodie Calls: When Women Date Men for a Free Meal (Rather than a Relationship).” *Social Psychological and Personality Science* 11 (3): 425–432. <https://doi.org/10.1177/1948550619856308>.
- Degen, J. L., and A. Kleeberg-Niepage. 2025. “Coping with Mobile-Online-Dating Fatigue and the Negative Self-fulfilling Prophecy of Digital Dating.” *SN Social Science* 5: Article 12. <https://doi.org/10.1007/s43545-024-01042-0>.
- Desrochers, J., M. MacKinnon, B. Kelly, B. Masse, and S. Arnocky. 2021. “Sex Differences in Response to Deception across Mate-Value Traits of Attractiveness, Job Status, and Altruism in Online Dating.” *Archives of Sexual Behavior* 50 (8): 3675–3685. <https://doi.org/10.1007/s10508-021-01945-6>.
- Dixon, S. 2023. *Online Dating Worldwide – Statistics & Facts*. Accessed July 31, 2023, <https://www.statista.com/topics/7443/online-dating/#topicOverview>.
- Dixon, S. 2024. *Tinder – Statistics & Facts*. Accessed February 14, 2025, <https://www.statista.com/topics/10082/tinder/#topFacts>.
- Dong, Y., and C.-Y. J. Peng. 2013. *Principled Missing Data Methods for Researchers*. SpringerPlus. <https://doi.org/10.1186/2193-1801-2-222>.
- Dumas, T. M., M. Maxwell-Smith, J. P. Davis, and P. A. Giulietti. 2017. “Lying or Longing for Likes? Narcissism, Peer Belonging, Loneliness and Normative versus Deceptive Like-Seeking on Instagram in Emerging Adulthood.” *Computers in Human Behavior* 71:1–10. <https://doi.org/10.1016/j.chb.2017.01.037>.
- Dunn, O. J. 1964. “Multiple Comparisons Using Rank Sums.” *Technometrics* 6: 241–252.
- Elaad, E., and Y. Gonen-Gal. 2022. “Face-to-Face Lying: Gender and Motivation to Deceive.” *Frontiers in Psychology* 13: Article 820923. <https://doi.org/10.3389/fpsyg.2022.820923>.
- Filice, E., K. D. Abeywickrama, D. C. Parry, and C. W. Johnson. 2022. “Sexual Violence and Abuse in Online Dating: A Scoping Review.” *Aggression and Violent Behavior* 67: Article 101781. <https://doi.org/10.1016/j.avb.2022.101781>.
- Fink, L., N. Ilany-Tzur, H. Yam, and S. Sokhina. 2023. “Do Women and Men Click Differently? Mobile Devices Mitigate Gender Differences in Online Dating.” *Information & Management* 60 (2): Article 103750. <https://doi.org/10.1016/j.im.2022.103750>.
- Forsyth, L., J. Anglim, E. March, and B. Bilobrk. 2021. “Dark Tetrad Personality Traits and the Propensity to lie across Multiple Contexts.” *Personality and Individual Differences* 177: Article 110792. <https://doi.org/10.1016/j.paid.2021.110792>.
- Geary, C., E. March, and R. Grieve. 2021. “Insta-identity: Dark Personality Traits as Predictors of Authentic Self-presentation on Instagram.” *Telematics and Informatics* 63: Article 101669. <https://doi.org/10.1016/j.tele.2021.101669>.
- Green, J. A. 2021. “Too Many Zeros and/or Highly Skewed? A Tutorial on Modelling Health Behaviour as Count Data with Poisson and Negative Binomial Regression.” *Health Psychology and Behavioral Medicine* 9 (1): 436–455. <https://doi.org/10.1080/21642850.2021.1920416>.
- Guadagno, R. E., B. M. Okdie, and S. A. Kruse. 2012. “Dating Deception: Gender, Online Dating, and Exaggerated Self-presentation.” *Computers in Human Behavior* 28 (2): 642–647. <https://doi.org/10.1016/j.chb.2011.11.010>.
- Hall, J. A. 2014. “First Comes Social Networking, Then Comes Marriage? Characteristics of Americans Married 2005–2012 Who Met through Social Networking Sites.” *Cyberpsychology, Behavior, and Social Networking* 17 (5): 322–326. <https://doi.org/10.1089/cyber.2013.0408>.
- Hall, J. A., N. Park, H. Song, and M. J. Cody. 2010. “Strategic Misrepresentation in Online Dating: The Effects of Gender, Self-monitoring, and Personality Traits.” *Journal of Social and Personal Relationships* 27 (1): 117–135. <https://doi.org/10.1177/0265407509349633>.
- Henry, N., and A. Powell. 2018. “Technology-facilitated Sexual Violence: A Literature Review of Empirical Research.” *Trauma, Violence, and Abuse* 19 (2): 195–208. <https://doi.org/10.1177/1524838016650189>.
- Her, Y.-C., and E. Timmermans. 2021. “Correction to: Tinder Blue, Mental flu? Exploring the Associations between Tinder use and Well-Being.” *Information Communication and Society* 24 (9): 1303–1319. <https://doi.org/10.1080/1369118X.2020.1764606>.
- Hogan, B., N. Li, and W. H. Dutton. 2011. *A Global Shift in the Social Relationships of Networked Individuals: Meeting and Dating Online Comes of Age*. <https://doi.org/10.2139/ssrn.1763884>.
- Jonason, P. K., K. A. Valentine, N. P. Li, and C. L. Harbeson. 2011. “Mate-Selection and the Dark Triad: Facilitating a

- Short-Term Mating Strategy and Creating a Volatile Environment." *Personality and Individual Differences* 51 (6): 759–763. <https://doi.org/10.1016/j.paid.2011.06.025>.
- Kolesnyk, D., M. G. de Jong, and R. Pieters. 2021. "Gender Gaps in Deceptive Self-presentation on Social-Media Platforms Vary with Gender Equality: A Multinational Investigation." *Psychological Science* 32 (12): 1952–1964. <https://doi.org/10.1177/09567976211016395>.
- Krüger, S., and A. Charlotte Spilde. 2020. "Judging Books by Their Covers—Tinder Interface, Usage and Sociocultural Implications." *Information Communication and Society* 23 (10): 1395–1410. <https://doi.org/10.1080/1369118X.2019.1572771>.
- Lamont, E.. 2021. "The Persistence of Gendered Dating." *Sociology Compass* 15 (11): e12933. <https://doi.org/10.1111/soc4.12933>.
- Lapinski, M. K., and R. N. Rimal. 2005. "An Explication of Social Norms." *Communication Theory* 15 (2): 127–147. <https://doi.org/10.1111/j.1468-2885.2005.tb00329.x>.
- Lauckner, C., N. Truszczynski, D. Lambert, V. Kottamasu, S. Meherally, A. M. Schipani-McLaughlin, E. Taylor, and N. Hansen. 2019. "Catfishing," Cyberbullying, and Coercion: An Exploration of the Risks Associated with Dating App Use Among Rural Sexual Minority Males." *Journal of Gay and Lesbian Mental Health* 23 (3): 289–306. <https://doi.org/10.1080/19359705.2019.1587729>.
- Lauder, C., and E. March. 2023. "Catching the Catfish: Exploring Gender and the Dark Tetrad of Personality as Predictors of Catfishing Perpetration." *Computers in Human Behavior* 140: Article 107599. <https://doi.org/10.1016/j.chb.2022.107599>.
- Lodder, P. 2013. "To Impute or Not Impute: That's the Question." In *Advising on Research Methods: Selected Topics*. Johannes van Kessel Publishing. https://www.paultwin.com/wp-content/uploads/Lodder_1140873_Paper_Imputation.pdf.
- Manta, I. D., M. A. Deane, S. Bray, R. Effron, C. Farini, B. Frye, A. Gilden, et al. 2019. "Tinder Lies." *Wake Forest Law Review* 207:207–249. https://scholarlycommons.law.hofstra.edu/faculty_scholarship/1261.
- March, E., J. Antunovic, A. Poll, J. Dye, and G. Van Doorn. 2024. "High (In)Fidelity: Gender, the Dark Tetrad, and Infidelity." *Sexual and Relationship Therapy* 39 (2): 549–566. <https://doi.org/10.1080/14681994.2023.2220279>.
- March, E., R. Grieve, J. Marrington, and P. K. Jonason. 2017. "Trolling on Tinder" (and Other Dating Apps): Examining the Role of the Dark Tetrad and Impulsivity." *Personality and Individual Differences* 110:139–143. <https://doi.org/10.1016/j.paid.2017.01.025>.
- McArthur, J., Z. Dunsworth, and M. Ternes. 2023. "World Wide Web of Lies: Personality and Online Deception." *Telematics and Informatics Reports* 11: Article 100075. <https://doi.org/10.1016/j.teler.2023.100075>.
- Merskin, D. L., and M. Huberlie. 1996. "Companionship in the Classifieds: The Adoption of Personal Advertisements by Daily Newspapers." *Journalism and Mass Communication Quarterly* 73 (1): 219–229. <https://doi.org/10.1177/107769909607300119>.
- Neumann, C. S., D. N. Jones, and D. L. Paulhus. 2022. "Examining the Short Dark Tetrad (SD4) across Models, Correlates, and Gender." *Assessment* 29 (4): 651–667. <https://doi.org/10.1177/1073191120986624>.
- Ng, V. K. Y., and R. A. Cribbie. 2017. "Using the Gamma Generalized Linear Model for Modeling Continuous, Skewed and Heteroscedastic Outcomes in Psychology." *Current Psychology* 36 (2): 225–235. <https://doi.org/10.1007/s12144-015-9404-0>.
- Paulhus, D. L., E. E. Buckels, P. D. Trapnell, and D. N. Jones. 2021. "Screening for Dark Personalities: The Short Dark Tetrad (SD4)." *European Journal of Psychological Assessment* 37 (3): 208–222. <https://doi.org/10.1027/1015-5759/a000602>.
- Peng, K, W.-Y. Lin, and H. Chen. 2022. "Consequences of Deceptive Self-Presentation in Online Dating." *Chinese Journal of Communication* 15 (4): 582–610. <https://doi.org/10.1080/17544750.2022.2052130>.
- Pingel, E. S., J. A. Bauermeister, M. M. Johns, A. Eisenberg, and M. Leslie-Santana. 2013. "A Safe Way to Explore": Reframing Risk on the Internet Amidst Young Gay Men's Search for Identity." *Journal of Adolescent Research* 28 (4): 453–478. <https://doi.org/10.1177/0743558412470985>.
- Ranzini, G., and C. Lutz. 2017. "Love at First Swipe? Explaining Tinder Self-presentation and Motives." *Mobile Media and Communication* 5 (1): 80–101. <https://doi.org/10.1177/2050157916664559>.
- Rowse, J., S. Mullane, R. Bassed, and J. Tully. 2022. "Technology-Facilitated Sexual Assault in Children and Adolescents: Is There a Cause for Concern? Fourteen Years of Experience at a Metropolitan Forensic Paediatric Medical Service." *Journal of Paediatrics and Child Health* 58 (3): 409–414. <https://doi.org/10.1111/jpc.15724>.
- Sawyer, A. N., E. R. Smith, and E. G. Benotsch. 2018. "Dating Application Use and Sexual Risk Behavior Among Young Adults." *Sexuality Research and Social Policy* 15 (2): 183–191. <https://doi.org/10.1007/s13178-017-0297-6>.
- Selvanathan, H. P., and B. Leidner. 2022. "Normalization of the Alt-Right: How Perceived Prevalence and Acceptability of the Alt-Right is Linked to Public Attitudes." *Group Processes and Intergroup Relations* 25 (6): 1594–1615. <https://doi.org/10.1177/13684302211017633>.
- Semrad, M., B. Scott-Parker, and M. Nagel. 2019. "Personality Traits of a Good Liar: A Systematic Review of the Literature." *Personality and Individual Differences* 147:306–316. <https://doi.org/10.1016/j.paid.2019.05.007>.
- Sevi, B., B. Urganci, and E. Sakman. 2020. "Who Cheats? An Examination of Light and Dark Personality Traits as Predictors of Infidelity." *Personality and Individual Differences* 164: Article 110126. <https://doi.org/10.1016/j.paid.2020.110126>.
- Sharabi, L. L., and J. P. Caughlin. 2019. "Deception in Online Dating: Significance and Implications for the First Offline Date." *New Media & Society* 21 (1): 229–247. <https://doi.org/10.1177/1461444818792425>.
- Statista. 2024. Online Dating – Worldwide. Accessed February 14, 2025. <https://www.statista.com/outlook/emo/dating-services/online-dating/worldwide>.
- Thompson, L. 2018. "I Can Be Your Tinder Nightmare": Harassment and Misogyny in the Online Sexual Marketplace." *Feminism and Psychology* 28 (1): 69–89. <https://doi.org/10.1177/0959353517720226>.
- Timmermans, E., and E. De Caluwé. 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>.
- Toma, C. L., J. T. Hancock, and N. B. Ellison. 2008. “Separating Fact from Fiction: An Examination of Deceptive Self-presentation in Online Dating Profiles.” *Personality and Social Psychology Bulletin* 34 (8): 1023–1036. <https://doi.org/10.1177/0146167208318067>.
- Tomas, F., and T. Van Der Zanden. 2024. *There are Layers to Liars: A Systematic Literature Review of Online Dating Deception* [Preprint Version 1.0 That May Vary from the Actual Accepted Paper]. https://osf.io/cgsb2/?view_only=e7cfd4f208114b03820f2514d47f4861.
- Vogels, E. A., and C. McClain. 2023. *Key Findings About Online Dating in the U.S.* <https://www.pewresearch.org/short-reads/2023/02/02/key-findings-about-online-dating-in-the-u-s/>.
- Welsh, C. A., L. M. Ferguson, L. McKeown, T. M. Gerlach, M. Dumas, T. E. Truhan, and K. A. Papageorgiou. 2024. “Assessing Dark Tetrad Traits: A COSMIN Systematic Review of Measurement Instruments Available.” *Personality and Individual Differences* 217:112431. <https://doi.org/10.1016/j.paid.2023.112431>.
- Whitty, M. T. 2018. “Do You Love Me? Psychological Characteristics of Romance Scam Victims.” *Cyberpsychology, Behavior, and Social Networking* 21 (2): 105–109. <https://doi.org/10.1089/cyber.2016.0729>.
- Willis, M. L., E. Oliver, and E. March. 2023. “Dating in the Dark: Vulnerable Narcissism Predicts Inauthentic Self-presentation in Online Dating.” *Telematics and Informatics* 81: Article 101985. <https://doi.org/10.1016/j.tele.2023.101985>.