Dating App Usage and Motivations for Dating App Usage are Associated with Increased Disordered Eating

K. Blake

University of Melbourne

J. Portingale

University of Melbourne

S. Giles

University of Melbourne

S. Griffiths

University of Melbourne

Isabel Krug (✉ Isabel.krug@unimelb.edu.au)

University of Melbourne

Research Article

Keywords: smart phones, disordered eating, emotion regulation, rejection sensitivity, social rank

Posted Date: March 1st, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1387119/v1>

License: This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Purpose

The centrality of physical appearance in dating app environments may constitute an appearance related pressure that increases the likelihood of body dissatisfaction (BD) and disordered eating (DE). Although dating app use has been linked to BD and DE, prior research has neglected the role of individuals' dating app use motivations and relevant traits in eating pathology. To address these gaps, the current study investigated whether dating app usage moderated the effects of appearance-based rejection sensitivity (appearance-RS), fear of negative evaluation (FNE), emotion dysregulation, and perceived social rank on DE, and the unique association between individuals' dating app use motivations and DE.

Methods

Participants ($N = 690$) completed baseline measures of demographic and trait variables including dating app usage.

Results

DE was positively associated with female gender, higher body mass index, a history of eating disorder (ED) diagnosis, appearance-RS, and emotion dysregulation. Dating app users were more likely to report DE symptoms, appearance-RS, and emotion dysregulation. No investigated predictor was moderated by dating app usage, but four of the six measured motivations for using dating apps were associated with DE among the dating app user sample.

Conclusion

Given that DE behaviors can lead to EDs, the present findings suggest that lifetime dating app usage may constitute a socio-cultural appearance pressure which confers DE risk.

Level of evidence

: Level V; descriptive study

Plain English Summary

Existing research evidence, although scant, has linked dating app use to body dissatisfaction (BD) and disordered eating (DE). Yet, little is known about the relationship between individuals' dating app use motivations and relevant traits in eating pathology. To address these gaps, the current study investigated

whether dating app usage moderated the effects of appearance-based rejection sensitivity (appearance-RS), fear of negative evaluation (FNE), emotion dysregulation, and perceived social rank on DE, and the unique association between individuals' dating app use motivations and DE. Participants ($N = 690$) completed baseline measures of demographic and trait variables including dating app usage. We found that dating app users were more likely to engage in DE behaviours, appearance-RS, and emotion dysregulation than non-users. Furthermore, four of the six measured motivations for using dating apps were associated with DE among the dating app user sample. We conclude that lifetime dating app usage may constitute a socio-cultural appearance pressure which confers DE risk. Our results showed also novel insights into the varied motivations for dating app use and their impacts on DE. As dating app use continues to proliferate, enhancing our understanding of how, why and for whom it may be harmful remains a salient area of research.

Introduction

Modern dating is increasingly conducted through online dating apps such as Tinder, Grindr and Bumble, which use geolocation and profile pictures to pair potential dating partners. Dating app users are able to quickly appraise a large number of potential "matches" by viewing others' profiles and rapidly indicating their interest (e.g., by "swiping left" or "swiping right"). With the average Tinder user swiping left or right on 140 people per day (1) and little information available except the users' profile picture, appraisals are largely based on the users' physical attractiveness. Given the central role of physical appearance concerns in exacerbating body dissatisfaction (BD) and eating pathology (2), we examined whether and why dating app usage increases the risk of sub-clinical disordered eating (DE). Specifically, we assessed associations between DE and trait-level and psychological predictors known to exacerbate DE, whether these differed among dating app users and non-users, and whether specific motivations for dating app usage were associated with increased DE.

Online dating and eating disorders

Dating apps have become increasingly popular, with an estimated 207 million people currently using dating apps worldwide (3). The centrality of physical appearance in interpersonal judgements made within dating apps may result in users' placing a disproportionate degree of importance on physical attractiveness, with negative flow-on effects on self-esteem and body satisfaction (4). Given that preoccupations with shape and weight are core psychopathological features in Fairburn's transdiagnostic model for eating disorders (EDs) (2), it is plausible that dating app usage may foster DE.

To date, only one published study has examined associations between dating app usage and DE (5), and three additional studies have examined associations between dating app usage and BD among predominately heterosexual populations (6, 4, 7). In a comparison of 100 Tinder users and 847 non-users, 4 (4) found positive associations between dating app use and thin-ideal internalization, appearance comparisons, body shame, body surveillance and BD. In a sample of 170 dating app users, 7 (7) found positive associations between frequent dating app use and body shame among men but not women, and

between dating app use and BD among women. In a recent male sample of 179 app users and 480 non-users, 6 (6) found positive associations between dating app use and body image disturbance, muscularity dissatisfaction, height dissatisfaction, and overall dissatisfaction. In a sample of 392 dating app users and 1334 non-users, 5 (5) found that app users engaged in more unhealthy weight-control behaviours than non-users. Moreover, in a recently submitted ecological momentary assessment study of 296 females (32% lifetime dating app users), 8 (8) found a positive association between lifetime dating app use and everyday urges for binge-eating/purging.

Collectively, this small body of research suggests that dating app use is associated with BD and DE. However, no study has examined associations between individuals' motivations for dating app use and eating pathology. Emerging research indicates that individuals use apps for varying reasons (9), and some of these motivations—such as self-worth validation—are implicated in the development of ED symptomology (10). An examination of these motivational factors would enhance understandings of individual characteristics that might be linked to DE among dating app users and provide insights into the functional role of DE which develops in response to dating app use. Existing research has also failed to control for important trait-level and psychological predictors known to exacerbate DE, especially those which are salient in a dating app environment. These predictors include appearance-RS (11, 12), social rank (13, 14), fear of negative evaluation (15) and emotion dysregulation (16). As explained below, dating app usage may increase their detrimental effects.

Appearance-based rejection sensitivity and eating disorders

Appearance-RS is a socio-affective processing bias where individuals are especially conscious of rejection based on their physical appearance (17). Appearance-RS is positively associated with DE (17) in community samples. Given the centrality of physical appearance within dating apps, individuals sensitive to appearance-based rejection may be especially likely to attribute dating app rejection to their physical appearance; hence, exacerbating DE symptoms among app users.

Social rank and eating disorders

Social ranking theory suggests that social rank plays a significant role in social interactions, such that mood and social behaviours are influenced by perceptions of one's social rank/status (Price, 1972). Individuals with EDs typically perceive themselves as having lower social rank than others (Cardi et al., 2014). People with low perceived social rank may be more acutely affected by the appearance-centric dating app environment, and thus engage in DE to elevate their status by achieving thin or muscular body ideals. Hence, avoiding any unwanted inferiority associated with being overlooked or rejected.

Fear of negative evaluation and eating disorders

FNE refers to anxiety about being negatively evaluated (18). According to psycho-evolutionary frameworks, FNE may function to avoid downward shifts in social rank. It is also a salient risk factor for EDs (Trompeter et al., 2018). As interpersonal judgements within dating apps are often based on physical

appearance, FNE may predispose dating app users to engage in DE to reduce their likelihood of negative evaluation.

Emotion dysregulation and eating disorders

Emotion dysregulation refers to an inability to effectively modulate and respond to emotional experiences (19). Emotion dysregulation is a common feature of clinical and sub-clinical DE (16). The impacts of psychosocial distress associated with dating-app use may be particularly unfavorable for individuals with pre-existing emotion dysregulation as it may then lead to DE behaviours, to regulate emotional states.

The present study

The centrality of physical appearance in dating app environments may constitute an appearance related pressure that increases the likelihood of presenting with DE. We aimed to investigate whether the relationship between psychological predictors (i.e., sensitivity to rejection, FNE, emotion dysregulation, and perceived lowered social rank) and DE was moderated by dating app usage. We further assessed whether people's motivations for using the apps augmented or attenuated DE. In this study, we hope to enhance understandings of individual differences driving DE, and subsequently, provide potential prevention efforts to improve eating disturbance in dating app users.

Method

Participants

A total of 690 participants (532 women; age $M = 20.30$ years, $SD = 4.51$, range = 17–51) participated in our study, of whom 310 had used dating apps previously. Approximately 11% self-reported currently or previously suffering from an ED and the body mass index (BMI) ranged from 15.35 to 66.06 kg/m² ($M = 22.11$, $SD = 4.33$). As shown in Table 1, the sample was ethnically diverse; however, the majority were Caucasian (41.2%), East-Asian (30.7%), Southern-Asian (15.6%). Most of the sample were also heterosexual (86.8%), had completed up to a Year 12 education (76.3%), were unemployed (51.8%), had never been married (95.1%), and reported English as their main language (66.6%).

Table 1
Sociodemographic characteristics for the total sample, and by dating app user status

Demographic variable	Statistics				
	Dating app user (<i>n</i> = 310, 45.1%)	Dating app non-user (<i>n</i> = 377, 54.9%)	Total (<i>N</i> = 687)	<i>t/χ</i> ²	<i>p</i>
Age (<i>M</i> ± <i>SD</i>)	20.99 ± 4.92	22.30 ± 8.47	20.28 ± 4.63		
BMI (<i>M</i> ± <i>SD</i>)	22.47 ± 3.66	22.01 ± 3.73	22.11 ± 4.33		
Gender (<i>n</i> , %)				10.06	.007
Female	222 (71.6%)	307 (81.4%)	529 (77%)		
Male	87 (28.1%)	70 (18.6%)	157 (22.9%)		
Other	1 (0.3%)	0 (0%)	1 (0.1%)		
Ethnicity (<i>n</i> , %)				24.01	<.001
Caucasian	152 (49%)	131 (34.7%)	285 (41.2%)		
Eastern Asian	71 (22.9%)	140 (37.1%)	212 (30.7%)		
Southern Asian/Southeast Asian	48 (15.5%)	59 (15.6%)	108 (15.6%)		
Other	39 (12.6%)	47 (12.5%)	86 (12.5%)		
Highest education completed (<i>n</i> , %)				19.96	.006
Year 12 or below	220 (71%)	305 (80.9%)	525 (76.3%)		
Certificate/diploma	19 (6.1%)	23 (6.1%)	42 (6.1%)		
Bachelor's degree	45 (14.5%)	36 (9.5%)	82 (11.9%)		
Postgraduate degree	26 (8%)	13 (3.4%)	39 (5.7%)		

Note. Significant *p* values bolded. BMI = Body Mass Index (kg/m²). *M* = mean, *SD* = standard deviation. t-test for continuous variables, chi-squared test for categorical variables

Demographic variable	Statistics				
Current paid employment status (<i>n</i> , %)				13.16	<.001
Employed	173 (55.8%)	158 (41.9%)	331 (48.2%)		
Main language spoken at home (<i>n</i> , %)				18.94	<.001
English	233 (75.2%)	224 (59.4%)	458 (66.6%)		
Sexual orientation (<i>n</i> , %)				13.97	.003
Heterosexual	255 (82.3%)	343 (91%)	599 (87.1%)		
Homosexual	16 (5.2%)	7 (1.9%)	23 (3.3%)		
Bisexual	35 (11.3%)	21 (5.6%)	56 (8.1%)		
Other	4 (1.3%)	6 (1.6%)	10 (1.5%)		
Marital status (<i>n</i> , %)				5.43	.246
Married	3 (0.9%)	6 (1.6%)	9 (1.3%)		
De facto	13 (4.2%)	8 (2.1%)	21 (3.1%)		
Separated/Divorced	3 (1.0%)	2 (0.7%)	4 (1.3%)		
Never married	291 (93.9%)	361 (95.8%)	654 (95.1%)		
<i>Note.</i> Significant <i>p</i> values bolded. BMI = Body Mass Index (kg/m ²). <i>M</i> = mean, <i>SD</i> = standard deviation. t-test for continuous variables, chi-squared test for categorical variables					

Measures

Demographics and ED diagnoses.

We obtained information concerning age, ethnic background, sexual orientation, marital status, highest level of education completed, lifetime ED diagnosis, and current self-reported height (centimeters) and weight (kilograms) used to calculate BMI.

Dating app variables.

Participants indicated whether they had ever used a dating app (45% yes), and their motivation(s) for using dating apps from the following options: Casual Sex, Ease of Communication, Self-Worth Validation, Thrill of Excitement, Trendiness, or Love (adopted from 9).

Appearance-based Rejection Sensitivity.

We used the Appearance-based Rejection Sensitivity Scale short form scale (20) which presented 10 hypothetical scenarios for which the participant indicated their anxiety and expectation of rejection. For each scenario, anxiety scores were multiplied by rejection scores; then averaged across scenarios ($M = 14.72$, $SD = 6.78$, Cronbach's $\alpha = .90$). High scores indicate higher appearance-RS.

Social rank.

We used the 11-item Social Comparison Scale (21) 1 – low subjective social ranking, 10 – high subjective social ranking). Items were summed, with high scores indicating self-perceived high rank ($M = 64.28$, $SD = 15.05$, $\alpha = .91$).

Fear of negative evaluation.

We used the 12-item Brief Fear of Negative Evaluation Scale (22) to measure fear of being negatively evaluated. Items were summed, with high scores indicating greater FNE ($M = 39.02$, $SD = 9.18$, $\alpha = .76$).

Emotion dysregulation.

Emotion dysregulation was measured using the 18-item Brief Version of the Difficulties in Emotion Regulation Scale (23). Items were summed to create a total score and higher scores represented more difficulty regulating emotions ($M = 50.97$, $SD = 12.36$, $\alpha = .89$).

Disordered eating.

We evaluated DE using the 12-item Eating Disorder Examination Questionnaire Short Form (24), which assesses DE symptoms over the last 7 days. Items were summed, with higher higher scores indicating elevated DE psychopathology ($M = 9.79$, $SD = 7.20$, $\alpha = .89$).

Procedure

Participants completed a 30-minute online survey asking about the demographics, lifetime dating app usage, and the aforementioned measures. Participants who indicated that they used dating apps throughout their lifetime were also asked questions about their usage frequency and motivations for use. The study was approved by the University of [redacted for peer-review] Human Research and Ethics Committee. All participants provided informed consent.

Data analysis

We were interested in the magnitude of associations between dating app variables and DE, controlling for known predictors of DE. In Model 1 we tested trait-level sociodemographic and clinical predictors (gender, BMI, ED history; Step 1), psychological predictors (appearance-RS, social rank, FNE, emotion dysregulation; Step 2), and dating app usage (Step 3) on DE for the full sample of app-users and non-app users. In Model 2 we examined whether dating app usage moderated the effects of trait and psychological predictors on DE. In Model 3 we examined associations between these same trait (Step 1) and psychological predictors (Step 2) with DE for app-users only; and also entered the six motivators for dating app usage (Step 3). We examined collinearity using variance inflation factors: all variance inflation factors were below 2.0, indicating that problematic levels of multi-collinearity were unlikely to be present. Where variables were summed, no missing data were present within participants (i.e., all summed scores were accurate, and not biased by missing data on some items within scales).

Results

Dating app users and non users differed according to gender, ethnicity, education, employment status, and sexual orientation (see Table 1). Among dating app users, the most commonly used dating app was Tinder (40%), followed by Bumble (6.1%), OKCupid (4.1%), Grindr (2.3%), Her (1.6%), and Coffee Meets Bagel (0.7%). Thrill of Excitement was the most frequent motivation for app usage (22.9%), followed by Trendiness (15.8%), Ease of Communication (15.5%); Self-Worth Validation (14.3%), Love (13.6%), and Casual Sex (10.6%). No significant group differences were found between app users and non-users on the variables in our regression models, except for DE, which was higher for dating app users (see Table 2).

Table 2
Differences between dating app users and non-users on trait variables included in the regression models

Trait variables	Statistics			
	Dating app user (<i>M</i> ± <i>SD</i>)	Dating app non-user (<i>M</i> ± <i>SD</i>)	<i>t</i>	<i>p</i>
Appearance rejection sensitivity	15.06 ± 7.04	14.43 ± 6.56	1.188	.235
Social rank	64.87 ± 16.08	63.82 ± 14.17	.886	.376
Fear of negative evaluation	38.97 ± 9.20	39.04 ± 9.18	– .095	.924
Emotion dysregulation	46.78 ± 13.16	46.31 ± 12.21	.478	.633
Disordered Eating	10.43 ± 7.50	9.25 ± 6.91	2.104	.036
<i>Note.</i> Significant <i>p</i> values bolded. <i>M</i> = mean, <i>SD</i> = standard deviation.				

— INSERT Tables 1 AND 2 ABOUT HERE —

In terms of Model 1 (Table 2), DE was positively associated with female gender, higher BMI, a history of an ED, appearance-rejection sensitivity, and emotion dysregulation. Associations between social rank and FNE with DE not reach statistical significance. There was a small, positive association between dating app usage and DE, indicating that dating app users were more likely to report DE symptoms. In terms of Model 2, dating app usage failed to moderate the effects of the aforementioned trait and psychological-level predictors on DE (Wald's χ^2 s range: 0.001–1.92, *ps* range: .166–.976).

Among dating app users, motivations for love and the thrill of excitement were negatively associated with DE, whereas using dating apps for ease of communication or validation of self-worth was positively associated with DE. Associations between using dating apps for casual sex or trendiness and DE were not significant (Model 3; see Table 3)

Table 3

Effects of trait, demographic, emotion dysregulation, and dating app variables on disordered eating, for the whole sample (Model 1) and dating app users only (Model 3).

	Model 1			Model 3		
	β	t	p	B	t	p
Step 1						
Female gender	0.19	5.13	< .001	0.19	3.40	.001
BMI	0.17	4.48	< .001	0.15	2.62	.009
History of eating disorder	0.21	5.49	< .001	0.21	3.75	< .001
Step 2						
Appearance rejection sensitivity	0.32	7.80	< .001	0.36	6.15	< .001
Social rank	-0.05	-1.41	.159	-0.01	-0.13	.895
Fear of negative evaluation	0.05	1.20	.231	0.06	0.94	.349
Emotion dysregulation	0.15	4.01	< .001	0.21	3.85	< .001
Step 3						
Dating app user	0.07	2.15	.032			
Dating app use motivations						
Love				-0.12	-2.42	.016
Casual sex				0.07	1.43	.155
Ease of communication				0.12	2.59	.010
Self-worth validation				0.13	2.50	.013
Thrill of excitement				-0.10	-2.11	.036
Trendiness				-0.05	-1.03	.306
<p><i>Note.</i> Model 1: Step 1 $F(3, 651) = 28.31, p < .001, R^2 = .12$; Step 2 $F(7, 651) = 42.02, p < .001, R^2 = .31$; Step 3 $F(8, 651) = 37.55, p < .001, R^2 = .32$. Model 3 Step 1 $F(3, 288) = 13.49, p < .001, R^2 = .12$; Step 2 $F(7, 288) = 24.00, p < .001, R^2 = .37$. Step 3 $F(13, 275) = 15.28, p < .001, R^2 = .42$.</p>						

— INSERT Table 3 ABOUT HERE —

Discussion

The popularity of dating apps has grown enormously in recent years, with a systematic review of 70 studies suggesting that dating app participation prevalence reaches 40–50% (25). The current study

investigated associations between known correlates of EDs, dating app use, and sub-clinical DE. Consistent with past work, DE was more prevalent among people who were women, had a higher BMI, a history of an ED, trouble regulating their emotions, and greater appearance-RS (5, 26, 17, 16). Dating app users were also more likely to engage in DE behaviours than non-app users, however, this effect size was small. Effects of these trait-level and psychological predictors on DE were not moderated by dating app usage (i.e., were not stronger among dating app users). However, among dating app users, certain motivations for use were associated with greater likelihood of reporting DE.

Consistent with prior research (8, 5), lifetime dating app users were more likely to engage in DE than non-app users. Although the current findings are cross-sectional, and therefore do not inform the direction of these relationships, they suggest that individuals who have used dating apps at least once throughout their lifetime also experience higher levels of DE. It is possible that individuals with greater eating disturbance prefer to interact with potential romantic partners on dating apps versus in real life, possibly due to increased control over self-presentation (7). Contrastingly, pressures surrounding physical appearance within dating app environments may trigger users to engage in DE behaviours in an attempt to enhance their perceived physical attractiveness, and thus, dating app success (8, 4, 5). Future research is needed to disentangle the direction of these effects.

Our investigation also revealed that using dating apps for validation of self-worth or ease of communication was positively associated with DE. Negative beliefs regarding one's self-worth are a central disturbance experienced by those with eating pathology; presumably because DE behaviours reflect a maladaptive attempt to overcome states of low self-worth (27, 2, 28). Moreover, it is plausible that individuals with greater eating pathology are motivated to use dating apps for their ease of communication, perhaps due to the interpersonal functioning problems (e.g., social skills deficits and social anxiety) associated with eating pathology (29). For these individuals, dating apps may represent a more conducive environment for dating success than offline.

Using apps for the thrill of excitement and love was negatively associated with DE. Characteristic of the thrill of excitement motive, sensation seeking is defined as the tendency to seek out novel and thrilling experiences (Steinberg et al., 2008) and has been implicated in DE; presumably due to an urge to satisfy needs for risk and excitement through DE behaviours (30–32). However, our findings suggest possible low sensation seeking in individuals with eating pathology. This aligns with past research linking low novelty seeking and a tendency to be hyper-protective when facing risk situations to DE; namely, dietary restraint (33, 34). We know of no conceptual framework to explain why love motivations might lead to lower eating pathology, but note the finding as one warranting future replication and exploration. Together, our findings evidence substantial heterogeneity in dating app use motivations, with different motivational drives affecting DE outcomes.

Clinical Implications

Insofar as future research can replicate associations between motivations for dating app use and DE, the present findings could be incorporated into practices that protect against the development of eating pathology in vulnerable individuals (i.e., those motivated to use dating apps for self-worth validation and ease of communication). For instance, dating app developers could implement a pre-screening instrument that assesses for interpersonal functioning deficits and the need for self-worth validation, then notifies users about potential risks. Clinicians on the other hand could enquire about clients' motivations for using dating apps to gain insight into participants' likelihood of DE. Thus, prompting more informed, healthful use, whilst helping these individuals feel more comfortable participating in online dating.

Limitations

Although these findings provide novel contributions to an emerging area of research, the current study was not without limitations. We did not assess the feedback people received from others while using the apps. Different predictions could be made for people who were frequently evaluated positively by others, versus those who were frequently rejected. Studies experimentally manipulating dating popularity (35), and any potential impacts on DE would further our understanding of these relationships. All variables in this study were assessed through self-report, thus making it vulnerable to socially desirable responding and reliant on individual self-awareness. Future research should also seek to utilise designs that allow for investigation into the directionality of relationships using more complex statistical designs, both at the trait and state levels. Given disparities in DE across sexual orientation groups (36), and the substantiated effects of sexual orientation on dating app use behaviour (37), comparisons between sexual orientation groups would be useful.

Conclusion

Our findings extend current understandings of the relationship between dating app use and body image and eating disturbance by highlighting that dating app users are more likely to engage in DE behaviours than non-users. They provide novel insight into the varied motivations for dating-app use and their unique impacts on DE. As dating app use continues to proliferate, enhancing our understanding of the mechanisms by which it may be harmful—and for which vulnerable groups—remains a salient area of research.

Abbreviations

BD
Body Dissatisfaction
BMI
Body Mass Index
DE
Disordered Eating
ED

Eating Disorder
FNE
Fear of Negative Evaluation
RS
Rejection Sensitivity

Declarations

Availability of data and materials

The data included in the current study can be requested from the corresponding author on reasonable request.

Acknowledgements

Not applicable

Funding

Khandis Blake was supported by a Discovery Early Career Researcher Award (DE210100800) from the Australian Research Council. Jade Portingale and Sarah Giles are supported by an Australian Government Research Training Program (RTP) Scholarship.

Contributions

KB, IK and SG developed the study idea and IK collected the data. KB undertook the analyses. KB, IK, SG and JP drafted the paper, and SG provided critical revisions. All authors approved the final version of the paper for submission.

Ethics declaration

Ethics approval and consent to participate

All procedures were conducted in accordance with the ethical standards of The University of Melbourne Human Research Ethics Committee. All participants provided consent to take part in the current study

Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests

References

1. Smith C. DMR Tinder Report; 2016. Available from: URL: <https://expandedramblings.com/index.php/downloads/dmr-tinder-statistic-report/>.
2. Fairburn CG, Cooper Z, Shafran R. Cognitive behaviour therapy for eating disorders: a “transdiagnostic” theory and treatment. *Behaviour Research and Therapy* 2003; 41(5):509–28. [https://doi.org/10.1016/s0005-7967\(02\)00088-8](https://doi.org/10.1016/s0005-7967(02)00088-8)
3. Curry D. Dating App Revenue and Usage Statistics; 2021. Available from: URL: <https://www.businessofapps.com/data/dating-app-market/>.
4. Strubel J, Petrie TA. Love me Tinder: Body image and psychosocial functioning among men and women. *Body Image* 2017; 21:34–8. <https://doi.org/10.1016/j.bodyim.2017.02.006>
5. Tran A, Suharlim C, Mattie H, Davison K, Agénor M, Austin SB. Dating app use and unhealthy weight control behaviors among a sample of U.S. adults: a cross-sectional study. *J Eat Disord* 2019; 7:16. <https://doi.org/10.1186/s40337-019-0244-4>
6. Fong ZH, Barnes J, Sündermann O. Dating apps, sexual orientation, and male body image: An investigation in Singaporean and Swedish samples. *Psychology of Men & Masculinities* 2021. <https://doi.org/10.1037/men0000352>
7. Rodgers RF, Campagna J, Attawala R, Richard C, Kafka C, Rizzo C. In the eye of the swiper: a preliminary analysis of the relationship between dating app use and dimensions of body image. *Eat Weight Disord* 2020; 25(5):1469–73. <https://doi.org/10.1007/s40519-019-00754-0>
8. Portingale J, Fuller-Tyszkiewicz M, Liu S, Eddy S, Liu X, Giles S et al. Love me Tinder: The Effects of Female Dating-App Use on Body-Dissatisfaction, Urge to Engage in Disordered Eating, and Negative Mood in Daily Life. Manuscript in preparation 2021.
9. Sumter SR, Vandenbosch L, Ligtenberg L. Love me Tinder: Untangling emerging adults’ motivations for using the dating application Tinder. *Telematics and Informatics* 2017; 34(1):67–78. <https://doi.org/10.1016/j.tele.2016.04.009>
10. Dunkley DM, Grilo CM. Self-criticism, low self-esteem, depressive symptoms, and over-evaluation of shape and weight in binge eating disorder patients. *Behaviour Research and Therapy* 2007; 45(1):139–49. <https://doi.org/10.1016/j.brat.2006.01.017>
11. Kimball H, Fuller-Tyszkiewicz M, Paoli T de, McKinlay A, Krug I. Testing a new interpersonal model of disordered eating between Australian and East-Asian women: The relationships between theory of mind, maladaptive schemas, and appearance-based rejection sensitivity. *Psychiatry Res* 2019; 275:1–9. <https://doi.org/10.1016/j.psychres.2019.02.065>
12. Linardon J, Braithwaite R, Cousins R, Brennan L. Appearance-based rejection sensitivity as a mediator of the relationship between symptoms of social anxiety and disordered eating cognitions and behaviors. *Eat Behav* 2017; 27:27–32. <https://doi.org/10.1016/j.eatbeh.2017.10.003>
13. Cardi V, Di Matteo R, Gilbert P, Treasure J. Rank perception and self-evaluation in eating disorders. *Int J Eat Disord* 2014; 47(5):543–52. <https://doi.org/10.1002/eat.22261>
14. Paoli T de, Fuller-Tyszkiewicz M, Halliwell E, Puccio F, Krug I. Social Rank and Rejection Sensitivity as Mediators of the Relationship between Insecure Attachment and Disordered Eating. *Eur Eat Disord*

Rev 2017; 25(6):469–78.

15. Trompeter N, Bussey K, Hay P, Mond J, Murray SB, Lonergan A et al. Fear of Negative Evaluation and Weight/Shape Concerns among Adolescents: The Moderating Effects of Gender and Weight Status. *J Youth Adolesc* 2018; 47(7):1398–408. <https://doi.org/10.1007/s10964-018-0872-z>
16. Sloan E, Hall K, Moulding R, Bryce S, Mildred H, Staiger PK. Emotion regulation as a transdiagnostic treatment construct across anxiety, depression, substance, eating and borderline personality disorders: A systematic review. *Clin Psychol Rev* 2017; 57:141–63. <https://doi.org/10.1016/j.cpr.2017.09.002>
17. Park LE. Appearance-based rejection sensitivity: implications for mental and physical health, affect, and motivation. *Pers Soc Psychol Bull* 2007; 33(4):490–504. <https://doi.org/10.1177/0146167206296301>
18. Heimberg RC, Brozovich FA, & Rapee RM. A cognitive-behavioral model of social anxiety disorder. In: Hofmann SG, DiBartolo PM, editors. *Social Anxiety*. New York: Elsevier Academic Press; 2014. 705–728).
19. Gratz KL, Roemer L. Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment* 2004; 26(1):41–54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
20. Park LE. Appearance-based Rejection Sensitivity (Appearance-RS) Scale (Long and Short Form); 2013. Available from: URL: www.midss.ie.
21. Allan S, Gilbert P. A social comparison scale: Psychometric properties and relationship to psychopathology. *Personality and Individual Differences* 1995; 19(3):293–9. [https://doi.org/10.1016/0191-8869\(95\)00086-L](https://doi.org/10.1016/0191-8869(95)00086-L)
22. Leary MR. A Brief Version of the Fear of Negative Evaluation Scale. *Pers Soc Psychol Bull* 1983; 9(3):371–5. <https://doi.org/10.1177/0146167283093007>
23. Kaufman EA, Xia M, Fosco G, Yaptangco M, Skidmore CR, Crowell SE. The Difficulties in Emotion Regulation Scale Short Form (DERS-SF): Validation and Replication in Adolescent and Adult Samples. *J Psychopathol Behav Assess* 2016; 38(3):443–55. <https://doi.org/10.1007/s10862-015-9529-3>
24. Gideon N, Hawkes N, Mond J, Saunders R, Tchanturia K, Serpell L. Development and Psychometric Validation of the EDE-QS, a 12 Item Short Form of the Eating Disorder Examination Questionnaire (EDE-Q). *PLoS One* 2016; 11(5):e0152744. <https://doi.org/10.1371/journal.pone.0152744>
25. Castro Á, Barrada JR. Dating Apps and Their Sociodemographic and Psychosocial Correlates: A Systematic Review. *Int J Environ Res Public Health* 2020; 17(18). <https://doi.org/10.3390/ijerph17186500>
26. Calogero RM, Park LE, Rahemtulla ZK, Williams KCD. Predicting excessive body image concerns among British university students: the unique role of Appearance-based Rejection Sensitivity. *Body Image* 2010; 7(1):78–81.

27. Tesser A. Self-evaluation. In: Leary MR, Tangney JP, editors. *Handbook of Self and Identity*. NY: Guildford Press; 2003. p. 275–90.
28. Rieger E, van Buren DJ, Bishop M, Tanofsky-Kraff M, Welch R, Wilfley DE. An eating disorder-specific model of interpersonal psychotherapy (IPT-ED): causal pathways and treatment implications. *Clin Psychol Rev* 2010; 30(4):400–10. <https://doi.org/10.1016/j.cpr.2010.02.001>
29. Caglar-Nazali HP, Corfield F, Cardi V, Ambwani S, Leppanen J, Olabintan O et al. A systematic review and meta-analysis of 'Systems for Social Processes' in eating disorders. *Neurosci Biobehav Rev* 2014; 42:55–92. <https://doi.org/10.1016/j.neubiorev.2013.12.002>
30. Lavender JM, Mitchell JE. Eating Disorders and Their Relationship to Impulsivity. *Curr Treat Options Psych* 2015; 2(4):394–401. <https://doi.org/10.1016/j.neubiorev.2013.12.002>
31. Laghi F, Pompili S, Baumgartner E, Baiocco R. The role of sensation seeking and motivations for eating in female and male adolescents who binge eat. *Eat Behav* 2015; 17:119–24. <https://doi.org/10.1016/j.eatbeh.2015.01.011>
32. Waxman SE. A systematic review of impulsivity in eating disorders. *Eur. Eat. Disorders Rev.* 2009; 17(6):408–25.
33. Brown M, Hochman A, Micali N. Emotional instability as a trait risk factor for eating disorder behaviors in adolescents: Sex differences in a large-scale prospective study. *Psychol Med* 2020; 50(11):1783–94. <https://doi.org/10.1017/S0033291719001818>
34. Cassin SE, Ranson KM von. Personality and eating disorders: a decade in review. *Clin Psychol Rev* 2005; 25(7):895–916. <https://doi.org/10.1016/j.cpr.2005.04.012>
35. Luberti FR, Blake KR, Brooks RC. The Effects of the Mating Market, Sex, Age, and Income on Sociopolitical Orientation: Insights from Evolutionary Theory and Sexual Economics Theory. *Hum Nat* 2020; 31(1):88–111. <https://doi.org/10.1007/s12110-019-09361-5>
36. Henn AT, Taube CO, Vocks S, Hartmann AS. Body Image as Well as Eating Disorder and Body Dysmorphic Disorder Symptoms in Heterosexual, Homosexual, and Bisexual Women. *Front Psychiatry* 2019; 10:531. <https://doi.org/10.3389/fpsy.2019.00531>
37. Sumter SR, Vandenbosch L. Dating gone mobile: Demographic and personality-based correlates of using smartphone-based dating applications among emerging adults. *New Media & Society* 2019; 21(3):655–73. <https://doi.org/10.1177/1461444818804773>