Free to be me: The relationship between the true self, rejection sensitivity, and use of online dating sites

Margaret A. Hance, Ginette Blackhart, and Megan Dew
East Tennessee State University

ABSTRACT
Prior research (Blackhart et al., 2014) found that rejection-sensitive individuals are more likely to use online dating sites. The purpose of the current research was to explain the relationship between rejection sensitivity and online dating site usage. Study 1 examined whether true self mediated the relation between rejection sensitivity and online dating. Study 2 sought to replicate the findings of Study 1 and to examine whether self-disclosure moderated the relationship between true self and online dating in the mediation model. Results replicated those found by Blackhart et al. and also found that true self mediated the relationship between rejection sensitivity and online dating site usage. These findings suggest that rejection-sensitive individuals feel they can more easily represent their “true” selves in online environments, such as online dating sites, which partially explains why they are more likely to engage in online dating.

KEYWORDS
Online dating; rejection sensitivity; relationships; self-disclosure; true self

As of May 2017, there were 54,350,000 single individuals in the United States and, of those single individuals, 49,650,000 had tried online dating (Statistic Brain Research Institute, 2017). It is estimated that 20% of current committed romantic relationships began online (Statistic Brain Research Institute, 2017). In addition, the annual revenue from the online dating industry is estimated to be $1,935,000,000 and individuals who use online dating sites spend an average of $243 per year to use those sites (Statistic Brain Research Institute, 2017).

As the popularity of online dating grows, researchers are continuing to examine factors related to online dating site usage and behaviors. Few studies, however, have examined predictors of online dating site use. The studies that have examined predictors of online dating have found that using the Internet for a greater number of tasks (Kang & Hoffman, 2011), being between 30–50 years of age (Valkenburg & Peter, 2007), being less trusting of others (Kang & Hoffman, 2011), being lower in dating anxiety (Valkenburg & Peter, 2007), and being higher in rejection sensitivity (Blackhart, Fitzpatrick, & Williamson, 2014) significantly predicted greater online dating site usage.

It is not clear, however, why rejection-sensitive individuals are more likely to engage in online dating. Blackhart et al. (2014) speculated that rejection-sensitive individuals may be drawn to online dating because they feel they can better present their “real” selves in such an environment compared to a more traditional dating environment, but this hypothesis has not yet been tested. As a result, the aim of the current research was to replicate the findings from Blackhart et al. that rejection sensitivity is predictive of use of online dating sites and to identify a potential mechanism by which rejection sensitivity predicts engagement in online dating. Specifically, we examined the “true” self as a potential mediator.
**Rejection sensitivity**

Rejection sensitivity is a disposition to “anxiously expect, readily perceive, and overreact to rejection” (Downey & Feldman, 1996, p. 1327). Rejection sensitivity is positively related to perceived social rejection (Kawamoto, Nittono, & Ura, 2015) and, when receiving ambiguous rejection feedback, rejection-sensitive individuals report greater feelings of rejection than less rejection-sensitive individuals (Downey & Feldman, 1996). In addition, Kawamoto et al. found that rejection-sensitive individuals displayed vigilance and a defensive response toward social rejection cues.

Within romantic relationships, rejection sensitive individuals often engage in behaviors that elicit rejection from their romantic partners. For instance, rejection sensitive individuals who expect rejection from their romantic partners are more likely to attribute hurtful intent when a new romantic partner engages in insensitive behaviors (Downey & Feldman, 1996). They also report more anxiety and avoidance in romantic relationships and are more negative when interacting with their romantic partners, showing greater frequency and intensity of behaviors that undermine autonomy and relatedness in their relationships (Hafen, Spilker, Chango, Marston, & Allen, 2014). Rejection sensitive women are also more angry during conflict and engage in more negative behaviors during a conflict discussion, such as having a hostile or negative tone of voice during conflict discussion; denying responsibility for a problem; demeaning and/or mocking their partners; dysphoric affect during discussion; displaying nonverbal gestures that indicate disgust, disapproval, displeasure, and/or disagreement; and/or assuming a negative mindset or motivation of their partners (Downey, Freitas, Michaelis, & Khouri, 1998). This leads to high rejection-sensitive women’s partners to be more negative about the relationship, to experience less relationship satisfaction, to be more likely to think about ending the relationship, and to be less accepting of and more withdrawn from their partners than low rejection sensitive women’s partners (Downey et al., 1998). Rejection sensitive men also display more jealousy toward their partners, and rejection-sensitive women are more hostile toward and less supportive of their partners (Downey & Feldman, 1996). Rejection sensitivity is significantly predictive of relationship dissatisfaction (Downey & Feldman, 1996) and of relationship dissolution (Downey et al.) for men and women. In addition, rejection sensitivity at age 16 is significantly predictive of being less likely to be in a romantic relationship at age 22 (Hafen et al., 2014).

Because rejection sensitivity is predictive of greater perceptions of social rejection in ambiguous situations, greater vigilance and defensiveness toward social rejection, a lower likelihood of having a romantic partner, and increased anxiety and avoidance when one does have a romantic partner, online dating may be especially attractive to high rejection-sensitive individuals. For instance, people higher in rejection sensitivity may be more likely to engage in online dating because it may be easier to avoid rejection and/or because rejection cues may be less salient in online environments than in face-to-face dating environments. According to the Hyperpersonal Interaction Theory, online dating also allows users to engage in more selective self-presentation than do traditional dating environments (e.g., Walther, 1996). That is, users of online dating sites and apps are able to choose which aspects of themselves they present to others, both when creating their online dating profiles and when communicating with prospective romantic partners through online dating sites or apps. Users can therefore present only those aspects of themselves they want others to see, thus possibly reducing rejection by other users. Some individuals, such as those higher in neuroticism or rejection sensitivity (see Amichai-Hamburger, Wainapel, & Fox, 2002), may have a strong desire to present aspects of themselves that they believe truly represent who they really are. Blackhart and colleagues (2014) indeed found a positive relationship between rejection sensitivity and online dating site use. It is not entirely clear, however, why this relationship exists. We therefore aimed to examine whether rejection sensitive individuals are more likely to engage in online dating because they feel they can better present their “real” selves in such an environment compared to a more traditional, face-to-face, dating environment.
“True” self

The “true” self is the philosophical concept of who a person believes he or she truly is, despite outward actions (Schlegel, Hicks, King, & Arndt, 2011). McKenna, Green, and Gleason (2002) concluded that disclosing through the Internet helps facilitate expressing one’s true self because people do not have the pressure of attempting to bond over superficial characteristics. This, in turn, may create more emotionally stable bonds. Because of diminished social pressures, people may use online dating as a means for representing their true selves. Perhaps, for people sensitive to rejection, the option of expressing one’s true self in an online environment would make romantic relationships easier to create and facilitate. For instance, research has shown that people higher in neuroticism (which is positively correlated with rejection sensitivity; see Blackhart et al., 2014) are more likely to use social services on the Internet (e.g., chat rooms and discussion groups; Hamburger & Ben-Artzi, 2000) and that they are drawn to these online environments because they can adequately express their “real” selves online (Amichai-Hamburger et al., 2002). Relatedly, an unpublished study (Rife, 2015) found a significant positive relationship between rejection sensitivity and anonymously seeking social support in online environments. Perhaps this is because rejection-sensitive individuals feel they can more readily present their true selves in such environments, which may thus increase the likelihood of receiving social support. The relation between rejection sensitivity and online dating may therefore be explained by the extent to which individuals feel comfortable revealing their true selves online versus in face-to-face social interactions.

The current research

As stated above, the aim of the current research was to replicate the findings of Blackhart et al. (2014) and to examine whether the extent to which one reveals his or her true self online may explain the relationship between rejection sensitivity and online dating. Two studies were conducted to accomplish this aim.

Study 1

The aim of Study 1 was to replicate findings from Blackhart et al. (2014) showing that rejection sensitivity predicts greater use of online dating sites and to examine whether the tendency to feel greater comfort revealing aspects of the true self online explained the relationship between rejection sensitivity and online dating site use.

Participants

Blackhart et al. (2014) reported that the correlation between rejection sensitivity and online dating site usage was \( r = .22, p < .05 \). We used this information to calculate the approximate number of participants we would need to achieve power of 0.95, which were 256 participants. We decided to collect data during one semester and to end data collection at the end of that semester, provided we had at least 256 participants. Participants were recruited from a southeastern public university participant pool through Sona and from Amazon’s Mechanical Turk (MTurk). Participants received research credit for their courses (Sona participants) or $1.00 (MTurk participants) for completion of the survey. Data were collected from 700 participants, though data from 60 participants were eliminated from analyses due to inconsistent answers on the Online Dating Inventory. The final sample therefore consisted of 640 participants (67% female) ranging in age from 18–65 (\( M_{\text{age}} = 23.59, SD = 7.61; 92\% \) were between 18–35).


**Materials and procedure**

All questionnaires were completed online. Participants first completed the 16-item Rejection Sensitivity Questionnaire (RSQ; Downey & Feldman, 1996) to assess the anxiety of anticipated rejection. Respondents were presented with 16 hypothetical scenarios in which they make a request of another individual and were asked to indicate, on a 6-point Likert scale, the extent to which they would experience anxiety and/or concern about making the request (1 = *not at all concerned*, 6 = *very concerned*) and the likelihood that the other person would respond in an accepting manner (1 = *very unlikely*, 6 = *very likely*). Sample items include, “You ask someone you don’t know well out on a date”; “You ask your supervisor for help with a problem you have been having at work”; and “You ask your parents or other family members to come to an occasion important to you.” The RSQ is scored by multiplying the level of rejection anxiety/concern by the reverse for acceptance expectancy for each item and calculating the average across the 16 items. Higher scores indicate greater sensitivity to social rejection (α = .85).

Participants also completed the Real Me Scale (McKenna et al., 2002) to assess how much participants were willing to reveal their “true” self to others online versus in-person. The Real Me Scale consists of four questions. The first two questions are answered in a Yes/No format and include, “Do you think you reveal more about yourself to people you know from the Internet than to real life (non-Internet) friends/close others?” and “Are there things your Internet friends/close others know about you that you cannot share or have not shared with real life (non-Internet) friends/close others?” The other two questions are answered on a Likert scale from 1–7 (1 = *not at all* and 7 = *a great deal*) and include, “To what extent have you revealed or expressed different parts of yourself to others on the Internet than you have to others in real life?” and “To what extent would your family and friends be surprised were they to read your Internet and/or email postings and/or messages?” Answers to the four questions are then summed up, and higher scores are indicative of respondents feeling more comfortable presenting aspects of their true selves in online environments than in person. In Study 1, due to low internal consistency reliability when using all four items of the Real Me Scale to calculate a true self score, we instead only used the first two items to calculate the true self score (α = .67).²

Finally, participants completed the Online Dating Inventory (ODI), a measure created by Blackhart et al. (2014) to assess the extent to which participants engaged in or used online dating sites and/or apps. To measure online dating site use, participants answered questions about their likelihood to use online dating sites, whether they had ever used online dating sites, how often they used online dating sites, and how much time they spend on online dating sites. Higher scores indicate more online dating site use (α = .83).

**Results and discussion**

Preliminary analyses showed significant correlations between online dating and rejection sensitivity (r = .25, p < .001) and between online dating and true self scores (r = .56, p < .001). There was also a significant correlation between rejection sensitivity and true self scores, r = .24, p < .001. A multiple regression analysis was used to regress online dating site use onto rejection sensitivity and true self scores, $F(2, 637) = 153.34$, $p < .001$. Results indicate that rejection sensitivity ($β = .12$, $t = 3.61$, $p < .001$) and true self ($β = .53$, $t = 15.75$, $p < .001$) significantly predicted online dating. The Preacher and Hayes (2008) PROCESS macro for SPSS was used to determine whether true self mediated the relationship between rejection sensitivity and online dating. The mediation model showed a significant indirect effect of .20, 95% CI: [.14, .27], Z = 5.87, $p < .001$, of the relationship between rejection sensitivity and online dating through the “true” self. See Figure 1 for the model.

The results from Study 1 support the findings of Blackhart et al. (2014) showing rejection sensitivity predicted use of online dating sites, indicating that those higher in rejection sensitivity are more likely to
use online dating sites. Additionally, the results indicated that the true self mediates the relation between rejection sensitivity and online dating site use. Individuals higher in rejection sensitivity tend to feel more comfortable revealing their true selves online and those that feel more comfortable revealing aspects of their true self online are more likely to engage in online dating.

One limitation to Study 1 is that we had to exclude data from 60 participants from analyses due to inconsistent answers on the Online Dating Inventory. Another limitation was low internal consistency reliability for the true self score when all four items of the Real Me Scale were used. Due to the low alpha when all four items were used, we instead used only the first two items of the Real Me Scale to calculate a true self score. We are not certain why so many participants in this sample gave inconsistent answers on the Online Dating Inventory or why internal consistency reliability was low for the Real Me Scale, but we suspect these incidents may be related and could be due to inattention on the part of some participants when completing the survey. Due to these limitations, it was important to try to replicate the results from Study 1 in a follow-up study.

**Study 2**

Due to the limitations of Study 1, one of the aims of Study 2 was to replicate the results from Study 1. We also sought to examine what role self-disclosure might play in the relationship between true self and online dating site/app use in Study 2 as self-disclosure would be important in revealing one’s true self to others.

**Self-disclosure**

Self-disclosure is any communication where one individual discloses personal information to another individual (Wheeless & Grotz, 1976), or the “process of making the self known to others” (Jourard & Lasakow, 1958, p. 91). That is, self-disclosure is a voluntary and authentic gesture that...
relates to the self (Pearce & Sharp, 1973). Furthermore, because self-disclosure is frequently reciprocated, it often strengthens the bond between potential romantic partners (Joinson & Paine, 2009; Jourard, 1971). Although research pertaining to self-disclosure and online dating is lacking, research has examined self-disclosure in online communications in non-dating scenarios. Ben-Ze’ev (2003) suggested that self-disclosure online might decrease the feelings of vulnerability often felt when people self-disclose in face-to-face interactions. Further, Joinson (2001) found that individuals are more likely to self-disclose when communicating online than during face-to-face interaction. Joinson also found that individuals who believe they are anonymous self-disclose more online than individuals who are not anonymous. For those in romantic relationships, communicating with a romantic partner online versus in-person was associated with greater breadth, amount, and depth of self-disclosure (Boyle & O’Sullivan, 2016). To reveal one’s true self, one must engage in self-disclosure about aspects of the true self. We therefore examined whether the extent to which an individual self-discloses to others in general moderated the relationship between true self and online dating in our mediation model.

Participants

The power analysis and data collection stopping rule applied to Study 2 was identical to that applied to Study 1. Participant recruitment and compensation was also identical to Study 1. The final sample consisted of 326 participants (119 male, 206 female, 1 non-binary) ranging in age from 18–59 (M_age = 24.15, SD = 8.15). Three participants were excluded from statistical analyses for providing inconsistent answers on the Online Dating Inventory.

Materials and procedure

The procedure for Study 2 was identical to that of Study 1, except that Study 2 used the 9-item version of the Rejection Sensitivity Questionnaire and included a measure of self-disclosure. Internal consistency reliability was α = .87 for the Online Dating Inventory, α = .78 for the Rejection Sensitivity Questionnaire, and α = .71 for the Real Me Scale (using all four items).

To measure self-disclosure, participants completed the Revised Self-Disclosure Scale (Wheless & Grotz, 1976), which consists of 32 items with five subscales: Intended Disclosure (4-items, α = .83; sample item: “When I express my personal feelings, I am always aware of what I am doing and saying”), Amount (7-items, α = .83; sample item: “Only infrequently do I express my personal beliefs and opinions” [reverse-coded]), Positive-Negative (6-items, α = .89; sample item: “I usually disclose negative things about myself”), Control of Depth (6-items, α = .78; sample item: “I often disclose intimate, personal things about myself without hesitation”), and Honesty-Accuracy (8-items, α = .83; sample item: “I always feel completely sincere when I reveal my own feelings and experiences”). For the current sample, the internal consistency reliability of the overall scale was good (α = .83).

Results and discussion

As in Study 1, the correlations between rejection sensitivity and online dating (r = .13, p = .02), between true self scores and online dating (r = .45, p < .001), and between rejection sensitivity and true self scores (r = .25, p < .001) were statistically significant. Significant correlations between self-disclosure and rejection sensitivity (r = -.30, p < .001) and between self-disclosure and online dating (r = .13, p = .02) were also found. A multiple regression analysis regressing online dating onto rejection sensitivity, true-self scores, and self-disclosure (F(2, 322) = 32.87, p < .001) found that true-self scores (β = .45, t = 8.92, p < .001) and self-disclosure (β = .18, t = 3.45, p = .001) significantly predicted online dating, whereas rejection sensitivity did not predict online dating, β = .08, t = 1.45, p = .15. We also entered the interaction between true self scores and self-disclosure into the
regression analysis predicting online dating site use to examine whether self-disclosure moderated the relationship between true self and online dating site use. The interaction was not a significant predictor of online dating site use, \( \beta = -.64, t = -1.95, p = .05 \).

Next, we examined whether true self mediated the relationship between rejection sensitivity and online dating using the PROCESS macro in SPSS (Preacher & Hayes, 2008). The mediation model showed a significant indirect effect for the true self (.18, 95% CI: [.10, .27], \( Z = 4.09, p < .0001 \)). See Figure 1 for the model. We also conducted a moderated mediation, entering self-disclosure as a moderator of the relationship between true self and online dating site use in the mediation model. Results show that self-disclosure is significantly related to online dating site use in the model (\( \gamma = .11 \) [.05, .16], \( p = .0005 \)), whereas the interaction between true self and self-disclosure was not statistically significant in the moderated mediation model, \( -0.007 [-.01, .0001], p = .05 \).

Importantly, Study 2 replicates the results from Study 1 showing that true self mediates the relationship between rejection sensitivity and online dating site use, indicating that true self partially explains the relationship between rejection sensitivity and online dating site use. Results did not show, however, that self-disclosure significantly moderated the relationship between true self and online dating site use. This indicates that the positive relationship between revealing one’s true self online and using online dating sites and apps is not influenced by self-disclosure. One reason for this finding is perhaps because we measured general self-disclosure rather than self-disclosure in online environments. Additionally, \( p = .05 \) in our analysis of the interaction between true self and self-disclosure on online dating site use, which suggests that it might be worth future research examining this further, especially as we examined self-disclosure in general and not self-disclosure in online environments. As a result, we suggest that future research specifically examine self-disclosure in online environments and examine whether this may, in fact, moderate the relationship between true self and online dating site use within the mediation model proposed in the current research. Study 2 shows that although rejection sensitive individuals feel more comfortable revealing their true selves in online than in offline environments, which predicts greater use of online dating sites and apps, our research also shows that rejection sensitive individuals self-disclose less to others in general than less rejection sensitive individuals. Perhaps those who are higher in rejection sensitivity may not self-disclose much in general, but may disclose more so online because they feel more comfortable revealing their true selves in online environments. Future research will need to examine this possibility.

**General discussion**

Two studies replicated the results of Blackhart et al. (2014), showing that individuals higher in rejection sensitivity are more likely to use online dating sites and apps. They also showed that the true self mediated that relationship. Rejection sensitive individuals feel more at ease revealing aspects of their true selves in online environments, which partially explains why they are more likely to engage in online dating.

Because self-disclosure is important in revealing one’s true self to others, we also examined whether self-disclosure moderated the relationship between true self and online dating in our mediation model. Results were not statistically significant but were suggestive that additional research on this topic might be warranted. Specifically, we suggest that future research examine whether rejection-sensitive individuals are more likely to self-disclose in online rather than in offline environments, as Joinson (2001) showed that self-disclosure is easier for individuals online than face-to-face (Joinson, 2001), and because rejection sensitive individuals feel they are better able to reveal their true selves online. As a result, individuals higher in rejection sensitivity may be more comfortable disclosing more information about themselves in an online environment, such as in online dating sites or apps, than in offline environments, such as more traditional dating environments. Because this explanation is speculative, however, future research must examine whether rejection sensitive individuals engage in more self-disclosure in online environments than in offline
environments. In addition, future research should examine whether self-disclosure in online environments specifically plays a role in the link between rejection sensitivity, revealing one’s true self online, and engaging in online dating.

The primary limitation of the current research is that it was cross-sectional. Future research should examine these relationships over time to establish temporal precedence. In addition, in order to partially establish causality, future research should manipulate the self-disclosure setting (online versus offline) to determine whether the setting in which one self-discloses influences the extent to which they self-disclose and how self-disclosure in these settings is related to rejection sensitivity.

As online dating sites and apps continue to increase in popularity as a way to meet potential romantic partners, it is important to understand the factors that contribute to this phenomenon. Our research has primarily focused on factors that predict use of online dating sites and apps, uncovering rejection sensitivity as one such predictor. We have further focused on understanding why rejection sensitivity predicts use of online dating sites/apps. Online dating sites/apps can provide rejection-sensitive individuals a way to present their “true” selves online while searching for potential romantic partners. Use of online dating sites could also increase self-disclosure (an important step in developing any relationship), especially for rejection sensitive individuals, though future research will need to examine whether this is true.

Prior research has shown that rejection sensitivity predicts a lower likelihood of being in a romantic relationship (Hafen et al., 2014; Levy, Ayduk, & Downey, 2001). There are several possibilities for why that may be, but one possibility is that they have greater difficulty meeting potential dating partners and initiating dating relationships in more traditional dating settings. The current research shows that rejection-sensitive individuals are more likely to use online dating sites because they feel they can better reveal their true selves online than offline. Perhaps engaging in online dating may increase dating success for individuals high in rejection sensitivity in that they may be more likely to meet potential dating partners and to initiate and/or enter into dating relationships. Future research will need to examine this possibility. The current study may also provide insight for online dating sites and apps as the results may enable site developers to tailor their services to those individuals who are more likely to use online dating sites/apps. It may further enable online dating sites/apps to develop tools and engage in practices that help these individuals feel more comfortable participating in online dating.

Notes

1. Materials used in the current research and data for both studies can be accessed at https://osf.io/6a34q/.
2. We would like to thank an anonymous reviewer for this suggestion. When all four items of the Real Me Scale were used to calculate a true self score, $\alpha = .44$. Results were nearly identical, however, when analyses were conducted using the two-item and the four-item true self score.

References


