THE JOURNAL OF SOCIAL PSYCHOLOGY
https://doi.org/10.1080/00224545.2022.2131502

Who is more willing to engage in social rejection? The roles of self-esteem, rejection sensitivity, and negative affect in social rejection decisions

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ABSTRACT
How do self-schemas and their consequences guide would-be-rejectors? When making decisions about whether to reject, individuals consider the difficulty and emotional consequences of rejecting, and both considerations are likely to involve self-schemas. In three preregistered studies, we examine the roles of self-esteem, rejection sensitivity, and symptoms of depression and anxiety in rejection decisions. In an initial set of studies (N_{1a} = 214, N_{1b} = 264), participants forecast their willingness to reject and their emotional responses in friendship (Study 1a) and romantic (Study 1a-1b) vignettes. In Study 2 (N_2 = 259), participants who recently rejected rated that experience on the same measures. Correlates of negative self-schema were associated with negative emotions. Self-esteem, rejection sensitivity, and general distress were associated with forecasted difficulty rejecting, but only anxiety and general distress were associated with retrospectively reported increased difficulty. Taken together, psychological distress may decrease willingness to reject in a way that participants cannot predict.

ARTICLE HISTORY
Received 13 January 2022
Accepted 21 September 2022

KEYWORDS
Social rejection; self-esteem; rejection sensitivity; depression; anxiety

Sometimes relationships need to end – but negative self-schemas and their emotional consequences can make it less likely for people to be willing to engage in social rejection.[1] Despite a recognition of the negative emotional consequences that result from both being socially rejected (e.g., Baumeister & Leary, 1995; Buckley et al., 2004; Feeney, 2004; Leary, 1990; Tang & Richardson, 2013; Williams, 2007) and of performing that rejection (e.g., Baumeister et al., 1993; Freedman et al., 2016; Kansky & Allen, 2018; Legate et al., 2013; Poulsen & Kashy, 2012), we know very little about the emotional antecedents that might be associated with social rejection decisions. Understanding the role of negative self-schemas and emotions in rejection decisions is critical: if individuals are reluctant to reject due to low self-esteem or mood, they may stay in unhealthy relationships and experience further negative emotional consequences. Therefore, the present work focuses on the relationship between negative self-schemas, emotions, and individuals' attitudes toward engaging in social rejection in a cross-sectional design.

Self-schemas, representations of the self that result from past experience (Beck, 1967; Segal, 1988), play an important role in the experience of being rejected, and negative self-schemas may be particularly influential. One aspect of negative self-schema is lower feelings of self-worth (i.e., low self-esteem). Such negative self-schemas may have downstream associations with rejection-relevant constructs such as anxious concerns about interpersonal acceptance (i.e., high rejection sensitivity). Self-esteem can be operationalized as a measure of one's level of interpersonal acceptance: higher levels of self-esteem signal higher levels of acceptance (Leary et al., 1995), and social rejection can lead to reductions in self-esteem (e.g., Leary, 1990; Williams, 2007). Similarly, individuals with higher levels of rejection sensitivity

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Supplemental data for this article can be accessed online at https://doi.org/10.1080/00224545.2022.2131502
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anxiously expect – and strongly react to – experiences of being rejected (Downey & Feldman, 1996). Furthermore, being rejected can be an impetus for experiencing depressive and anxiety symptoms (Beck & Bredemeier, 2016; Kendler et al., 2003; Nolan et al., 2003; Slavich et al., 2010, 2009). However, it is unclear whether these consequences of negative self-schemas are related to how individuals choose to *engage* in rejection.

Although social rejection is an unpleasant and difficult aspect of interpersonal relationships, it is also a necessary one: not all relationships are healthy, and unhealthy relationships can have damaging consequences. For example, adolescents in romantic relationships marked by negative qualities (e.g., conflict, criticism) report higher levels of depressive symptoms (La Greca & Harrison, 2005). Furthermore, being in a relationship involving intimate partner violence is strongly associated with experiencing depressive symptoms and being at risk for major depressive disorder (Beydoun et al., 2012; Devries et al., 2013). Thus, it is critical to examine the factors that may be associated with less willingness to end relationships.

Social rejection occurs in a wide range of contexts and with many types of relationships including romantic relationships as well as friendships. Yet, despite the ubiquity of social rejection, engaging in rejection can be a difficult endeavor for the rejector. First, engaging in social rejection is generally perceived as effortful (Ciarocco et al., 2001; Williams et al., 2000). Individuals are often reluctant to reject romantic suitors even when they are not interested in pursuing a relationship with them (Joel et al., 2014). Second, engaging in social rejection can lead to unpleasant emotional experiences, including guilt and negative affect (e.g., Baumeister et al., 1993; Legate et al., 2013; Perilloux & Buss, 2008; Poulsen & Kashy, 2012). Furthermore, when individuals engage in social rejection, they can experience consequences with direct effects on self-schema (Wirth & Wesselmann, 2018). For example, after engaging in ostracism (i.e., using the silent treatment as a form of rejection), individuals report higher levels of negative self-conscious emotions such as guilt and shame (Gooley et al., 2015) and view themselves as less human (Bastian et al., 2012). The effortfulness of rejecting coupled with the potential for negative emotional consequences make for a potentially difficult decision for a would-be-rejector. How a would-be-rejector thinks about themself, particularly in relation to others, is likely to play an important role in that decision-making process. Thus, in the present research we examine the role of two aspects of negative self-schema (low self-esteem and rejection sensitivity) and two emotional corollaries of negative self-schema (anxious and depressive symptoms) – in vignette-based affective forecasts and actual experiences of social rejection decisions. We argue that each will be invoked in the decision-making process as individuals consider rejecting others, and when they actually do so.

Negative self-schemas

Low self-esteem

Self-esteem is a central component of self-schema directly linked to social rejection, and being rejected may reduce one's self-esteem (Baumeister & Leary, 1995; Leary et al., 1995). Although there is some controversy surrounding the degree to which social rejection paradigms affect self-esteem (Blackhart et al., 2009; Gerber & Wheeler, 2009), there is evidence that specific episodes of rejection do in fact threaten self-esteem (Bernstein & Claypool, 2012).

The relationship between self-esteem and social rejection is likely to vary depending on the reason for engaging in rejection. For example, in a recalled experiences study, individuals higher in self-esteem were more likely to use ostracism to end a relationship, while those lower in self-esteem were more likely to use ostracism to avoid getting rejected themselves (Sommer et al., 2001). In a laboratory experiment involving instructed ostracism, participants felt worse about themselves when engaging in ostracism compared to inclusion, but they also felt more superior to others (Zadro et al., 2005). Taken together, social rejection and self-esteem are clearly linked, yet there is some ambiguity regarding the direction of the relationship. However, based on Sociometer Theory and the finding that people may

feel worse about themselves after rejecting (Zadro et al., 2005), we hypothesized that individuals with lower self-esteem would view engaging in rejection as more difficult and more likely to induce negative emotions, and they would indicate less inclination to reject.

Rejection sensitivity

Rejection sensitivity – the tendency to react particularly negatively to rejection (Downey & Feldman, 1996) – is, much like self-esteem, closely connected to experiences of social rejection. Thus, individuals who experience higher levels of rejection sensitivity tend to have stronger emotional and interpersonal reactions to being rejected. For example, rejection sensitive individuals are more likely to respond to rejection with anger, hostility, and aggression (e.g., Ayduk et al., 1999; Downey et al., 2000; Romero-Canyas et al., 2010). Furthermore, rejection sensitivity has been linked to several other constructs associated with negative self-schema including anxiety symptoms, depressive symptoms, and low self-esteem (e.g., Ayduk et al., 2001; Downey & Feldman, 1996; P. Gilbert et al., 2006; London et al., 2007; Watson & Nesdale, 2012; Zhou et al., 2020). For instance, women with higher levels of rejection sensitivity experience higher levels of depressive symptoms after they are broken up with (Ayduk et al., 2001). Similarly, rejection sensitivity has been shown to mediate the relationship between low self-esteem and depressive symptoms in an adolescent sample (Zhou et al., 2020).

Yet, much of the research on rejection sensitivity has focused on expectations toward and reactions to *being* rejected, and less is known about the role of rejection sensitivity in expectations toward and reactions to *engaging* in rejection. Given the links between rejection sensitivity, mood symptoms, and self-esteem, it is possible that rejection sensitive individuals may forecast feeling worse about engaging in rejection and may also experience engaging in rejection as more difficult and emotionally negative. Although few studies have investigated this connection, one study found that rejection sensitivity was associated with depressive symptoms for women who experienced a partner-initiated breakup, but not those who engaged in rejection (Ayduk et al., 2001). However, in the present research, we specifically examine the role of rejection sensitivity in forecasting the act of engaging in rejection – specifically, in likelihood of rejecting and forecasted difficulty in performing it.

Consequences of negative self-schemas

While self-esteem and rejection sensitivity are components of self-schema, they also have downstream associations with negative emotions and disturbances in mood. Individuals process information or situations through the lens of their schema, which impacts symptoms of anxiety and depression. For example, an ambiguous situation will be interpreted negatively if one is feeling depressed or anxious (Watkins et al., 1992). It is clear that ending a relationship is depressing – for example, in a meta-analysis of 21 studies, the dissolution of relationships was positively associated with depressive symptoms (Mirsu-Paun & Oliver, 2017). It is also evident that rejecting is anxiety-provoking, especially within the context of a relationship (Rizvi et al., 2021). Furthermore, both depressive and anxiety symptoms are associated with the experience of romantic rejection (e.g., Field et al., 2009; Kansky & Allen, 2018). Current mood or anxiety may also be associated with whether and how an individual rejects a partner or friend and how difficult people will find that experience.

Depression has been associated with difficulty in making effortful decisions (Blanco et al., 2013; Clark et al., 2009; Dainer-Best et al., 2017), suggesting that depressive symptoms should be associated with an increased difficulty in making decisions to reject. Anxiety may also lead to difficulty in, and ultimately the avoidance of, making difficult decisions (Bishop & Gagne, 2018; Maner et al., 2007). Not only is the actual task of rejection difficult, but individuals are also likely to predict that they will struggle with engaging in rejection. For example, when would-be rejectors imagine how likely they would be to engage in romantic rejection, they express a higher likelihood of rejecting than when they are faced with the real potential rejection situation (Joel et al., 2014).

Similarly, individuals may not accurately predict the negative emotional consequences of engaging in rejection. In other words, they make affective forecasting errors. Affective forecasting is the idea that individuals try to predict how they will feel in the future (Wilson & Gilbert, 2003). Such forecasting tends to be guided by one's self-schema (Liberman et al., 2002), suggesting that it may respond to mood states, and be most accurate when a respondent has had similar past experiences. However, forecasting is not always accurate. Early cross-sectional studies of forecasting about rejections showed that people believe a breakup will make them feel worse than it actually does (D. T. Gilbert et al., 1998), and similar longitudinal studies show that this is in fact the case (Eastwick et al., 2008).

Although *being* rejected is clearly perceived as emotionally negative and difficult, would-be-rejectors also face a negative interpersonal process. For example, when individuals engage in rejection, they report that it is difficult and emotionally taxing, and they often do not know the best way to approach the situation (e.g., Baumeister et al., 1993; Ciarocco et al., 2001; Freedman et al., 2016; Legate et al., 2013; Poulsen & Kashy, 2012; Wesselmann et al., 2013; Williams et al., 2000). When individuals forecast their willingness to reject, they do not always consider the emotional consequences for themselves and for the target of rejection in the same way that they do when actually engaging in rejection (Joel et al., 2014). Thus, the potential disconnect between forecasting the difficulty and emotions associated with rejecting compared to the true level of difficulty and emotion is important for understanding rejection decisions. Based on this research, we hypothesized that higher symptoms of anxiety, depression, and general distress are likely to be associated with increased difficulty of rejecting and with more negative emotions experienced during the rejection.

Present research

In the present research, we test whether individuals with more negative views of themselves and of the world around them 1) are likely to forecast rejection would be difficult and unpleasant and that they would be unwilling to do so, and 2) will recall experiences of engaging in rejection as difficult and emotionally negative. These hypotheses are tested in three studies utilizing two different methods. The first set of studies (Studies 1a and 1b) use vignette paradigms to assess forecasts about likelihood of rejecting, method of hypothetical rejection, perceived difficulty, and perceptions about negative emotions that would be felt after rejecting. The final study uses a recall paradigm in which participants who had engaged in social rejection within the last two to three weeks wrote about their rejection experience and then rated the difficulty and negative emotions they experienced. In all studies, we measure self-esteem, rejection sensitivity, anxiety symptoms, and depressive symptoms. We report all manipulations, measures, and exclusions in these studies. The hypotheses, materials, analyses, and stopping plans for all studies were preregistered on the Open Science Framework. We have reported all preregistered analyses in the main body of the manuscript and supplemental materials, and marked any deviations from the preregistered analysis plan in the main body of the paper. All studies were approved by institutional review boards: Bard College Institutional Review Board (approval: 2019MAR25-DAI) and the St. Mary's College of Maryland Institutional Review Board (approvals: Study 1a: SP19_36, Study 1b: SP20_03, Study 2: SU21_04).

Study 1

For Studies 1a and 1b, we measured the associations between constructs connected to negative self-schemas (i.e., self-esteem, rejection sensitivity, depressive and anxiety symptoms,) and rejection decision forecasts. The constructs connected to negative self-schemas were measured at a general level and were not tied to a rejection experience. In Study 1a, we studied both friendships and romantic relationships in a sample of undergraduate students; in Study 1b, we used an online sample of similar age but focused solely on romantic relationships.

Study 1a

Study 1a focused on self-reported willingness to engage in two different types of social rejection.

Method

Participants. Two hundred and ninety-two participants were recruited from two college psychology participant pools from February to December 2019. Participants received course credit for participating in this study. We conducted a power analysis in R for a small correlation (r = .2) with 95% power and an alpha of .05, which indicated a target sample size of 194. The effect size was chosen based on wanting to be able to detect a small effect, as social psychological effects tend to be small on average (Richard et al., 2003). We decided to oversample to account for exclusions. The preregistered stopping rule was that data collection would end after collecting data from 300 participants or by the end of December 2019; it ended at the end of December with data collected from 292 participants. The final sample consisted of 214 participants (see, Table 1 for demographics and exclusions). A sensitivity analysis performed in R for a correlation with a two-tailed test and an alpha of .05 indicated that our sample provides 80% power to detect a correlation of r = .19.

Procedure. After consenting to participate, participants were directed to a survey presented on the Qualtrics platform. They read a set of 10 brief vignettes describing a friendship or romantic situation in which there were possible grounds for ending the relationship (see Materials on OSF). For each situation, participants were asked a set of questions about engaging in rejection in that situation. The vignettes were presented in a randomized order. After completing the vignette measures, participants completed a 30-item version of the Mood and Anxiety Symptom Questionnaire (MASQ), the Rosenberg Self-Esteem Scale (RSE), and the 8-item Rejection Sensitivity Questionnaire (RSQ) in a randomized order (see Supplemental Table S1 for intercorrelations). Finally, participants completed questions about past experiences with rejection, demographic questions, an attention check, and were asked if we should use their data.

Measures. For the vignette responses, participants were first asked how likely they would be to end the friendship or relationship on a 1 (*extremely unlikely*) to 5 (*extremely likely*) scale (see, Table 2 for means and standard deviations). Next, they were told to imagine that they had decided to end the friendship or romantic relationship and were asked how likely they would be to use explicit rejection ("How likely would you be to explicitly reject the person [i.e., tell them that the friendship is over]?") and passive rejection ("How likely would you be to passively reject the person [i.e., ghost them, ignore them until they get the message]?"), in a randomized order. Finally, they were told, "Imagine you decided to end the relationship. Regardless of whether you've done so passively or explicitly, indicate how much you agree with the following statements about ending the relationship" and were asked to rate a set of ten statements on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. The ten statements assessed difficulty of engaging in rejection ("It would be difficult for me to end it" and "It would take a lot of effort on my part to end it"; α = .90), negative emotion ("I would feel . . . " distressed, upset, guilty, ashamed; α = .92), and positive emotion ("I would feel . . . " proud, strong, determined, relieved; α = .94).

To assess past experiences with rejection, participants were asked about their number of previous romantic relationships. Romantic relationship was defined liberally: "an intimate relationship with an individual that lasts for more than two dates." They were then asked how many of those relationships they had ended, how many the other person had ended, and how many were ended mutually. Percent of relationships ended by the participant was calculated as the number the participant ended divided by the number of total relationships.

To measure anxiety and depression, participants completed the short-form of the MASQ (Clark & Watson, 1991; Wardenaar et al., 2010), a 30-item inventory with three subscales: General Distress (α = .91), Anxious Arousal (α = .87), and Anhedonic Depression (α = .90). The General Distress subscale is

Table 1. Demographics and exclusions for all studies. Parts (a) and (b) show sample demographics; part (c) shows participants dropped due to exclusion criteria.

			Gender		
a.	n	Age, M (SD)	No. Women* (%)	No. Men* (%)	Non-binary gender responses
Study 1a	292	19.27 (1.65)	146 (50%)	63 (21%)	5: 2 gender fluid, 2 non-binary, 1 demigirl
Study 1b	264	21.36 (1.99)	125 (47%)	133 (50%)	6: 3 non-binary, 2 agender, 1 genderqueer
Study 2	259	21.55 (2.02)	137 (53%)	88 (34%)	14: 13 non-binary, 1 agender

	Race/Ethnicity						
b.	White	Black	Asian/Asian American	Hispanic/ Latinx	American Indian or Alaska Native	Multiracial	Another race/ ethnicity
Study 1a	162 (75%)	15 (7%)	12 (6%)	8 (4%)	2 (1%)	11 (5%)	4 (2%)
Study 1b	153 (58%)	26 (10%)	32 (12%)	27 (10%)	2 (1%)	23 (9%)	1
Study 2	147 (57%)	17 (7%)	31 (12%)	26 (10%)	3 (1%)	15 (6%)	0

		Exclusion criteria**						
c.	Recruited	Failed attention check	Incomplete MASQ	Left vignettes blank	Had not rejected	No description of rejection	Asked not to use data	Final sample
Study 1a	292	62	34	24	N/A	N/A	38	214
Study 1b	309	25	21	N/A	N/A	N/A	17	264
Study 2	329	40	18	N/A	16	2	12	259

* Participants reported free response gender; cis- and transgender respondents are grouped together. ** Some participants were excluded due to multiple criteria.

Table 2. Means and standard deviations for overall likelihood of engaging in rejection, likelihood of explicit rejection, and likelihood of ghosting in response to the vignettes in Study 1a and Study 1b.

	Study 1a Friendship	Study 1a Romantic	Study 1b Romantic
Overall likelihood of rejecting	3.44 (0.65)	3.76 (0.63)	3.82 (0.64)
Explicit rejection	3.21 (0.86)	3.98 (0.66)	4.17 (0.65)
Ghosting	3.36 (0.97)	2.48 (1.03)	2.34 (0.97)

Responses were on a 1 (*extremely unlikely*) to 5 (*extremely likely*) Likert scale.

thought of as measuring negative affect and incorporating both depressive and anxiety symptoms (Clark & Watson, 1991).

To measure self-esteem, participants completed the RSE (Rosenberg, 1965), which consists of ten items (e.g., "On the whole, I am satisfied with myself") rated on a 1 (*strongly disagree*) to 4 (*strongly agree*) scale (α = .91) with higher numbers indicating higher levels of self-esteem.

Rejection sensitivity was included as an exploratory measure in Study 1a. For the RSQ-8 (Downey & Feldman, 1996), participants read eight scenarios and for each scenario indicated how likely they would be to experience acceptance on a 1 (*very unlikely*) to 6 (*very likely*) scale and how concerned they would be about being rejected on a 1 (*very unconcerned*) to 6 (*very concerned*)[2] scale (α = .78). The overall score reflects anxious expectation and concern about rejection.

Analyses. Analyses were conducted using a preregistered alpha criterion of p = .05 and were performed in SPSS and R (R Core Team, 2021).

Results

Self-esteem and rejection. As predicted, self-esteem was negatively correlated with forecasted difficulty of engaging in rejection (r[209] = −.32, p < .001) and negatively correlated with forecasting negative emotions in response to thinking about hypothetical rejection (r[209] = −.40, p < .001). However, contrary to hypotheses, self-esteem was not associated with likelihood of engaging in

rejection in the vignettes: $r(204) = .05$, $p = .49$. Self-esteem was also not associated with percent of relationships participants had ended: $r(155) = -.15$, $p = .07$.

General distress and rejection. As predicted, there was a positive correlation between general distress and forecasted difficulty of engaging in rejection: $r(212) = .32$, $p < .001$. Contrary to predictions, there was no association between general distress and the overall likelihood of rejecting in the vignettes, $r(207) = .02$, $p = .81$. An exploratory linear mixed effects model showed, however, that there was an interaction between relationship type and general distress in the prediction of likelihood of rejecting, $t(206) = -3.67$, $b = -0.02$, 95% CI [−0.03, −0.008], $p < .001$, such that, for friendships, general distress was positively correlated with increased likelihood rejecting but for romantic relationships it was negatively correlated.

Contrary to predictions, there was no association between general distress and the percent of romantic relationships ended by the participant, $r(156) = .13$, $p = .11$. A linear mixed effects model with predictors of general distress and whether rejection was explicit or passive found no effect of general distress on likelihood of rejection: $t(211) = 0.78$, $b = 0.01$, 95% CI [−0.01, 0.02], $p = .43$. As predicted in the secondary hypotheses, general distress was positively correlated with negative emotions in response to thinking about rejecting in the hypothetical scenarios: $r(212) = .39$, $p < .001$.

Anxiety and rejection. Contrary to hypotheses, anxiety was not associated with forecasted difficulty of engaging in rejection ($r[212] = .10$, $p = .16$), likelihood of rejecting in rejection vignettes ($r[207] = .01$, $p = .83$), or the percent of romantic relationships ended by the participant ($r[156] = .09$, $p = .24$). The hypothesis that individuals with more anxiety symptoms would be more likely to engage in ghosting than explicit rejection was likewise not supported: $t(211) = 0.97$, $b = 0.01$, 95% CI [−0.006, 0.03], $p = .33$. As predicted in secondary hypotheses, anxiety symptoms were positively correlated with negative emotions in response to thinking about rejecting in the hypothetical scenarios: $r(212) = .25$, $p < .001$.

Anhedonic depression. Analyses examined the relationship between the Anhedonic Depression subscale and the rejection variables. Because this subscale was unintentionally excluded from the preregistration, it might be considered exploratory; we report the analyses as parallel to the other subscales of the MASQ. There was a positive correlation between anhedonic depressive symptoms and forecasted difficulty of engaging in rejection: $r(212) = .17$, $p = .01$. However, there was no association between anhedonic depressive symptoms and the likelihood of rejecting in the vignettes, $r(207) = -.04$, $p = .61$, or the percent of romantic relationships ended by the participant, $r(156) = .05$, $p = .51$. Similarly, a linear mixed effects model with predictors of anhedonic depressive symptoms and whether

Table 3. Correlations between depressive symptoms, anxiety symptoms, self-esteem, rejection sensitivity and negative emotion and difficulty in Studies 1a, 1b, and 2.

	Study 1a				Study 1b				Study 2	
	Friend		Romantic		Explicit Rejection		Ghosting		All experiences	
	Difficulty	Negative Emotion	Difficulty	Negative Emotion	Difficulty	Negative Emotion	Difficulty	Negative Emotion	Difficulty	Negative Emotion
Anhedonic depression	.18*	.26**	.12	.24**	.11	.02	.03	.08	−.04	.14*
Anxious arousal	.04	.18*	.13	.27**	.12	.17*	.15*	.10	.15*	.30**
General distress	.22*	.30**	.34**	.41**	.30**	.27**	.24**	.24**	.20**	.40**
Self-esteem	−.28**	−.33**	−.30**	−.39**	−.30**	−.23**	−.19**	−.21**	.00	−.22**
Rejection sensitivity	.24**	.18*	.19*	.19*	.25**	.16*	.19*	.17*	.04	.22**

**$p < .005$, *$p < .05$

rejection was explicit or passive found no effect of anhedonic depressive symptoms on likelihood of rejection: $t(211) = 0.62$, $b = 0.006$, 95% CI [−0.01, 0.02], $p = .53$. Finally, anhedonic depressive symptoms were positively correlated with negative emotions in response to thinking about rejecting in the hypothetical scenarios: $r(212) = .27$, $p < .001$.

Exploratory analyses. A set of analyses was conducted to examine the relationship between rejection sensitivity and forecasts about engaging in rejection. Rejection sensitivity was significantly positively correlated with forecasted difficulty of engaging in rejection, $r(210) = .24$, $p < .001$, and forecasted negative emotions in response to thinking about hypothetical rejection, $r(210) = .20$, $p = .003$. Rejection sensitivity was not associated with likelihood of engaging in rejection: $r(205) = −.02$, $p = .81$.

A set of exploratory analyses was conducted to examine whether the correlations between depression, anxiety, self-esteem and the vignette responses differed based on type of relationship scenario (i.e., friendship versus romantic). Overall, the patterns were similar across friendship and romantic scenarios (see, Table 3) with somewhat stronger correlations for romantic scenarios. However, there were weak and opposing correlations between general distress and likelihood of engaging in rejection for romantic versus friend relationships such that negative affect was weakly, positively correlated with likelihood of ending a friendship, $r(207) = .163$, $p = .018$, but weakly, negatively correlated with likelihood of ending a romantic relationship, $r(207) = -.140$, $p = .043$.

Additionally, we tested whether rejection sensitivity or self-esteem were associated with the forecasts about engaging in rejection when the MASQ subscales were included as covariates. We conducted linear regressions to control for mental distress while determining whether self-esteem or rejection continued to be associated with rejection decisions. Full regression tables are available in the Supplement. Self-esteem was associated with forecasts of overall difficulty across vignettes, $b = −0.04$, 95% CI [−0.08, −0.01], $t(206) = −2.81$, $p = .008$ and overall negative emotions, $b = −0.03$, 95% CI [−0.05, −0.004], $t(206) = −2.34$, $p = .02$. Rejection sensitivity was not associated with either outcome. Neither was associated with likelihood of ending a relationship, or the numbers of relationships participants had ended, after MASQ subscales were included.

Study 1b

Study 1b was designed as a replication of Study 1a with only romantic relationship vignettes. We focused on romantic relationships due to the interest in exploring ghosting versus explicit exclusion, but not increasing the number of vignettes. Additionally, the romantic vignettes were modified to describe a shorter period of dating. Furthermore, as it is possible that the term “ghosting” has negative connotations (Freedman et al., 2019) and that participants were reluctant to admit they would consider engaging in ghosting, the expression “ghost them” was removed from the survey.

Method

Participants. Participants between the ages of 18 and 24 who were living in the United States and spoke English as their first language were recruited via Prolific. We aimed to collect data from a similar number of participants as in Study 1a. Thus, the preregistered stopping rule for data collection was when 300 participants completed the study. Data were collected on February 24 and 25, 2020. The final sample had 264 participants (see, Table 1 for demographics and exclusions). Participants were paid $2.17 for their participation, which took a median of 14 minutes and 15 seconds. A sensitivity analysis performed in R for a correlation with a two-tailed test and an alpha of .005 indicated that our sample provides 80% power to detect a correlation of $r = .22$.

Procedure. After consenting to participate, participants read the five romantic vignettes from Study 1a with the modification that all relationships were described as lasting a “few weeks” instead of a “few months.” For each vignette, participants were asked a set of questions about engaging in rejection in

that situation. The vignettes were presented in a randomized order. After completing the vignette measures, participants completed identical questionnaires to Study 1a (see Supplemental Table S2 for intercorrelations). Analyses were conducted using a preregistered alpha criterion of $p = .005$, chosen to highlight findings from Study 1a that replicated unequivocally.

Measures. For the vignette responses, participants were first asked how likely they would be to end the relationship, as in Study 1a. Next, they were told to imagine that they had decided to end the relationship and were asked how likely they would be to use explicit rejection and passive rejection/ghosting, in a randomized order. (Exact wording of questions is available on OSF.) To allow for an examination of how participants would feel about each rejection option (i.e., explicit rejection and ghosting), after each of those questions, participants were instructed to imagine they had ended it in that way and were asked to rate the ten statements from Study 1a. The ten statements assessed difficulty of engaging in rejection (difficulty $\alpha = .90$; negative emotion $\alpha = .93$; positive emotion $\alpha = .91$). Participants also completed the MASQ (AD $\alpha = .92$, AA $\alpha = .87$, GD $\alpha = .93$), the RSE ($\alpha = .93$), the RSQ ($\alpha = .77$), and the same questions from Study 1a about past experiences ending relationships.

Results

As predicted, increased general distress and lower self-esteem were associated with forecasting higher levels of difficulty of engaging in rejection for both explicit rejection and ghosting (see, Table 3). In addition, as predicted, increased general distress and lower self-esteem were associated with the forecast that engaging in rejection would lead to more negative emotions for both explicit rejection and ghosting (see, Table 3). Contrary to predictions, anxiety symptoms were not significantly associated at the preregistered criterion level with forecasting negative emotions for explicit rejection ($r[262] = .17$, $p = .006$) or ghosting ($r[262] = .11$, $p = .09$). The hypothesis that individuals with more anxiety symptoms would be more likely to engage in ghosting than explicit rejection was not significant at the preregistered criterion level, $t(262) = 2.52$, $b = 0.02$, 95% CI [0.002, 0.04], $p = .01$. There was a main effect of preference to explicitly reject, $t(262) = -11.95$, $b = -2.27$, 95% CI [−2.71, −1.82], $p < .001$.

As in Study 1a, general distress, anxiety symptoms, and self-esteem were not significantly correlated with the percent of relationships that participants had ended (general distress: $r[195] = -.02$, $p = .81$; anxiety symptoms: $r[195] = -.05$, $p = .51$; self-esteem: $r[193] = .06$, $p = .42$), the reported likelihood of ending the relationships described in the vignettes (general distress: $r[262] = -.03$, $p = .58$; anxiety symptoms: $r[262] = -.03$, $p = .68$; self-esteem: $r[259] = .07$, $p = .29$), or the reported likelihood of ending the relationships described in the vignettes via explicit rejection (general distress: $r[262] = -.076$, $p = .216$; anxiety: $r[262] = -.154$, $p = .012$; self-esteem: $r[259] = .068$, $p = .276$) or ghosting (general distress: $r[262] = .007$, $p = .915$; anxiety: $r[262] = .083$, $p = .176$; self-esteem: r[259] = .003, p = .967).

Exploratory analyses. Again, the Anhedonic Depression subscale from the MASQ was not included in the preregistration; we report the analyses here. Contrary to the general prediction, anhedonic depressive symptoms were not significantly associated with forecasting negative emotions for explicit rejection ($r[262] = .02$, $p = .78$) or ghosting ($r[262] = .08$, $p = .18$). Anhedonic depressive symptoms were also not associated with the percent of relationships that participants had ended: $r(195) = -.02$, $p = .76$. Finally, there was no statistical support for the hypothesis that individuals with more anhedonic depressive symptoms were more likely to engage in ghosting than explicit rejection, $t(262) = -1.07$, $b = -0.01$, 95% CI [−0.03, 0.007], $p = .28$.

As in Study 1a, rejection sensitivity was significantly positively associated with perceived difficulty of ending relationships via explicit rejection, $r(262) = .25$, $p < .001$, and ghosting, $r(262) = .19$, $p = .002$. Based on the preregistered criterion level of $p = .005$, rejection sensitivity was not significantly correlated with overall likelihood of ending the relationships, $r(262) = -.17$, $p = .006$. Nor was it significantly correlated with negative emotions in response to explicitly rejecting, $r(262) = .16$, $p = .01$,

or ghosting, $r(262) = .17$, $p = .006$. Scores on the RSQ were also not associated with the percent of relationships that participants had ended, $r(195) = -.10$, $p = .18$.

Additionally, we again tested whether rejection sensitivity or self-esteem were associated with the forecasts about engaging in rejection when the MASQ subscales were included as covariates. We conducted linear regressions to control for mental distress while determining whether self-esteem or rejection continued to be associated with rejection decisions. Full regression tables are available in the Supplement, and we use an alpha criterion of $p < .05$ in these exploratory analyses. Self-esteem was associated with forecasted difficulty of making explicit rejections, $b = -0.04$, 95% CI [−0.08, −0.009], $t(256) = -2.50$, $p = .01$ but not ghosting rejections, with increased self-esteem predicting a decreased believed difficulty of explicit rejection. Rejection sensitivity was associated with the difficulty of making explicit rejections, $b = 0.04$, 95% CI [0.006, 0.07], $t(259) = 2.33$, $p = .02$, as well as the overall likelihood of rejecting, $b = -0.03$, 95% CI [−0.04, −0.008], $t(259) = -2.87$, $p = .004$, with more rejection-sensitive individuals being more likely to find forecast finding rejection difficult and less likely to reject. Neither was associated with negative emotions.

Discussion

Studies 1a and 1b found that two aspects of negative self-schema (lower self-esteem and rejection sensitivity) and one correlate (general distress) were associated with forecasts of greater difficulty and more negative emotion. Specifically, general distress and lower self-esteem were associated with forecasts about the difficulty of rejecting and the negative emotions that would result from rejecting. Rejection sensitivity was also associated with forecasting rejection to be more difficulty and negatively emotional, though the correlations did not reach the preregistered alpha criterion value in Study 1b. In exploratory analyses, both self-esteem and rejection sensitivity showed these associations even when the affect-related subscales of the MASQ were statistically covaried. Anxious arousal was not consistently associated with difficulty forecasts but was associated with forecasting more negative emotions after rejecting in both studies, but in Study 1b this did not meet the preregistered criterion.

There were not, however, significant differences in how these correlates of negative self-schema related to predicted willingness to engage in different types of rejection (i.e., explicit rejection vs. ghosting). There was some indication that higher levels of anxiety might be associated with an unwillingness to explicitly reject in Study 1b, but the interaction did not meet the preregistered criterion level of $p < .005$. We therefore chose to investigate this possible relationship in Study 2.

Study 2

In Study 2, we broadened the scope of how we defined rejection and used a different methodology to assess feelings about the emotional consequences and difficulty of rejection episodes. Although Studies 1a-b provide converging evidence about the roles of depressive symptoms, self-esteem, and (to a lesser degree) rejection sensitivity in how individuals perceive the act of engaging in rejection, both studies relied on vignette methodology. These vignettes in Study 1 provided useful forecasts; however, in Study 2 we focused on how people report having felt in real situations where they rejected someone else – and how this experience connects to the consequences and components of self-schema discussed in Study 1. We thus used a recall paradigm to assess how depression, anxiety, self-esteem, and rejection sensitivity relate to a previous, retrospectively reported rejection experience. We predicted similar patterns to those observed in the forecasts of individuals described in Study 1.

Method

Participants

Participants between the ages of 18 and 24 who were living in the United States and spoke English as their first language were recruited via Prolific Academic. To determine eligibility for the main study, a prescreening questionnaire was administered. The eligibility criterion was that the participants had

socially rejected someone in the last two weeks. Participants were paid $0.30 for their participation in the prescreening survey, which took a median of 78 seconds. For the prescreening questionnaire, 1472 participated and 400 indicated that they had rejected someone in the last two weeks.

Those 400 participants were then invited to participate in the main survey and 329 elected to participate. Based on a power analysis conducted in R with 95% power, $p = .05$, and $r = .222$ (Study 1b, correlation between MASQ-GD and perceived difficulty in rejecting a friend), data collection continued until 258 participants completed the study and qualified according to preregistered exclusion criteria. The final sample had 259 participants (see, Table 1 for demographics and exclusions). Participants were paid $1.60 for their participation in the main survey, which took a median of 6 minutes 54 seconds. Data were collected between June 4, 2021 and June 27, 2021.

Procedure

Prescreening. After consenting to participate in the prescreening survey, participants were asked to check off the things they had done within the last two weeks from a list of five items that included the rejection question (see Measures) and four filler items. Then participants completed three items from the Adult Rejection Sensitivity Questionnaire (ARSQ; Berenson et al., 2009) and were debriefed. The ARSQ was used in this study as the questions are more applicable to a broader sample than the RSQ.

Main survey. Participants who indicated that they had rejected someone in the previous two weeks were sent an invitation to participate in the main survey. After providing consent, they read the following definition of social rejection:

> [Social rejection is] a time when you told a friend, romantic partner, colleague, acquaintance, or family member that you did not want to engage in a social interaction with them (e.g., turning down a date, saying no to a lunch request, telling someone you didn't want to come over to their place) OR a time when you ignored someone's request for an interaction (e.g., ghosting, not responding to text messages) OR a time when you ended a relationship (e.g., a romantic breakup, ending a friendship).

After reading the definition, participants were asked when they had last socially rejected someone and if they answered that it had occurred within the last three weeks, they were directed to a set of questions about the experience and then a set of questionnaires (see Supplemental Table S3 for intercorrelations): the MASQ, the RSE, the ARSQ, attention check, data usage, and demographics. If the participants had not rejected anyone in the last three weeks, they were sent directly to the questionnaires, and were compensated but not included in analyses. Three weeks was used to allow for time that had elapsed since participants completed the prescreening. (However, only 14 participants responded about a rejection that had occurred more than 2 weeks prior to completing the survey.)

Measures

Prescreening. Respondents were asked to indicate if they had "done each of the following within the past two weeks" for a series of five items presented in randomized order, four of which were filler items. The filler items included questions such as, "Have you engaged in your favorite hobby? (e.g., have you gardened, read a book, played a sport, or done yoga?)," going out to eat, going on a date, and arguing with someone. The item of interest asked "Have you told a friend or romantic interest that you cannot do something together, ignored them when they tried to talk to you, or indicated that you wanted to end the relationship? (i.e., have you rejected anyone?)." Participants who said that they had done so were invited to participate in the main survey. (Additionally, participants responded to questions 5, 7, and 9 from the Adult RSQ.)

Main survey. Following their response to the rejection item described in Procedures, above, participants were asked about their method of rejection – whether it had been passive ("I used an indirect approach [e.g., ghosting, ignoring, not responding]"), active ("I used a direct approach [e.g., telling

them face-to-face, via text, via email, via a phone call]"), or a different approach. Participants were also asked to spend at least one minute writing about how the rejection occurred.

Following this question, participants rated the ten statements from Study 1. These assessed difficulty of engaging in rejection (difficulty α = .87; negative emotion α = .87; positive emotion α = .76). Participants also completed the MASQ (AD α = .92, AA α = .88, GD α = .93), the RSE (α = .93), the ARSQ (α = .81), and provided demographics. The MASQ was modified to ask about the past *two* weeks rather than one.

Results

Self-esteem and rejection sensitivity

Contrary to predictions, self-esteem was not significantly correlated with difficulty rejecting, $r(252) = -.003$, 95% CI [−.13, .12], $p = .96$. Self-esteem was, however, negatively correlated with negative emotions experienced while rejecting, $r(252) = -.22$, 95% CI [−.34, −.10], $p < .001$.

Contrary to predictions, rejection sensitivity was not significantly correlated with difficulty rejecting, $r(252) = .04$, 95% CI [−.08, .16], $p = .54$. Rejection sensitivity was, however, positively correlated with negative emotions experienced while rejecting, $r(252) = .22$, 95% CI [.10, .34], $p < .001$. A logistic regression did not find a significant effect of adult RSQ score predicting the method participants had used to reject, $b = -0.04$, 95% CI [−0.09, 0.00], $z(243) = -1.82$, $p = .07$.

General distress and rejection

As predicted, general distress was positively correlated with difficulty experienced rejecting others, $r(256) = .20$, 95% CI [.08, .32], $p < .001$; increased scores on the MASQ-GD were associated with increased difficulty rejecting. General distress was also positively correlated with negative emotions experienced while rejecting, $r(256) = .40$, 95% CI [.29, .50], $p < .001$; increased scores on the MASQ-GD were associated with more negative emotions about the experience (see the lower portion of Figure 1).

Anhedonic depression and rejection

Anhedonic depression was not correlated with difficulty rejecting others, $r(256) = -.04$, 95% CI [−.17, .08], $p = .48$. It was, however, positively correlated with negative emotions experienced while rejecting, $r(256) = .14$, 95% CI [.01, .25], $p = .03$, such that increased scores on MASQ-AD were associated with more negative emotions about having rejected someone. A logistic regression did not find a significant effect of MASQ-AD predicting the method participants had used to reject, $b = -0.02$, 95% CI [−0.05, 0.01], $z(243) = -1.15$, $p = .25$.

Anxiety and rejection

As predicted, anxiety symptoms on the MASQ were positively correlated with the negative emotions experienced while rejecting, $r(256) = .30$, 95% CI [.19, .41], $p < .001$ – increased anxiety was associated with more negative emotions to having rejected someone. Although not preregistered due to the results from Studies 1a and 1b, anxiety was also negatively associated with how difficult participants found it to reject others, $r(256) = .15$, 95% CI [.03, .27], $p = .01$ (see the top of Figure 1).

A logistic regression did not find a significant effect of anxiety symptoms predicting the method participants had used to reject, $b = -0.02$, 95% CI [−0.06, 0.01], $z(247) = -1.47$, $p = .14$.

Exploratory analyses

As in Study 1, we tested whether rejection sensitivity or self-esteem were associated with the experiences rejecting when the MASQ subscales were included as covariates. We conducted linear regressions to control for mental distress while determining whether self-esteem or rejection continued to be associated with rejection decisions. Full regression tables are available in the Supplement. As with the single-predictor model, even with covariates self-esteem was associated with negative emotions after rejecting, $b = 0.06$, 95% CI [0.009, 0.10], $t(249) = 2.35$, $p = .02$. However, this association was in the opposite

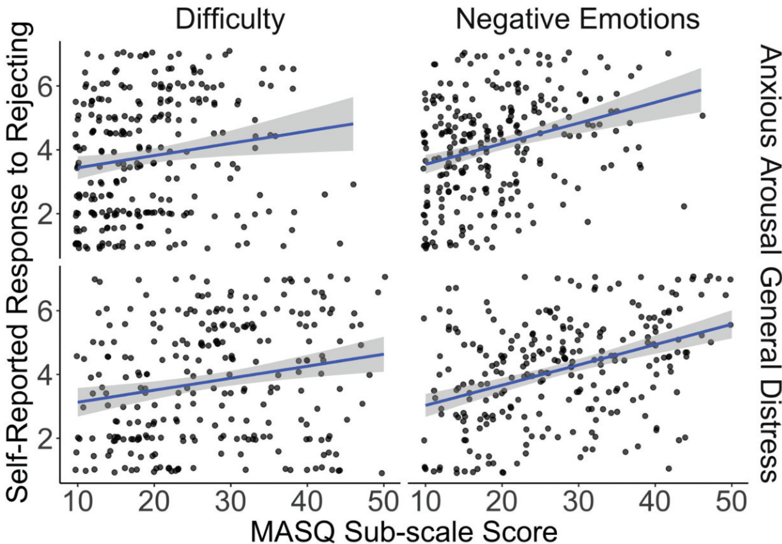

Figure 1. Anxious arousal (top) and general distress (bottom) are associated with difficulty (left) and negative emotions (right) of rejecting in Study 2. Points show individual responses with a .3/.1 x/y jitter; blue trend lines show the linear trend, with 95% confidence intervals in gray.

direction from those predicted. Given that participants indicated both direct rejection and indirect rejection (ghosting), we included an interaction term in the model of method of rejection interacting with self-esteem. We found that the interaction was significant, b = −0.06, 95% CI [−0.12, −0.008], t (237) = −2.28, p = .02; individuals who had used indirect methods to reject experienced more negative emotions if they had higher self-esteem (linear regression b = 0.12, 95% CI [0.03, 0.21], t(88) = 2.69, p = .008), while those who used direct methods did not experience a significant difference (p = .44).

The association between rejection sensitivity and negative emotions experienced while rejecting was not significant when the MASQ subscales were included in the regression (p = .65), and as described above, rejection sensitivity did not predict the method participants had used to reject. However, when rejection method was included in the regression with MASQ covariates, there was a significant interaction, b = 0.08, 95% CI [0.005, 0.15], t(237) = 2.10, p = .04. Neither simple effect had a significant regression coefficient when MASQ subscales were included in the regression. Without covariates, and mirroring the trend that was apparent in the full model, higher rejection sensitivity was associated with decreased negative emotions for direct rejection methods (b = 0.10, 95% CI [0.05, 0.15], t[144] = 3.98, $p < .001$) but not for indirect methods (p = .55), which showed a non-significant trend in the opposite direction.

Discussion

In these data, individuals with elevated levels of general distress and anxious arousal reported increased difficulty choosing to reject another person, as well as increased negative emotions after doing so. The other measurements relating to negative self-schema (self-esteem, rejection sensitivity, and depressive symptoms) were also associated with negative emotions experienced after rejecting, but were not significantly associated with difficulty doing so. In this sample, there was no indication that any of these symptoms moderated the *method* of rejection individuals used, be it passive (ghosting) or active (direct). However, the types of rejections described by participants were highly varied (including, e.g., a breakup, or ignoring a text), and it remains possible that negative self-schema may moderate rejection method for only more serious rejections. For example, exploratory analyses showed that the rejection method was likely to interact with both self-esteem and rejection sensitivity to result in

higher negative emotions when using one but not the other rejection method. Regardless, the results from Study 2 demonstrate that mood and anxiety symptoms, as well as low self-esteem and heightened rejection sensitivity, may be associated with a more negative experience when having to turn someone down or otherwise reject them.

General discussion

Across three studies, the present research shows that negative self-schema and its correlates are associated with forecasts and actual experiences of engaging in rejection. First, in terms of components of negative self-schema, self-esteem is negatively associated – and rejection sensitivity is positively associated – with forecasting rejection to be difficult and emotionally negative. However, when participants recounted their most recent rejection experience, only the negative emotional consequences of rejection were associated with self-esteem and rejection sensitivity. In other words, although forecasting difficulty of rejecting was associated with negative self-schema, the difficulty of the actual experience of rejection difficulty was not. Prior research on rejection sensitivity has focused on how individuals with differing levels of rejection sensitivity respond to being rejected (e.g., Downey et al., 1998; London et al., 2007; Mendoza-Denton et al., 2002), but less research has considered the role of rejection sensitivity on engaging in rejection. The present research begins to address this gap and provides evidence that rejection sensitivity is important for understanding both sides of social rejection. It may be the down-stream effects of negative self-schema – general distress and low mood or anxiety – that influence how individuals will feel after rejecting someone. Additionally, exploratory analyses in both studies demonstrate that rejection sensitivity and self-esteem may influence feelings about rejection even when those symptoms are controlled for, although a causal connection would require further research.

In the present set of studies, depressive symptoms, including those of general distress, were associated with forecasts that engaging in rejection will be more difficult and will lead to more negative emotions. Furthermore, these forecasts were accurate: in Study 2, individuals with higher levels of depressive symptoms were more likely to recount their most recent experience of engaging in rejection as difficult and emotionally negative. This result is in line with what participants in Study 1 predicted.

In addition, anxious symptoms were associated with forecasts of negative emotion, though not consistently at the preregistered criterion levels below .005 in Study 1b. However, anxious symptoms were significantly associated with both perceived difficulty and negative emotions for the recalled rejection experience. This suggests that while anxiety may in fact play a role in whether a rejection is carried out, participants are not necessarily able to predict this when forecasting.

Taken together, the results indicate that negative self-schemas, and the constructs that stem from them, may play an important role in both how individuals forecast rejection experiences as well as the actual experiences of rejection. These results also have clinical implications: they provide evidence that young adults experiencing elevated depressive and anxiety symptoms may be less willing to consider engaging in social rejection, as they believe that doing so will increase their negative emotions. And, in the retrospective report of other young adults, it appears that these beliefs are correct: symptoms were associated with feeling more negative emotions after engaging in rejection. This raises the possibility that such internalizing symptoms may have measurable external consequences. For example, heightened anxiety may lead a young adult to not end a friendship that is causing harm because of the forecasted emotional repercussions of doing so, when in fact ending that friendship might be a psychologically healthy decision.

These studies also revealed two potential forecasting errors when individuals think about how engaging in rejection will feel. First, higher levels of rejection sensitivity and lower self-esteem were associated with forecasting rejection as more difficult and more emotionally negative, yet rejection sensitivity and self-esteem were only associated with negative emotions and not difficulty when participants recounted their most recent rejection. That is, individuals with higher levels of rejection sensitivity and lower self-esteem thought engaging in rejection would be more difficult, but when

participants in Study 2 recalled their most recent rejection experience, difficulty was not associated with these constructs of negative self-schema. Second, anxious symptoms were not associated with forecasted difficulty, but when participants recounted their most recent rejection experience, anxious symptoms were positively associated with how difficult it felt to reject as well as negative emotional responses. Thus, it seems that negative self-schema and its consequences are at times associated with forecasts of rejection difficulty and at other times with actual perceived difficulty, but the associations between forecasts and experiences do not always match.

These findings build on prior work indicating that performing social rejection is an effortful task (Ciarocco et al., 2001; Williams et al., 2000) and that initiators of social rejection experience a range of negative emotions (Baumeister et al., 1993; Davis et al., 2003; Kansky & Allen, 2018; Legate et al., 2013; Perilloux & Buss, 2008; Poulsen & Kashy, 2012). Importantly, the present research adds to this literature by examining the ways in which existing self-perceptions may be associated with the way that individuals perceive the act of engaging in social rejection. That is, self-concept, especially the negative measures described here, was associated with the perception that engaging in social rejection is more difficult and more likely to lead to further negative emotion. Furthermore, these constructs were also associated with actual difficulty of rejecting (for depressive symptoms and anxiety symptoms) and with the experience of negative emotion when rejecting (for depressive symptoms, anxiety symptoms, rejection sensitivity, and self-esteem). It will be important for future work to longitudinally examine how a given individual's forecasts of rejection relate to future rejection decisions.

It is also important to consider the context, as rejections occur across a wide range of social scenarios and relationships. Across the three studies in the present research, there were a number of different contexts. In Study 1a, the vignettes depicted several reasons that one might engage in social rejection within both friendships and romantic relationships. In Study 1b, the vignettes were only within the context of short-term romantic relationships. Finally, in Study 2, individuals wrote about a variety of experiences ranging from not responding to a text to a breakup. Thus, it will be important in future research to examine how negative self-schemas operate within specific rejection contexts including the type of relationship in which the rejection occurs and the magnitude of the rejection (e.g., is the rejection ending a relationship or is it turning down an offer to get coffee?).

Limitations and future directions

A strength of the present research was the replication of findings from Study 1a in a generalized (but similarly-aged) sample in Study 1b; further, the lowered alpha criterion in Study 1b highlighted results that replicated unequivocally. Additionally, Study 2 provided evidence about how individuals actually feel after having engaged in rejection, allowing us to consider forecasting errors. However, all three studies relied on non-clinical samples, and findings may be different in patients diagnosed with anxiety or mood disorders, or those currently seeking psychological treatment. Findings are based on a short version of the Mood and Anxiety Symptoms Questionnaire (Clark & Watson, 1991), which is intended for non-clinical samples; nonetheless, the use of such a scale means that we cannot make direct connections to diagnoses. However, correlations between the 30-item MASQ and traditional measures of depression such as the Beck Depression Inventory (BDI-II; Beck et al., 1996) show good convergent validity (Wardenaar et al., 2010).

Additionally, there are several constraints on generalizability. First, the samples in the present research were age-restricted. Study 1a was conducted in college participant pools and Studies 1b and 2 were restricted to ages 18 to 24 to match the initial sample. Thus, it will be important to replicate the current research with participants of other ages to understand how negative self-schemas relate to the forecasts and experiences of engaging in rejection across the lifespan. In addition, all three samples were majority White (1a: 75%, 1b: 58%; 2: 57%), although the samples for Studies 1b and 2 were more diverse in terms of race/ethnicity than Study 1a. Finally, all three studies were conducted with participants from the United States, and there may be important differences in self-schema and in rejection experiences in other countries. For example, there is some evidence for cross-cultural

differences in levels of rejection sensitivity and in the affective experience of being rejected (e.g., Garris et al., 2011; Sato et al., 2014).

Furthermore, the three studies in the present research were all correlational and cross-sectional. Thus, we cannot make causal claims about the role of self-schemas in rejection decisions and affective responses. In the future, it would be important to examine whether changes in self-schema directly affect willingness to engage in rejection. For example, if individuals experience a decrease in their level of rejection sensitivity, would they be more willing to end a romantic relationship? Individuals with lower levels of rejection sensitivity will be less likely to anticipate getting rejected by others (Downey et al., 1998) and may therefore perceive that they have more romantic options. Based on the Investment Model (Rusbult, 1980), the perception of more alternatives to their current relationship could lead to lower levels of commitment and thus greater willingness to end their current relationships.

Finally, although Study 2 allowed for an examination of how negative self-schemas relate to actual rejection experiences, it used a retrospective method, and memory errors and biases may occur when individuals recount even recent experiences. To minimize errors, we specifically recruited individuals who had engaged in rejection within the past two weeks, but future research would benefit from longitudinal studies with prospective designs that allow for more immediate recounting of rejection experiences, e.g., using ecological momentary assessment. Future work could also differentiate between experiences of rejection compared to wanting to reject, but not doing so.

Conclusion

The present research points to the importance of considering the roles of negative self-schemas and their consequences when examining forecasts and experiences of engaging in rejection. Markers associated with negative self-schema were associated with experiencing more negative emotions in response to engaging in rejection and some were also associated with forecasting and experiencing rejection as more difficult. These results suggest that when individuals with psychological distress are faced with the question of whether to turn a friend or romantic partner down, they anticipate negative emotions, but believe that they will be able to make that rejection. And in situations where individuals do reject, those same markers of distress are in fact associated with the experience of negative emotions and finding rejection more difficult.

Notes

1. We use the term "social rejection" throughout the manuscript to refer to the idea of being denied belonging. Although this term has previously been defined to indicate an "explicit declaration" (Williams, 2007, p. 427), we have chosen this language to match the language that participants saw in the reported studies.
2. The labeling on the concern scale was inadvertently reversed in the survey: 1 corresponded to "very concerned" and 6 corresponded to "very unconcerned." Therefore, the concern items were reverse-scored before calculating the composite.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

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Data availability statement

The data described in this article are openly available in the Open Science Framework at https://osf.io/fmvn5; https://doi.org/10.17605/OSF.IO/6B9QH.

Open scholarship

This article has earned the Center for Open Science badges for Open Data, Open Materials and Preregistered. The data and materials are openly accessible at https://osf.io/fmvn5; https://osf.io/ukwbq and https://doi.org/10.17605/OSF.IO/6B9QH

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