

## Settling for Less Out of Fear of Being Single

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The present research demonstrates that fear of being single predicts settling for less in romantic relationships, even accounting for constructs typically examined in relationship research such as anxious attachment. Study 1 explored the content of people's thoughts about being single. Studies 2A and 2B involved the development and validation of the Fear of Being Single Scale. Study 2C provided preliminary support for the hypothesis that fear of being single predicts settling for less in ongoing relationships, as evidenced by greater dependence in unsatisfying relationships. Study 3 replicated this effect in a longitudinal study demonstrating that fear of being single predicts lower likelihood of initiating the dissolution of a less satisfying relationship. Studies 4A and 4B explored the predictive ability of fear of being single for self-reported dating standards. Across both samples, fear of being single was unrelated to self-reported standards for a mate, with the exception of consistently higher standards for parenting. Studies 5 and 6 explored romantic interest in targets that were manipulated to vary in responsiveness and physical attractiveness. These studies found that fear of being single consistently predicted romantic interest in less responsive and less attractive dating targets. Study 7 explored fear of being single during a speed-dating event. We found that fear of being single predicted being less selective in expressing romantic interest but did not predict other daters' romantic interest. Taken together, the present research suggests that fear of being single is a meaningful predictor of settling for less in relationships.

*Keywords:* fear of being single, individual differences, romantic standards, longitudinal data, speed-dating

Single women lead lonely, depressing, and incomplete lives. Their unhappiness increases exponentially with each passing birthday, because past a certain age a woman is "used up." All women are desperate to marry or remarry because marriage is their only real chance for security and happiness. (Anderson & Stewart, 1994, p. 64).

Anderson and Stewart discuss the subtle yet destructive myths about singlehood that are arguably as common today as they were 20 years ago. The myth is that singles (particularly women) yearn for a relationship and they suffer or lack without it. Indeed, Western society maintains an ideology that the romantic relationship is the most important social relationship (Day, Kay, Holmes, & Napier, 2011; DePaulo & Morris, 2005). Such beliefs appear to promote fears about the consequences of not finding a romantic

partner. How do people's concerns about ending up single influence how they seek out and maintain relationships?

The present research explores the usefulness of fear of being single as a construct for understanding relationship attitudes and behaviors. We construe fear of being single as entailing concern, anxiety, or distress regarding the current or prospective experience of being without a romantic partner. This fear may manifest as an immediate concern about one's current relationship status or anxiety about the prospect of being single in the future. In this sense, even people who are currently involved in romantic relationships may be affected by fear of being single. Our goal in the present research is, first and foremost, to establish fear of being single as a unique and psychometrically validated construct. Furthermore, we aim to explore the implications of fear of being single in important relationship domains. In particular, distress about not having a romantic relationship may promote an approach that any relationship is better than no relationship at all. An important consequence of fear of being single may be, therefore, to settle for less in relationships in order to gain and maintain a relationship.

Choosing whether to initiate, maintain, or dissolve romantic relationships involves complex decision making, such that individuals often weigh their options and rely heavily on heuristics and emotions to make these decisions (see review by Joel, MacDonald, & Plaks, *in press*). To the extent that one fears being single, daily relationship decisions may be driven by a desire to have or maintain relationships over other factors that typically predict commitment and romantic stability, such as high satisfaction or relationship quality (e.g., Le, Dove, Agnew, Korn, & Mutso, 2010; Rusbult, Martz, & Agnew, 1998). We demonstrate in the present research that fear of being single predicts the tendency to make

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decisions that seem to prioritize relationship status over relationship quality, which we colloquially refer to as “settling for less.” To better understand how a deep desire to be involved in a relationship may lead to lower quality mate selection, one should first understand normative desires for relationships.

### Normative Desires for Relationships

Desire for intimate relationships and concern about the status of one’s relationships is a normative human experience. Because of the importance of social connection to survival and reproduction in their evolutionary past (Caporael, 2001; Foley, 1995), humans require meaningful and persisting associations with others for both physical and psychological well-being (Baumeister & Leary, 1995). A lack of social connection is associated with negative emotional states (Blackhart, Nelson, Knowles, & Baumeister, 2009), impairments in self-regulation (Baumeister, DeWall, Ciarocco, & Twenge, 2005), hostility and aggression (Leary, Twenge, & Quinlivan, 2006), and negative health outcomes such as increased risk of contracting illnesses and greater risk of mortality (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997; House, Landis, & Umberson, 1988).

Beyond focusing on a broad need for social connection, attachment theory specifically highlights the need for close bonds with trusted attachment figures (Bowlby, 1969; Mikulincer & Shaver, 2007). The attachment system is rooted in infant–caregiver connections and is activated in response to distress and threat in order to prompt individuals to seek security and comfort from caregivers (Ainsworth & Bell, 1970; Bowlby, 1969). The attachment system extends beyond the infant–parent relationship, such that youths and adults form attachments with close others and construe them as attachment figures (Fraley, Brumbaugh, & Marks, 2005; Hazan & Shaver, 1987). It is therefore a natural part of human development to desire someone who can serve as a secure base from which to explore freely and securely and a safe haven to provide comfort and security in times of distress (Mikulincer & Shaver, 2007). People thus have deeply rooted, intrinsic motivations to gain and maintain close social connections. These basic biological and psychological pressures for social connection may contribute to fear of being single.

### Fear of Being Single

Fear of being single is defined in the present research as concern, anxiety, or distress regarding the current or prospective experience of being without a romantic partner. Although the concept is an important component of lay understanding of relationship dynamics, there is as of yet no existing quantitative measure of fear of being single. However, past research involving qualitative assessments, such as interviews and narrative analyses, has documented such anxieties about singlehood. Indeed, this qualitative research suggests that, for a subset of individuals, a stable relationship status is the primary source of psychological security, with its absence being a source of distress and anxiety (Cole, 1999). Societal and family pressures, combined with insecurity and self-doubt, cause some people to struggle to achieve a “comfortable definition of the self as a single person” (Schwartzberg, Berliner, & Jacob, 1995, p. 5).

Combine the intrinsic desire for connection with the social stigma of being single (e.g., single individuals are perceived as

having worse personalities and lower well-being than have coupled individuals; DePaulo & Morris, 2005; Greitemeyer, 2009), and singlehood has the potential to be a distressing state that can provoke feelings of isolation on multiple fronts. Schwartzberg et al. (1995) explained that distress about being single may be a prevalent response, given that people are typically socialized to tie their personal and social identity to their relationship status. For instance, quantitative research has demonstrated a well-defended ideology of the committed relationship, such that Western societies endorse and defend the committed romantic relationship as the most important adult relationship (Day et al., 2011; DePaulo & Morris, 2005). Single people recognize that others expect them to be in relationships (Cole, 1999; Sharp & Ganong, 2011). Furthermore, most young adults expect that they will marry (DePaulo & Morris, 2005), and the majority of Americans do indeed marry (U.S. Census Bureau, 2010). Essentially, it is a couples’ world, and it may be difficult to live single within it. Studies on women’s experiences with singlehood have found that the sense of having missed an important life transition leaves many single women suffering intra- and interpersonal sanctions and feeling uncertain about their futures (Sharp & Ganong, 2007). In fact, scholars on singlehood note that it is often considered as a deficit state, marked by the lack of a relationship rather than as an entity of its own (Reynolds & Taylor, 2005).

Psychotherapist Marcy Cole (1999) conducted extensive interviews with never-married women in their thirties who desired marriage and a family. Cole found significant variation in the lived experiences of singlehood. She noted that in terms of emotional responses to being single, participants tended to fall into one of three distinct groups. The largest group consisted of those who felt ambivalent about being single. Women in this group had fluctuating emotional responses to singlehood, acknowledging the positive features such as autonomy and independence but also noting the frequent bouts of loneliness and judgment from others. The second group consisted of those who approached singlehood with empowerment, maintaining a positive sense of self regardless of their relationship status. Last, some women experienced chronic and intense anxiety, despair, and self-doubt in response to being single. Thus, qualitative research suggests individual differences in fear of being single that may have meaningful implications for relationship choices.

Despite its value, an important limitation to past research on the psychological experience of singlehood is that the majority of this research has been conducted retrospectively, focusing on the reflected experiences of single, middle-aged adults. As such, the past research exclusively explores the experiences of those who have actually ended up single. By definition, individuals who compromised their relationship standards to resolve fears of being single and who continue to maintain those relationships would have escaped the purview of past researchers. We propose in the present research, however, that those who fear being single may be eager not just to initiate relationships but to maintain them even at significant cost. Thus, the focus of the present research is on the process of managing fear of being single, rather than the outcome of ending up single. The present research explores concerns about singlehood from participants with greater diversity in age and experience than has typically been explored.

Past research on the lived experience of singlehood has also been conducted almost exclusively with female participants. How-

ever, we propose that fear of being single is not a uniquely female phenomenon. In fact, in a study of unmarried heterosexual adults over 30 years old, men had stronger desires for marriage than women because they had weaker social support (Frazier, Arikian, Benson, Losoff, & Maurer, 1996). Both sexes also experience discrimination for being single. For instance, people evaluate both men and women more negatively, and discriminate against them, when single than when coupled (Greitemeyer, 2009; Hertel, Schütz, DePaulo, Morris, & Stucke, 2007; Morris, Sinclair, & DePaulo, 2007). Therefore, in terms of emotional and psychological needs to find and maintain intimate relationships, there should not necessarily be differences between men and women.

### Specificity of Insecurity

We argue that fear of being single provides a theoretically meaningful level of specificity not taken into account with other measures of insecurity such as anxious attachment. Anxious attachment tends to be marked by chronic neediness and clinginess with attachment figures and chronic fear of rebuff and rejection (Mikulincer & Shaver, 2007; Spielmann, Maxwell, MacDonald, & Baratta, 2013). Anxious attachment and fear of being single may therefore share many theoretical and behavioral similarities. We argue, however, that fear of being single may more directly reflect relationship-specific outcomes than more general measures of insecurity because it is a relationship-specific construct. Gillath and colleagues (Gillath, Hart, Nofle, & Stockdale, 2009; Nofle & Gillath, 2009) discussed the benefit of using an assessment at the same level of specificity as the outcome, in order to account for a unique amount of variance typically overlooked with trait measures. Indeed, their state measures of attachment were found to be consistent with trait measures, although representing unique statistical constructs. We propose that a key difference between fear of being single and anxious attachment may be the specificity of the desired attachment figure. Although those who fear being single by definition are focused specifically on romantic attachment figures, anxiously attached individuals may be focused on receiving comfort and reassurance from a broader range of attachment figures including peers and family members (e.g., Cox et al., 2008; Fraley & Davis, 1997; Markiewicz, Lawford, Doyle, & Haggart, 2006). Therefore, when one is trying to predict behavior in romantic relationship contexts, fear of being single may add a level of specificity above and beyond trait anxious attachment.

### Settling for Less

Do people's concerns about ending up single lead them to desperately seek out relationship partners and cling to a relationship once they have one? People tend to have expectations for their relationships in domains such as physical attractiveness, status/resources, and potential for responsiveness/intimacy (e.g., Fletcher & Simpson, 2000; Fletcher, Simpson, Thomas, & Giles, 1999). There is mixed evidence, however, regarding whether feelings of insecurity, such as low self-esteem and anxious attachment, promote more or less willingness to settle for less in relationships. Those who are less secure about their own value as romantic partners tend to be more willing to compromise their standards in a relationship (Campbell, Simpson, Kashy, & Fletcher, 2001; Regan, 1998). Moreover, decreased self-esteem as a consequence

of romantic rejection has been associated with lower mating aspirations (Kavanagh, Robins, & Ellis, 2010). Similarly, individuals higher in anxious attachment tend to remain committed to relationships that do not satisfy their needs (Slotter & Finkel, 2009) and are less selective during mate initiation (McClure, Lydon, Baccus, and Baldwin, 2010). Hirschberger, Florian, and Mikulincer (2002) likewise found that male and female students who had lower self-esteem reported lower requirements on a number of partner traits, such as intellect, attractiveness, social status, and interpersonal skills. However, following a mortality salience threat, it was those with high self-esteem rather than those with low self-esteem who were more willing to compromise their ideal standards. Furthermore, Tolmacz (2004) found that anxiously attached individuals reported less willingness than did securely and avoidantly attached individuals to compromise their ideal mate standards.

The previous literature therefore yields mixed results about insecurity and the willingness to settle for less in romantic relationships. These inconclusive findings highlight the need for a more specific measure of relational insecurity that reliably relates to willingness to compromise one's standards. Better understanding the phenomenon of fearing being single may shed light on motivations to settle for less and contexts in which settling for less will take place. We hypothesize that those with stronger fear of being single will be willing to accept lower quality mates in order to avoid being single.

### The Present Research

The primary goal in the present research was to better understand the influence of fear of being single on relationship choices. To this end, we sought to develop and validate a measure of fear of being single and to explore the effects of fear of being single on people's willingness to settle for less when (a) maintaining relationships with less satisfying partners (Studies 2C and 3), (b) evaluating relationship ideals (Studies 4A and 4B), and (c) selecting dating partners and initiating relationships (Studies 5, 6, and 7). In general, we hypothesized that stronger fear of being single should be associated with greater willingness to settle for lower quality relationships.

Study 1 involved a qualitative design to explore people's thoughts and feelings about being single. Thematic analyses of open-ended responses highlighted the frequency and primacy of specific concerns about being single and informed the creation of a Fear of Being Single Scale in Study 2. Studies 2A and 2B involved factor analyses and validation of the Fear of Being Single Scale across two independent samples. We examined the psychometric validity of the scale by testing whether individual differences in fears of being single are associated (though not redundant) with measures of interpersonal anxiety and negative affect, such as anxious attachment and neuroticism, social avoidance goals, and general interpersonal sensitivities. Study 2C assessed a subsample of participants in relationships from Studies 2A and 2B, examining their current relationship satisfaction and relational dependence. We hypothesized that those with stronger fear of being single would be more dependent on their romantic relationships, even when they were relatively dissatisfied in their relationships. Study 3 was a longitudinal study of individuals in relationships, in which fear of being single and relationship satisfaction were assessed. We mon-

itored whether or not the relationship ended and, if so, which partner made the breakup decision. We hypothesized that among those in less satisfying relationships, stronger fear of being single would be associated with lower likelihood of choosing to end the relationship. Studies 4A and 4B explored people's standards for an ideal partner (4A and 4B) and minimum standards for a partner (4B). We expected that fear of being single would predict setting lower standards for a partner. However, we also considered the possibility that fear of being single may not predict self-reported standards due to the psychological discomfort of consciously acknowledging the willingness to settle for less. Next, Studies 5 and 6 explored how those with stronger fear of being single evaluate less desirable dating targets in the context of Internet dating. In two Internet dating tasks, participants evaluated their romantic interest in targets who appeared either high or low in responsiveness (Studies 5 and 6) and who were either physically attractive or unattractive (Study 6). We hypothesized that those with stronger fear of being single would be more likely to express romantic interest in less desirable targets than would those with weaker fear of being single. Finally, Study 7 explored the effects of fear of being single at a speed-dating event. We hypothesized that those with stronger fear of being single would be less selective in expressing romantic interest toward others.

### Study 1

Our first step in understanding fear of being single involved the creation and validation of a reliable assessment tool. To develop items for a quantitative measure of fear of being single, we began with an open-ended survey of individuals' thoughts about being single. The purpose of Study 1 was to explore the extent to which people report anxiety about being single and which aspects of being single may or may not concern them. Unlike those who have conducted other qualitative studies on the experience of being single, we invited participants of all ages, sexes, and relationship experience.

### Method

Participants were 153 individuals (126 women, 27 men), recruited through online forums such as Craigslist.org. Participants were entered into a draw for a \$50 gift certificate. One single, female participant was excluded because she was younger than 18 years of age, which was a requirement in the recruitment ad. The age of the remaining participants ranged from 18 to 59 ( $M = 30.5$ ,  $SD = 10.8$ ). Of the 152 participants, 48 were currently single, 20 reported they were casually dating, 57 were exclusively dating, 10 were engaged, and 17 were married.

Participants were asked to think about the extent to which they "fear being alone (i.e., single, without a romantic partner)." Participants were asked to indicate in an open-ended manner what they specifically fear or do not fear about being single.

### Results

**Coding.** Two independent raters coded the narratives for themes related to the specific aspects of being single that participants reported as concerns or advantages. The coding was data driven, such that themes emerged from comments provided by

participants (e.g., Braun & Clarke, 2006). Each narrative received as many codes as were applicable, with coding indicating either the presence or the absence of a theme. An average Cohen's kappa agreement between raters of .71 reflected reasonably good agreement overall (e.g., Landis & Koch, 1977).

#### Open-ended responses about fear of being single.

Participants' responses with examples for each theme are summarized in Table 1. When discussing whether or not they fear being single, a large proportion of individuals (39%) made explicit claims about not fearing being single, and approximately 37% explicitly indicated fear of being single to some degree. Some individuals expressed current concerns about being single, some reported ambivalent feelings, and some reported expecting singlehood to be a growing concern as they got older.

When participants discussed the aspects of being single that cause them anxiety, the most commonly cited concern was lacking companionship and intimate connection with a partner. The other most commonly cited worries were about losing a current partner, growing old alone, missing out on having children and a family, judging oneself negatively—as well as being judged negatively by others—for being unable to find a partner, and having concerns that a romantic partner provides unique comfort that friends and family cannot. A small proportion also reported concerns about lacking financially and sexually without a partner, and one participant reported that the benefits of a relationship are worth any associated costs.

Finally, when discussing reasons why being single does not cause them anxiety, individuals were most likely to cite factors such as having close friends and family to whom to turn. Some participants also indicated that being in a bad relationship would be a greater concern than being single, or they indicated that their anxieties were attenuated by experiences of being single in the past or having a negative relationship experience that helped them realize being single would not be so bad. Last, a small proportion reported turning to religion to ease loneliness.

#### Predicting themes from age, sex, and relationship status.

We next explored whether the odds of reporting a specific concern about being single were predicted by participants' age, sex, or relationship status. Relationship status was dummy coded such that those who were single and casually dating were coded as *single* and those who were exclusively dating, engaged, or married were coded as *in a relationship*. We conducted binary logistic regressions on each theme and simultaneously included age, sex (0 = female, 1 = male), and relationship status (0 = single, 1 = in a relationship) as predictors.

Older age increased the odds of reporting concerns about growing old alone (odds ratio = 1.04,  $p = .05$ ). Furthermore, older age decreased the odds of saying that close friends and family members could ease concerns about being single (odds ratio = 0.86,  $p = .01$ ). Not surprisingly, being in a relationship increased the odds of fearing losing one's current partner (odds ratio = 16.08,  $p = .008$ ). Moreover, those in relationships were less likely to report that they would feel bad about themselves if they ended up single (odds ratio = 0.07,  $p = .01$ ). There were no predictive effects of participant sex, and no other themes yielded significant effects.

Table 1  
*Frequencies and Examples of Themes From Open-Ended Narratives in Study 1*

Theme	Percent reported	Example
Presence of fear of being single		
Explicit no fear of being single	38.8	"I don't fear being alone . . . . Having company is not the same as being fulfilled as a person. I believe that part of fulfillment is knowing you are capable to function on your own." (female, single, 29 years old)
Explicit fear of being single	18.4	"I worry what my future will be. Will I just end up another old lady forgotten and alone?" (female, single, 58 years old)
Ambivalent feelings about being single	11.8	"I am very family oriented and have life-long friends; thus, I will never be truly alone. However, the thought of being single without a romantic partner somewhat bothers me. I also strongly feel that having a romantic relationship with a partner is tiresome and involves too much work. So, sometimes I am bothered by being alone but also feel relief." (female, single, 23 years old)
Anticipate being fearful in the future	6.6	"I tend to not worry so much about whether I am alone or single at the moment but do have a fear of being alone when I am old. Singleness at 25 years old does not sound so bad, but to be single forever sounds terrible." (female, dating, 25 years old)
Reasons for fear of being single		
Fear not having the long-term companionship of an intimate partner	40.1	"I fear that there will be no one there that I can share intimacy with like cuddling, hugs, and kisses and the fact that there is somebody that is ready to do anything or go anywhere with you." (female, dating, 23 years old)
Fear losing current partner	11.8	"I do sometimes fear the possibility that something will happen to my husband, such as a grave illness or an accident . . . . I can't imagine the thought of experiencing something joyful and not being able to share it with him. Our domestic rhythms revolve around each other, and if I have to spend the evening alone, time seems to pass more slowly, and the night seems shapeless and devoid of routine." (female, married, 28 years old)
Fear growing old alone	11.2	"I fear being alone because I keep thinking how awful it would be to be alone as an elderly person." (male, dating, 47 years old)
Fear never having children and a family	6.6	"I fear not having someone means I'll miss out on great parts of life: marriage, children, family." (female, dating, 27 years old)
Fear feeling worthless or bad about themselves	6.6	"Being alone to me means being a failure, unlovable, and never being loved" (female, dating, 57 years old)
Fear friends and family aren't enough to ease anxieties about being single	4.6	"Although every relationship has its costs and benefits, romantic relationships seem to possess a unique set of benefits that can't be achieved through other types of interactions." (female, dating, 23 years old)
Fear people will judge them negatively if single for too long	3.9	"There seems to be a societal expectation, and no doubt an extended family expectation, that an attractive woman such as myself should not remain unattached indefinitely. The 'old spinster' cliché comes to mind." (female, single, age not reported)
Won't have as much sex if single	2	"I really miss making love! Just because you get older, it does not mean that passion takes a backseat." (female, single, 49 years old)
Will suffer financially if single	2	"My biggest fear is that I will not be able to support myself financially." (female, dating, 48 years old)
Any relationship, even if bad, is better than being alone	0.7	"I think being with someone (in a relationship) is worth whatever else comes along with it." (male, dating, 38 years old)
Reasons for no fear of being single		
Having friends and family to turn to eases anxieties about being single	9.9	"Regardless if I have a significant other or not in the future, I will always have people who love me and who I love." (female, dating, 18 years old)
Being alone is a better alternative than being in a bad relationship	8.6	"I have grown enough emotionally and psychologically to know that I would rather be on my own than be a part of another unhealthy relationship." (female, single, 35 years old)
No longer fearing being alone due to a past experience with loneliness, such as being single or in a bad relationship	8.6	"In the past, I have relied on men to make me happy, and when they have let me down, I felt no control over myself . . . . Upon doing a lot of soul-searching, I have come to realize that my state of happiness depends on me. I am responsible for finding peace within myself so I'm no longer dependent on someone else to make me happy or make me feel worthy." (female, dating, 27 years old)
Religious beliefs ease anxieties about being single	1.3	"I never feel alone because God is always there." (female, married, 29 years old)

## Discussion

The results of Study 1 shed light on the subjective experience of being single. Open-ended responses revealed individual differ-

ences in the extent to which people report anxieties about being single and highlighted variability in the specific issues of concern. Compared to previous literature on singlehood, this study assessed prospective concerns about being single from participants of all

ages, sexes, and relationship statuses. Validating our suggestion that fear of being single may be a more widespread phenomenon than past qualitative research has suggested, few differences were found in concerns among people in these different groups. A primary limitation to consider, however, is the small number of men in the sample relative to the number of women. Given this limitation, it is possible that concerns about being single that are specific to men were not adequately captured in this study. It is also quite possible that nearly 30 male participants provided saturation of the qualitative themes (i.e., reached the point at which no new themes are being added), as this sample size is above the requirement typically expected for qualitative research (e.g., Boyd, 2001). Nonetheless, the relatively smaller sample of males should be considered when interpreting the themes resulting from Study 1.

### Studies 2A and 2B

The primary purpose of Study 2 was to create and validate a Fear of Being Single Scale, informed by responses gathered in Study 1. We conducted factor analyses to refine the scale to only the most representative items for both men and women. Then, we compared the final scale to a battery of established measures of insecurity, social avoidance, and interpersonal sensitivity to determine convergent and discriminant validity. Given that fear of being single should reflect interpersonal insecurities more generally, we assessed convergent validity with measures of anxious attachment, neuroticism, and measures of sensitivity such as loneliness, depression, and need to belong. Furthermore, because a key aspect of fear of being single is an emotional state contingent on one's relationship status, we also assessed convergent validity by having participants report their relationship contingent self-esteem. Finally, because fear of being single likely represents an avoidance, fear-based motivation (i.e., strong desire to avoid being single), we examined convergent validity with a measure of social avoidance goals. Because we construe fear of being single as a fearful and avoidance-motivated experience, we examined discriminant validity with a measure of social approach goals, as fear of being single should not likely be associated with reward-based approach motivations.

### Method

**Participants and procedure.** To conduct the factor analyses and to create a scale that was generalizable to the general community, we collected two independent samples of participants consisting of online community members (Study 2A) and university undergraduate students (Study 2B). Participants first indicated their age, sex, and relationship status and then completed the items created for our initial version of the Fear of Being Single Scale. Participants then completed the battery of measures discussed below in order to establish convergent and discriminant validity of the Fear of Being Single Scale.

**Study 2A.** The sample of participants in Study 2A consisted of 304 individuals recruited through online forums (e.g., Craigslist.org) in return for entry into a draw for a \$50 Amazon.com gift card. Three participants younger than 18 were excluded for not satisfying age eligibility. The remaining 301 participants (233 women, 66 men, 2 unreported) ranged in age from 18 to 69 years old ( $M = 29.3$ ,  $SD = 9.7$ ). Of those participants, 131 were single,

31 were casually dating, 99 were exclusively dating, 7 were engaged, and 33 were married. Participants were primarily from Canada and the United States.

**Study 2B.** Study 2B consisted of 147 undergraduate students (108 women, 39 men) at the University of Toronto, participating in return for course credit. Participants ranged in age from 17 to 34 years old ( $M = 19.2$ ,  $SD = 2.7$ ). Of the participants, 105 were single, 9 were casually dating, 28 were exclusively dating, 3 were engaged, and 2 were married.

**Measures.** All participants completed the following measures. Additional measures, which are discussed in Study 2C, were collected from participants in relationships.

**Fear of Being Single Scale.** Prominent themes about being single from Study 1 were formulated into a series of 17 scale items. Participants responded to each statement on a scale from 1 (*not at all true*) to 5 (*very true*).

**Attachment style.** Participants completed the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994), reporting on a scale from 1 (*totally disagree*) to 6 (*totally agree*) the degree to which they agreed with statements on subscales of anxious attachment (e.g., "I worry that others won't care about me as much as I care about them"; 13 items;  $M = 3.40$ ,  $SD = 0.88$ ,  $\alpha = .88$ ) and avoidant attachment (e.g., "I prefer to depend on myself rather than other people"; 16 items;  $M = 3.37$ ,  $SD = 0.65$ ,  $\alpha = .81$ ).

**Big Five Inventory.** Participants responded on a scale from 1 (*disagree strongly*) to 5 (*agree strongly*) to items assessing personality traits measured with the Big Five Inventory (BFI; John & Srivastava, 1999). The traits included neuroticism (e.g., "I see myself as someone who worries a lot"; 8 items;  $M = 3.17$ ,  $SD = 0.81$ ,  $\alpha = .84$ ), openness (e.g., "I see myself as someone who is creative and inventive"; 10 items;  $M = 3.86$ ,  $SD = 0.65$ ,  $\alpha = .82$ ), conscientiousness (e.g., "I see myself as someone who keeps working until things are done"; 9 items;  $M = 3.43$ ,  $SD = 0.68$ ,  $\alpha = .80$ ), agreeableness (e.g., "I see myself as someone who is the kind of person almost everyone likes"; 8 items;  $M = 3.63$ ,  $SD = 0.66$ ,  $\alpha = .72$ ), and extraversion (e.g., "I see myself as someone who is outgoing, sociable"; 8 items;  $M = 3.23$ ,  $SD = 0.83$ ,  $\alpha = .85$ ).

**Relationship-contingent self-esteem.** Participants indicated the extent to which their self-esteem fluctuates as a function of the quality of their relationships on the Relationship-Contingent Self-Esteem Scale (e.g., "My feelings of self-worth are based on how well things are going in my relationship"; 11 items;  $M = 3.34$ ,  $SD = 0.78$ ,  $\alpha = .87$ ; Knee, Canevello, Bush, & Cook, 2008). Participants in relationships responded regarding their current romantic partners, and those who were single responded according to their past relationships in general (descriptive statistics represent both single and coupled participants).

**Social goals.** Participants completed the Friendship Goals Questionnaire (Elliot, Gable, & Mapes, 2006), rephrased to refer to close relationships more generally. On a scale from 1 (*not at all true of me*) to 7 (*very true of me*), participants indicated their social approach goals (e.g., "I am trying to enhance the bonding and intimacy in my close relationships"; 4 items;  $M = 5.39$ ,  $SD = 1.36$ ,  $\alpha = .92$ ) and social avoidance goals (e.g., "I am trying to make sure that nothing bad happens to my close relationships"; 4 items;  $M = 5.18$ ,  $SD = 1.27$ ,  $\alpha = .78$ ).

**Need to belong.** To assess general feelings of belonging, participants completed the Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2007). On a scale from 1 (*strongly disagree*) to 5 (*strongly agree*), participants responded to items such as “I need to feel that there are people I can turn to in times of need” (10 items;  $M = 3.38$ ,  $SD = 0.67$ ,  $\alpha = .80$ ).

**Depression.** Depression was assessed with the Center for Epidemiological Studies Depression Scale (Radloff, 1977). Participants reported their frequency of 20 depressive symptoms over the prior week (e.g., “I felt that I could not shake off the blues even with help from my family or friends”), from 1 (*rarely or none of the time*) to 4 (*most or all of the time*),  $M = 2.02$ ,  $SD = 0.63$ ,  $\alpha = .92$ .

**Loneliness.** Loneliness was assessed with the UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980). Participants responded to 20 items such as “How often do you feel that you lack companionship?” from 1 (*never*) to 4 (*always*),  $M = 2.30$ ,  $SD = 0.56$ ,  $\alpha = .94$ .

**Hurt feelings proneness.** Participants completed Leary and Springer’s (2001) Hurt Feelings Proneness Scale, responding from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*) to items such as “My feelings are easily hurt” ( $M = 3.27$ ,  $SD = 0.79$ ,  $\alpha = .78$ ).

**Rejection sensitivity.** Rejection sensitivity was assessed on the Rejection Sensitivity Scale (Downey & Feldman, 1996) by the expectancy of and anxiety about rejection during several hypothetical scenarios (e.g., “You approach a close friend to talk after doing or saying something that seriously upset him/her”). Participants’ expectancy scores are multiplied by their anxiety scores for each scenario, and the products for the nine scenarios are averaged to reflect a total rejection sensitivity score. Total scores may range from 1 (low rejection sensitivity) to 36 (high rejection sensitivity),  $M = 9.98$ ,  $SD = 4.53$ ,  $\alpha = .79$ .

## Results

The analyses proceeded in three stages. First, the Fear of Being Single Scale was refined via exploratory factor analyses (EFAs) in Study 2A. Then, the refined scale was cross-validated via confirmatory factor analysis (CFA) in Study 2B. In the third stage, Studies 2A and 2B were combined to assess the convergent and discriminant validity of the final scale.

### Refinement of the initial scale: Exploratory factor analyses.

In order to create an assessment tool that captures singlehood concerns of both men and women, unrotated maximum likelihood EFAs were conducted separately for men and women on the original 17 scale items in Study 2A, selecting only items loading highly for both sexes. Items without a single loading greater than .50 were deleted, as were any items with substantial cross-loadings on a second factor ( $>.40$ ). As can be seen in Table 2, this process yielded 8 items for men and 10 items for women, loading onto a single factor for each sex (based on eigenvalues  $> 1$ ) and accounting for more than half of the variance. The final scale was created by selecting only the six items that remained for both sexes ( $M = 2.76$ ,  $SD = 1.07$ ).<sup>1</sup> The final scale included the following items: “I feel it is close to being too late for me to find the love of my life,” “I feel anxious when I think about being single forever,” “I need to find a partner before I’m too old to have and raise children,” “If I end up alone in life, I will probably feel like there is something

wrong with me,” “As I get older, it will get harder and harder to find someone,” and “It scares me to think that there might not be anyone out there for me.” Cronbach’s alphas for men ( $\alpha = .87$ ), women ( $\alpha = .86$ ), and both sexes combined ( $\alpha = .86$ ) revealed substantial reliability of the reduced scale.

### Validation of the final scale: Confirmatory factor analysis.

In the second stage of analyses, we explored the generalizability of the final scale by conducting a CFA to determine whether the single factor structure derived in Study 2A provided an adequate fit to the data in Study 2B ( $M = 2.70$ ,  $SD = 0.82$ ,  $\alpha = .75$ ). The single-factor six-item Fear of Being Single Scale evidenced good model fit,  $\chi^2(9) = 12.72$ , *ns*, comparative fit index = .98, root-mean-square error of approximation = .05 (Bentler & Bonett, 1980; Browne & Cudeck, 1993).

**Testing invariance of the scale across participant sex.** To confirm that the factor structure of the Fear of Being Single Scale did not differ significantly for men and women, we conducted a series of multigroup CFA models, in which we increased the number of equality constraints in each model (e.g., Kline, 2011; Millsap & Olivera-Aguilar, 2012; Reise, Widaman, & Pugh, 1993). Table 3 summarizes the goodness of fit statistics for each model. As shown in this table, constraining factor loadings, item intercepts, and item residuals to be equal across sexes did not significantly alter fit (thus meeting the stringent criteria for strict invariance). Models constraining the variance ( $\Delta df = 1$ ,  $\Delta\chi^2 = 0.04$ , *ns*) and mean ( $\Delta df = 1$ ,  $\Delta\chi^2 = 0.84$ ) of the fear of being single factor to be equal across sexes did not significantly alter fit, indicating that both sexes have similar variability and mean levels of the construct. In sum, the results of these analyses confirm construct comparability across sexes.

**Convergent and discriminant validity.** Finally, Studies 2A and 2B were combined to create a larger sample ( $N = 448$ ) with which to assess convergent and discriminant validity of the Fear of Being Single Scale. Table 4 displays the zero-order correlations and multiple regressions predicting fear of being single. As expected, insecurity-related variables such as anxious attachment and neuroticism positively predicted fear of being single.<sup>2</sup> Moreover, fear of being single was positively associated with social avoidance goals. Discriminant validity was demonstrated by a nonsignificant association with social approach goals. Finally, fear of being single was positively related to, although distinct from,

<sup>1</sup> Applying a promax or varimax rotation to the factor analyses yielded largely similar item selection. The rotation is arguably a minor concern, given that the final scale loads onto only one factor. Variations of the scale produced with different rotations yielded highly similar means and  $\alpha$  reliabilities. Furthermore, all associations presented in the Convergent and Discriminant Validity section in Study 2 remained unchanged when comparing the different scales.

<sup>2</sup> To confirm that fear of being single and anxious attachment are distinct constructs, we conducted a large-scale maximum likelihood exploratory factor analysis with promax rotation. Data were merged from Studies 2A, 2B, 4A, 4B, 5, and 6 ( $N = 1,137$ ), as they all measured fear of being single and anxious attachment with the ASQ (Feeney et al., 1994). Fear of being single and anxious attachment loaded onto separate factors. Importantly, none of the Fear of Being Single Scale items cross-loaded with anxious attachment items (defining cross-loading as greater than .40), or vice versa. With a large sample size, including both single and coupled participants recruited from the undergraduate and online community, this factor analysis provides compelling support for the distinction between fear of being single and anxious attachment.

Table 2  
Factor Loadings for Men and Women in Study 2A

Item	Men	Women
1. I fear being alone when I am old.	—	.69
2. I feel like I'm supposed to be in a serious romantic relationship by now.	—	.70
3. I sometimes feel as though everyone is in a relationship except for me.	.85	—
<b>4. It scares me to think that there might not be anyone out there for me.</b>	.80	.79
5. People who never date or marry are kind of sad.	—	.56
<b>6. I feel it is close to being too late for me to find the love of my life.</b>	.74	.63
<b>7. I feel anxious when I think about being single forever.</b>	.85	.84
<b>8. I need to find a partner before I'm too old to have and raise children.</b>	.73	.64
<b>9. If I end up alone in life, I will probably feel like there is something wrong with me.</b>	.82	.84
12. I worry about how others will judge me if I am ever single for too long.	—	.64
13. If I never marry, I'll have a lonely life.	.80	—
<b>14. As I get older, it will get harder and harder to find someone.</b>	.67	.71
Eigenvalue	4.93	5.01
% of variance accounted for	61.65	50.10

Note. Bolded items included in the final Fear of Being Single Scale.

measures of interpersonal sensitivity, including relationship-contingent self-esteem, rejection sensitivity, hurt feelings proneness, depression, loneliness, and need to belong.

## Discussion

Studies 2A and 2B produced a reliable and psychometrically validated Fear of Being Single Scale. The preliminary scale of 17 items informed by responses in Study 1 was subjected to factor analyses on two different samples of participants. A final six-item scale loading onto a single factor provided a good fit to the data. Importantly, this scale represented the concerns of both male and female participants.

The results of these studies provide the groundwork for subsequent analyses testing our critical hypothesis that people will be likely to settle for less out of fear of being single. We conducted a first test of this hypothesis in Study 2C using data from Studies 2A and 2B.

### Study 2C

One way in which individuals may be thought of as compromising their relationship standards (i.e., settling for less) is to remain committed to and invested in a poor-quality relationship. Typically, dependence and commitment are considered to be positive and important aspects of relationship stability. Relationship dependence leads to greater commitment over time

(Attridge, Berscheid, & Sprecher, 1998; Wieselquist, Rusbult, Foster, & Agnew, 1999). Furthermore, in a recent meta-analysis of longitudinal studies of romantic breakups, relational dependence was one of the strongest predictors of relationship stability (Le et al., 2010). However, to the extent that one's relationship is less healthy or satisfying, dependence and commitment may be less desirable. For instance, a study of women with abusive partners found that commitment was the key predictor of returning to the offending partner immediately after leaving a women's shelter, and satisfaction was not (Rusbult & Martz, 1995).

For individuals with stronger fear of being single, nearly any relationship may promote dependence and commitment. To the extent that those with stronger fear of being single are insecure about their ability to find and keep a partner for the long term, they may remain nonselectively committed to a relationship once they have one. Indeed, other studies have found that insecure individuals, such as those with anxious attachment, are more vulnerable to staying in relationships that do not satisfy their needs. For instance, whereas more secure individuals feel less committed to their romantic partners and are more likely to break up with their partners when the relationship does not meet their needs, anxiously attached individuals tend to maintain their relationship commitment despite their lack of need satisfaction (Slotter & Finkel, 2009). In a longitudinal study of newly married couples over their first four years of marriage, couples with insecure partners were

Table 3  
Summary of Models Testing Invariance of Fear of Being Single Scale Across Sexes

Model	$\chi^2$	<i>df</i>	$\Delta\chi^2$	$\Delta df$	<i>p</i>	RMSEA	CFI
1. Configural invariance	16.70	18				0.000	1.00
2. Weak invariance	24.88	23	8.17	5	<i>ns</i>	0.033	0.989
3. Strong invariance	30.85	28	5.97	5	<i>ns</i>	0.037	0.983
4. Strict invariance	35.68	34	4.82	6	<i>ns</i>	0.026	0.990
5. Equal factor variance	35.72	35	0.04	1	<i>ns</i>	0.017	0.996
6. Equal factor mean	36.56	36	0.84	1	<i>ns</i>	0.015	0.997

Note. All model  $\chi^2$  values are nonsignificant. *df* = degrees of freedom; RMSEA = root-mean-square error of approximation; CFI = comparative fit index; *ns* = nonsignificant.

Table 4  
Convergent and Discriminant Validity of Fear of Being Single Scale (Studies 2A and 2B Combined)

Predictor	<i>r</i> (zero-order correlation)	$\beta$ (simultaneous regression)
Attachment style		
Anxious attachment	.51***	.52***
Avoidant attachment	.22***	-.02
Personality		
Neuroticism	.28***	.24***
Extraversion	-.12*	-.03
Conscientiousness	-.16**	-.05
Openness	-.12*	-.09
Agreeableness	-.17**	-.04
Social goals		
Social avoidance goals	.27***	.28***
Social approach goals	.10*	-.01
Interpersonal sensitivity		
Relationship-contingent self-esteem	.42***	
Need to belong	.43***	
Rejection sensitivity	.34***	
Hurt feelings proneness	.24***	
Depression	.42***	
Loneliness	.38***	

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

the most likely to be in stable, yet unhappy marriages (Davila & Bradbury, 2001). In this way, those with stronger fear of being single may also settle for less by remaining committed to less satisfying relationships.

To explore the hypothesis that fear of being single would predict dependence in less satisfying relationships, we examined only participants in Studies 2A and 2B who reported being involved in a romantic relationship. These participants provided additional data regarding their current relationship satisfaction and dependence. We hypothesized in particular that there would be a significant interaction between fear of being single and relationship satisfaction predicting relational dependence. Although most participants will likely be dependent on relationships marked by high satisfaction, we expected that only those with stronger fear of being single would be dependent on less satisfying relationships.

## Method

**Participants and procedure.** The subsample of data in Study 2C was taken from Studies 2A and 2B. Study 2C included all participants from Studies 2A and 2B currently involved in romantic relationships. There were 172 participants included in analyses (147 women, 24 men, 1 unidentified), ranging in age from 17 to 57 years old ( $M = 27.6$ ,  $SD = 9.2$ ). Participants in this combined sample had been in their current relationships between 1 month and 40 years ( $M = 39.9$  months,  $SD = 57.3$ ). The following items were provided in addition to the items mentioned above, only to those participants who reported being in a romantic relationship.

### Measures.

**Relationship satisfaction.** Participants reported their satisfaction in their current relationship with the Satisfaction Scale developed by Murray, Holmes, and Griffin (2000). Participants responded to four items, such as "I am extremely happy with my current relationship," on a scale from 1 (*not at all true*) to 6 (*extremely true*),  $M = 4.50$ ,  $SD = 1.21$ ,  $\alpha = .90$ .

**Relationship dependence.** Participants also indicated how dependent they were on their current relationship on Murray, Holmes, MacDonald, and Ellsworth's (1998) Dependence Scale. Using a scale from 1 (*not at all true*) to 9 (*completely true*), participants responded to five items, such as "I feel that I need my partner a great deal" and "If I couldn't be in this relationship, I would lose an important part of myself" ( $M = 5.33$ ,  $SD = 1.93$ ,  $\alpha = .85$ ).

## Results

We conducted a hierarchical regression predicting relationship dependence, with fear of being single (standardized) and relationship satisfaction (standardized) entered in Step 1. To ensure that results were not attributable to systematic differences in length of the current relationship, we included relationship length as a covariate in Step 1. The interaction between fear of being single and relationship satisfaction was entered in Step 2. One outlier 3 standard deviations below the mean in satisfaction was excluded from this analysis. Results revealed that the length of one's current relationship was a marginally significant, positive predictor of relationship dependence ( $\beta = .13$ ,  $p = .08$ ). Furthermore, both current relationship satisfaction ( $\beta = .48$ ,  $p < .001$ ) and fear of being single ( $\beta = .23$ ,  $p = .003$ ) were significant, positive predictors of relationship dependence. These main effects were qualified by a significant interaction between fear of being single and relationship satisfaction ( $\beta = -.18$ ,  $p = .02$ ; see Figure 1). Simple effects tests revealed that at high levels of relationship satisfaction, fear of being single did not predict relationship dependence ( $\beta = .06$ , *ns*). However, among those who were less satisfied in their relationships, stronger fear of being single predicted greater dependence on the relationship ( $\beta = .37$ ,  $p < .001$ ). Examined differently, higher satisfaction promoted greater dependence than lower satisfaction overall, but the magnitude of this effect was greater for those lower in fear of being single ( $\beta = .68$ ,  $p < .001$ ) than for those higher in fear of being single ( $\beta = .37$ ,  $p < .001$ ).

Follow-up analyses revealed that these effects cannot be accounted for by anxious attachment. We included anxious attachment as a covariate in Step 1, and to account for bias in the estimate of the fear of being single by relationship satisfaction

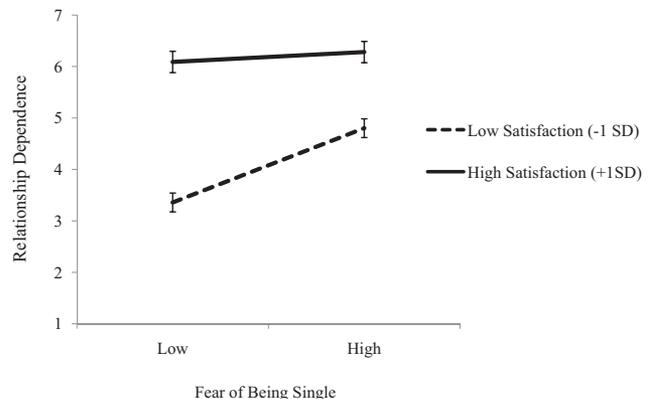


Figure 1. Dependence on a relationship as a function of relationship satisfaction and fear of being single in Study 2C. Error bars represent standard error.

interaction (Yzerbyt, Muller, & Judd, 2004), we also included the interaction between anxious attachment and satisfaction in Step 2. First, analyses revealed that the interaction between fear of being single and satisfaction remained significant when controlling for the main and interaction effects of anxious attachment ( $\beta = -.15$ ,  $p = .04$ ). Furthermore, although the main effect of anxious attachment was a significant, positive predictor of dependence in the model ( $\beta = .41$ ,  $p < .001$ ), the interaction between anxious attachment and satisfaction was not significant ( $\beta = .05$ , *ns*). Indeed, across all studies in this paper, follow-up analyses replacing fear of being single with anxious attachment as the independent variable did not produce significant results, further highlighting the distinction between anxious attachment and fear of being single. Furthermore, although we focus on anxious attachment as a covariate because of its theoretical similarity to fear of being single, it is worthy to note that the interaction between fear of being single and relationship satisfaction predicting relationship dependence also remained significant when controlling for other relevant variables such as neuroticism ( $p = .008$ ), depression ( $p = .05$ ), and need to belong ( $p = .03$ ). Therefore, fear of being single accounted for variance in the association between relational satisfaction and dependence that could not be accounted for by more general insecurities.

## Discussion

Study 2C demonstrated that, compared to their less fearful counterparts, those with stronger fear of being single are more dependent on less satisfying relationships. Although relationships higher in satisfaction were associated with higher dependence regardless of individual differences in fear of being single, those who were more afraid of being single reported being relatively dependent even on relationships they found less satisfying. Moreover, the present findings hold above and beyond the effects of anxious attachment, as well as other general insecurities such as neuroticism, depression, and need to belong. This suggests that fear of being single plays a unique role in the maintenance of dissatisfying relationships beyond insecurity-related constructs that are typically examined in the literature on close relationships. Fear of being single is a unique predictor of settling for less in one's relationship.

## Study 3

If fear of being single is associated with greater relationship dependence, even in less satisfying relationships, might fear of being single also discourage people from ending less satisfying relationships? Study 3 examined this question by recruiting a large sample of individuals in relationships and tracking their relationship status over time. We predicted that fear of being single would not predict whether or not participants broke up. Experiencing a breakup is a dyadic process that may often be beyond a relationship member's individual control, particularly if the individual is the one being rejected. Therefore, although we see in Study 2C that fear of being single predicts greater dependence in less satisfying relationships, we may not be able to extrapolate from this that fear of being single should predict overall breakup rates, because there remains an unknown factor of how one's partner feels about the future of the relationship. We hypothesized, therefore, that fear of

being single should not predict overall breakup rates. Focusing on what can be predicted knowing only one member of the couple's feelings about the relationship, we did have a hypothesis regarding fear of being single for the subset of participants who reported experiencing a breakup. We expected that for those who were relatively less satisfied with their relationships, stronger fear of being single would be associated with a lower likelihood of initiating a breakup.

## Method

**Participants and procedure.** Study 3 involved an initial relationship questionnaire, followed by a weekly tracking of relationship status. Participants in dating relationships were recruited both locally from the undergraduate participant pool at the University of Toronto ( $N = 278$  participants) and online from Amazon.com's Mechanical Turk ( $N = 3,827$  participants). Participants were first asked to complete a series of questionnaires about themselves and their romantic relationships. A total of 493 participants were excluded from the present analyses: 147 for not currently being in romantic relationship, 315 for exhibiting response sets according to an algorithm applied to reverse-coded items, and 31 for providing unrealistic responses to the demographics questions (e.g., relationship lengths that were not possible given their ages).<sup>3</sup> The final sample consisted of 3,612 participants (2,045 women, 841 men, 726 not reported), with an average age of 26 (range = 16 to 68,  $SD = 7.5$  years) and an average relationship length of 22 months (range = 1 month to 40 years,  $SD = 30$  months). Participants completed the following measures as part of a larger package of questionnaires.

### Measures.

**Fear of being single.** Participants first completed the six-item Fear of Being Single Scale ( $M = 2.75$ ,  $SD = 0.97$ ,  $\alpha = .83$ ).

**Attachment style.** Anxious attachment was assessed with the ASQ (Feeney et al., 1994),  $M = 3.28$ ,  $SD = 0.80$ ,  $\alpha = .86$ .

**Relationship satisfaction.** Satisfaction was assessed with the five-item satisfaction subscale from the Investment Model Scale (Rusbult et al., 1998). An example item is "My relationship is close to ideal." Participants responded to items on a 9-point scale from 1 (*strongly disagree*) to 9 (*strongly agree*),  $M = 6.69$ ,  $SD = 1.81$ ,  $\alpha = .94$ .

**Weekly relationship status follow-up.** After they completed the initial background questionnaire, participants were e-mailed weekly with the question, "Are you and your romantic partner still together?" Participants who were still together were asked to simply respond with "yes." Participants who had broken up were also asked to answer a follow-up question: "If you are no longer in your romantic relationship, please also indicate who initiated the breakup, by giving us a number on a scale ranging from 1 (*Entirely my partner's decision*) to 3 (*Mutual decision*) to 5 (*Entirely my decision*)." Every 3 months, a gift card draw was conducted for

<sup>3</sup> Response sets were determined based on patterns of responding to reverse-coded items for which there were equivalent items worded in the opposite valence. Participants were excluded if they responded on the same extreme ends of the scale for reverse-coded items. For instance, attachment style assessed on the ASQ (Feeney et al., 1994) includes items such as "I find it easy to trust others" as well as "I find it difficult to trust others." If participants indicated strongly agree/agree or strongly disagree/disagree to both statements, they were excluded.

participants who had responded to at least 80% of our e-mails during that period. Participants were removed from the e-mail list when they asked to be removed.

A total of 1,242 people participated in the weekly e-mail follow-up, and they responded to our e-mails for an average of 10 weeks (range = 1 to 29 weeks). Out of those participants, 226 reported breaking up over the course of the study; 1,016 remained in their relationship. Out of the participants who broke up, 202 responded to the follow-up question regarding their breakup initiator status. The mean response was near the midpoint of the scale ( $M = 2.86$ ,  $SD = 1.44$ ).

## Results

We first investigated who was most likely to experience a breakup over the course of the study. Because participants were asked about their breakup status weekly, we were able to take into account not only whether participants broke up but also how long it took them to break up. Thus, we tested this hypothesis using Cox regression survival analysis, which models both the occurrence of an event (i.e., breakup) and how long it took for the event to occur. Cox regression provides a hazard ratio, which represents the relative rate at which a particular event is likely to occur (in this case, a breakup) for every unit increase in the predictor variable. Fear of being single, relationship satisfaction, and relationship length were first standardized and entered in Step 1. The interaction between fear of being single and relationship satisfaction was entered in Step 2. Relationship status was entered as the event (1 = broke up, 0 = still in relationship), and the number of weeks for which participants responded to relationship status e-mails was entered as the time variable.

Relationship satisfaction predicted a significantly lower likelihood of breaking up over the course of the relationship ( $b = -.59$ ,  $p < .001$ , hazard ratio = .56). In other words, for every standard deviation increase in satisfaction, participants broke up at only .56 times the rate. Similarly, relationship length predicted a significantly lower likelihood of breaking up ( $b = -.56$ ,  $p < .001$ , hazard ratio = .57). For every standard deviation increase in relationship length, participants broke up at only .57 times the rate. Fear of being single did not predict the likelihood of breaking up ( $b = .02$ ,  $p = .81$ ); nor did fear of being single interact with satisfaction to predict the likelihood of breaking up ( $b = -.08$ ,  $p = .19$ ).

Our key analysis centered on the subset of participants who experienced a breakup over the course of the study. Using hierarchical linear regression, we tested the hypothesis that, relative to weaker fear of being single, stronger fear of being single would predict a lower likelihood of initiating the breakup of a less satisfying relationship. Fear of being single, relationship satisfaction, and relationship length were standardized and entered in Step 1. The interaction between fear of being single and relationship satisfaction was entered in Step 2. Initiator status (1 = entirely the partner's decision to 5 = entirely the participant's decision) was entered as the dependent variable.

Once again, Step 1 revealed a main effect of satisfaction, such that participants who were more satisfied with their relationships at Time 1 reported that the breakup was less of a personal decision and more so a mutual or partner's decision ( $\beta = -.15$ ,  $p = .04$ ). There were no main effects of fear of being single ( $\beta = -.09$ ,  $ns$ )

or relationship length ( $\beta = .00$ ,  $ns$ ). The predicted interaction between fear of being single and satisfaction in Step 2 was marginally significant ( $\beta = .13$ ,  $p = .07$ ; see Figure 2). Simple effects tests revealed that for those with relatively higher relationship satisfaction at baseline, fear of being single did not predict breakup initiator status ( $\beta = .05$ ,  $ns$ ). However, among those with relatively lower relationship satisfaction at baseline, those with stronger fear of being single were significantly less likely than their less fearful counterparts to have initiated the breakup ( $\beta = -.18$ ,  $p = .04$ ). Framed differently, for those with relatively weaker fear of being single, lower satisfaction predicted significantly higher likelihood of initiating the breakup than higher satisfaction ( $\beta = -.27$ ,  $p = .006$ ). However, satisfaction did not predict initiator status for those with relatively stronger fear of being single ( $\beta = -.03$ ,  $ns$ ).

We next conducted the same analysis with attachment anxiety included as a covariate in Step 1, and with the interaction between attachment anxiety and satisfaction included as a covariate in Step 2 (as suggested by Yzerbyt et al., 2004). Analyses revealed that the interaction between fear of being single and satisfaction was significant when controlling for the main effect and interaction of anxious attachment ( $\beta = .21$ ,  $p = .02$ ). Furthermore, there was no significant main effect of anxious attachment predicting breakup initiation ( $\beta = .02$ ,  $ns$ ), and the interaction between anxious attachment and satisfaction was marginally significant ( $\beta = -.15$ ,  $p = .09$ ). Therefore, the effects of fear of being single on relationship maintenance were not accounted for by anxious attachment.

## Discussion

The results of Study 3 revealed that fear of being single is a longitudinal predictor of whether or not one initiates a breakup in a relatively less satisfying relationship. These results replicate and extend the findings from Study 2C, and suggest that fear of being single may motivate individuals to persist even when they are not happy in a relationship. These effects if anything became stronger when accounting for anxious attachment. Thus, both correlational and longitudinal data suggest that fear of being single is a unique predictor of settling for less in existing relationships.

### Studies 4A and 4B

Does the phenomenon of fear of being single leading to settling for less extend to selecting new partners? Given that those with

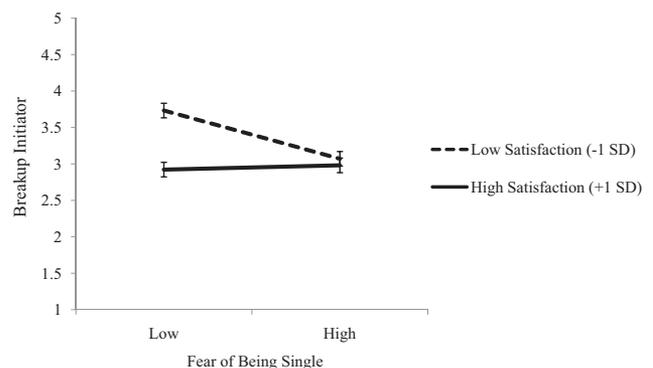


Figure 2. Breakup initiator status as a function of relationship satisfaction and fear of being single in Study 3. Error bars represent standard error.

stronger fear of being single may desperately desire a relationship, one strategy for maximizing their chances of beginning a relationship could be to set lower standards when it comes to choosing a partner. People tend to have schemas, or cognitive expectancies, of what they consider to be ideal in a romantic partner based on factors such as responsiveness and intimacy potential, physical attractiveness, and status/resources (Fletcher & Simpson, 2000; Fletcher et al., 1999). Being willing to settle for lower quality mates would increase the pool of acceptable dating candidates and thus reduce the risk of ending up single. In this sense, setting lower standards may provide psychological comfort, reassuring those with stronger fear of being single that they will not be single for long. Lowering their standards for a dating partner may therefore help ease people's fears about being single.

On the other hand, those higher in fear of being single may not consciously acknowledge lowering standards because of the psychological discomfort such an admission could evoke. The most commonly cited fear of singlehood in Study 1 was the risk of missing out on companionship and loving experiences. In other words, an important aspect of fear of being single is a desire for a high-quality relationship. Therefore, regardless of whether or not those with stronger fear of being single actually settle for lower quality partners, they may not be open to admitting this to themselves. It may be threatening to acknowledge holding low standards, out of fear that one may not find a quality relationship. Indeed, Tolmacz (2004) found that anxiously attached individuals reported less willingness to compromise their ideal mate standards. It is unclear, therefore, whether the insecurity of fear of being single would prompt individuals to set lower or higher standards for a mate. The purpose of Studies 4A and 4B was to explore whether or not those with stronger fear of being single tend to report lower standards for a mate. Studies 4A and 4B were correlational studies in which participants reported their fear of being single and their standards for a dating partner. Participants in both studies were asked about their ideal mate characteristics. However, it is possible that people's dream partner is not affected by their anxieties about being single, but perhaps the extent to which they are willing to accept deviations from their ideal partner (i.e., compromise their standards) is driven by fear of being single. Participants in Study 4B were therefore also asked to indicate the minimum for which they would be willing to settle in order to date someone.

## Method

### Participants and procedure.

**Study 4A.** Participants were recruited online through Amazon.com's Mechanical Turk ([www.mturk.com](http://www.mturk.com)). A total of 254 individuals completed the survey. However, 8 individuals were excluded because of response sets. There remained 246 participants (161 women, 84 men, 1 unidentified), 88 single and 158 in relationships. Participants ranged in age from 18 to 78 years old ( $M = 31.8$ ,  $SD = 11.9$ ). Of the participants, 218 identified as heterosexual, and 28 identified otherwise (6 homosexual, 17 bisexual, 3 undecided/questioning, 1 other, and 1 unidentified). Participants completed the following measures in the order presented.

**Study 4B.** Participants were again recruited through Mechanical Turk. In accordance with other hypotheses being explored in

these data, individuals were required to be single at the time of the study to be eligible to participate. One hundred fifty-nine participants completed the survey. However, 7 participants were excluded because they were in serious romantic relationships, and 11 were excluded because of response sets. There remained 141 participants (86 women, 55 men) included in analyses. Participants ranged in age from 18 to 78 years old ( $M = 30.00$ ,  $SD = 10.41$ ). Of these participants, 121 identified as heterosexual, 6 as homosexual, 9 as bisexual, 4 as undecided/questioning, and 1 was unidentified. Participants completed the following measures online in the order listed.

### Measures.

**Fear of being single.** Participants first completed the six-item Fear of Being Single Scale (Study 4A:  $M = 2.77$ ,  $SD = 1.09$ ,  $\alpha = .83$ ; Study 4B:  $M = 2.93$ ,  $SD = 1.08$ ,  $\alpha = .87$ ).

**Attachment style.** Anxious attachment was assessed with the ASQ (Feeney et al., 1994; Study 4A:  $M = 3.18$ ,  $SD = 0.85$ ,  $\alpha = .88$ ; Study 4B:  $M = 3.39$ ,  $SD = 0.88$ ,  $\alpha = .91$ ).

**Ideal partner standards.** To gauge participants' standards for a romantic partner, we provided participants in Study 4A with a series of hypothetical traits on a measure adapted from Buss and Shackelford (2008) and asked them to indicate, "In a romantic partner, how important are the following characteristics?" Participants responded on a scale from  $-2$  (*undesirable—a "deal breaker"*) to  $2$  (*indispensable—a "must have"*). Traits were aggregated to form domains of standards for physical attractiveness (5 items: physically attractive, good looking, sexually appealing, physically fit, and good health;  $M = 0.96$ ,  $SD = 0.50$ ,  $\alpha = .81$ ), resources (3 items: high income, good earning capacity, and good financial prospect;  $M = 0.40$ ,  $SD = 0.67$ ,  $\alpha = .84$ ), good parenting potential (5 items: desire for home and children, good cook and housekeeper, priorities of raising children well, fond of children, and likes children;  $M = 0.85$ ,  $SD = 0.78$ ,  $\alpha = .86$ ), and good partner potential (8 items: priorities of being a loving partner, devoted to you, loyal, mutual attraction/love, kind and understanding, emotional stability and maturity, pleasing disposition/personality, and dependable character;  $M = 1.51$ ,  $SD = 0.47$ ,  $\alpha = .88$ ).

To ensure that effects for ideal partner standards were not due to the specific instrument used, we employed a different scale in Study 4B than in 4A. To gauge standards for an ideal partner, we provided participants in Study 4B a series of traits and asked them to indicate the percentile score that would be most desirable for that trait (e.g., Regan, 1998). This method enabled us to determine above what percentage of all other same-sex individuals one's perfect partner would fall on a given characteristic. Responses were provided in percentile format, ranging from 0% to 100%. Traits were aggregated to form assessments of ideal standards for physical attractiveness (3 items: physically attractive, sexy, and healthy;  $M = 69.63\%$ ,  $SD = 17.71$ ,  $\alpha = .76$ ), resources (4 items: wealthy, powerful, good earning capacity, and has material possessions;  $M = 48.02\%$ ,  $SD = 18.99$ ,  $\alpha = .82$ ), good parenting potential (1 item: wants children;  $M = 47.89\%$ ,  $SD = 35.84$ ), and good partner potential (4 items: attentive to partner's needs, easy-going, friendly, and good sense of humor;  $M = 74.13\%$ ,  $SD = 15.69$ ,  $\alpha = .83$ ). All participants completed ideal partner standards first as an anchor from which to base minimum partner standards.

**Minimum partner standards.** After evaluation of ideal partner standards, participants in Study 4B were provided with a list of the same traits and were asked to indicate the minimum percentile

score that they would find acceptable when considering a potential romantic partner. Responses were again provided in percentile format, ranging from 0% to 100%. Participants rated the extent to which they would settle on physical attractiveness ( $M = 48.50\%$ ,  $SD = 20.25$ ,  $\alpha = .83$ ), resources ( $M = 31.42\%$ ,  $SD = 19.35$ ,  $\alpha = .88$ ), parenting potential ( $M = 31.86\%$ ,  $SD = 33.59$ , single item thus no  $\alpha$ ), and good partner potential ( $M = 53.16\%$ ,  $SD = 19.28$ ,  $\alpha = .89$ ).

## Results

Correlations between fear of being single and dating standards in each domain of physical attractiveness, resources, good parent, and good partner are presented in Tables 5 and 6. The first columns in the tables present zero-order correlations, and the second columns present partial correlations controlling for anxious attachment.

**Study 4A.** With regard to standards for attractiveness, resources, and being a good partner, the zero-order correlations with fear of being single were not significant. However, fear of being single was significantly, positively correlated with standards for being a good parent.<sup>4</sup> Moreover, the effects held controlling for anxious attachment, with the exception of standards for attractiveness, which were positively correlated with fear of being single when accounting for anxious attachment. Furthermore, there were no significant interactions for all four standards domains between fear of being single and participant age, sex, relationship status, or sexual orientation (comparing heterosexual with all nonheterosexual categories combined).

**Study 4B.** The results for ideal standards replicate those of Study 4A, such that fear of being single did not significantly predict standards for attractiveness, resources, or good partner potential, and they predicted marginally higher standards for good parenting potential. Moreover, participants' minimum standards were not predicted by fear of being single, with the exception of good parenting potential, which was again positively predicted by fear of being single.

Columns 3 and 4 in Table 6 display the correlations controlling for anxious attachment. All findings held controlling for anxious attachment. Furthermore, there were no significant interactions of fear of being single with participant age or sexual orientation, but there were mixed results for interactions with participant sex. There was an interaction between sex and fear of being single predicting ideal standards for good parenting ( $\beta = -.20$ ,  $p = .05$ ), such that fear of being single predicted higher ideal standards for parenting potential among women ( $\beta = .27$ ,  $p = .01$ ) but not

Table 6  
Correlations With Fear of Being Single in Study 4B

Standard	Zero-order correlations		Controlling for anxious attachment	
	Ideal standards	Minimum standards	Ideal standards	Minimum standards
Attractiveness	-.03	-.02	.10	.09
Resources	.05	.03	.04	.04
Good parent	.14 <sup>†</sup>	.17*	.15 <sup>†</sup>	.18*
Good partner	.09	.03	.00	.01

<sup>†</sup>  $p < .10$ . \*  $p < .05$ .

among men ( $\beta = -.08$ ,  $ns$ ). There was also an interaction between sex and fear of being single predicting ideal standards for good partner potential ( $\beta = -.26$ ,  $p = .01$ ), such that women reported higher ideal standards for a good partner when they had a greater fear of being single ( $\beta = .24$ ,  $p = .02$ ), but men did not ( $\beta = -.20$ ,  $ns$ ). There were no other interactions with ideal standards, and no interactions with minimum standards.

## Discussion

The results of Studies 4A and 4B suggest that self-reported dating standards are not lower for those with stronger fear of being single. Whether participants were asked about their standards for an ideal partner or the bare minimum for which they would settle in a partner, fear of being single was consistently unrelated to dating standards. In fact, in rare cases where fear of being single was associated with dating standards, it was actually associated with higher standards. In particular, those with stronger fear of being single reported higher standards for a partner who would be a good parent. This finding suggests that having children and a family is an important component of fear of being single. Indeed, participants in Study 1 noted in their open-ended responses about being single that missing out on having children was a relevant concern. Furthermore, an item in the Fear of Being Single Scale taps into fears about not having and raising children and, as we note in Footnote 4, may be driving the effects in Studies 4A and 4B. It appears, then, that when considering a hypothetical mate, the prospect of dating someone who does not want children may be more of a "dealbreaker" for those with stronger fear of being single, at least at the level of abstract standards. Furthermore, the effect in Study 4B (although not Study 4A) revealed a moderation by participant sex, such that women with stronger fear of being single held higher standards for an ideal partner with parenting and partner potential than did men. Although effects that do not replicate across studies should be interpreted cautiously, it is possible

Table 5  
Correlations Between Fear of Being Single and Dating Standards in Study 4A

Standard	Zero-order correlations	Correlations controlling for anxious attachment
Attractiveness	.03	.15*
Resources	.03	.10
Good parent	.22***	.22***
Good partner	.06	.06

\*  $p < .05$ . \*\*\*  $p < .001$ .

<sup>4</sup> This positive association appears largely attributable to the item on the Fear of Being Single Scale having to do with a desire for children (i.e., "I need to find a partner before I'm too old to have and raise children"). Analyses excluding this item revealed mixed effects for the association between fear of being single and standards for good parenting potential (in Study 4A,  $r = .08$ ,  $p = .47$ , for single participants and  $r = .26$ ,  $p = .001$ , for participants in relationships; in Study 4B,  $r = .06$ ,  $p = .46$ , for ideal standards and  $r = .12$ ,  $p = .15$ , for minimum standards). Overall, it appears that the association between fear of being single and higher standards for parenting is largely driven by this child-relevant scale item. We thank Otmar Lipp for the suggestion to conduct this analysis.

that such sex differences reflect concerns over parental investment. Women invest a greater amount of reproductive time and energy per child than men, which may make them more selective and concerned with paternal support (e.g., Geary, 2000).

Although participants did not report a willingness to lower their standards when choosing a mate, self-reported standards do not always predict behavior. For instance, speed-dating research has shown a mismatch between what people claim they want in a partner before a dating event and what they ultimately select during their real dating interactions (Eastwick & Finkel, 2008). In this way, those with stronger fear of being single may state they would not settle for a lower quality partner, but they may behave differently when presented with an actual dating prospect. Therefore, the purpose of Study 5 was to explore whether those with stronger fear of being single express romantic interest in actual dating prospects of relatively lower quality.

### Study 5

To examine whether those with stronger fear of being single are willing to settle for lower quality dating partners, we asked participants in Study 5 to indicate their desire to date more or less desirable dating targets in an Internet dating scenario. Desirability was experimentally manipulated by varying the degree to which targets were high versus low in partner responsiveness. Responsive partners are caring, understanding, and validating (Reis, Clark, & Holmes, 2004). Those who perceive their relationship partners as responsive feel more intimate, more satisfied, and more committed to their relationships (Karney & Bradbury, 1995; Reis et al., 2004). Therefore, to the extent that individuals would be willing to compromise their standards for a responsive partner, they would be settling for less on a central component of good relationships.

After reading a dating target's profile consisting of a photo and a self-description, participants rated their romantic interest, assessed as their degree of interest in the target's personality and desire to go on a date with the target. We hypothesized that those with stronger fear of being single would express greater romantic interest in the unresponsive targets than would their less fearful counterparts. Furthermore, to account for the possibility that participants would express romantic interest in lower quality targets due to motivated perceptions that they could form a successful relationship with a lower quality target, participants evaluated the extent to which they anticipated being able to form a successful, lasting relationship with the target.

### Method

**Participants and procedure.** Participants were single, heterosexual, undergraduate women who participated for course credit. This study included only heterosexual women for simplicity of study material preparation (i.e., only male dating profiles were presented). Ninety-nine participants began the study, but 11 participants were excluded: One participant was excluded because she reported being in a serious relationship, three participants were excluded because they left the majority of questions blank, one participant experienced language difficulties, one participant left the study for an extended period of time to take a phone call, and five participants revealed response sets. There remained 88 female participants in our analyses.<sup>5</sup> These participants ranged in age from

17 to 32 years old ( $M = 18.73$ ,  $SD = 2.06$ ). Eighty-four participants indicated they were single, and four reported they were casually dating.

Participants first completed questionnaires assessing fear of being single and attachment style. Next, under the cover story that the study was about "personality and evaluations of online dating profiles," participants viewed an ostensibly real Internet dating profile of a man from the Toronto area. The dating profile included an attractive male photo, as well as a written profile that depicted the man as either high or low in partner responsiveness. Following the profile, participants evaluated the target on attractiveness and responsiveness and indicated their romantic interest in the target.

#### Materials and measures.

**Fear of being single.** Participants completed the Fear of Being Single Scale ( $M = 2.69$ ,  $SD = 0.99$ ,  $\alpha = .84$ ).

**Attachment style.** Attachment style was again assessed with the ASQ (Feeney et al., 1994;  $M = 3.22$ ,  $SD = 0.91$ ,  $\alpha = .90$ ).

**Dating profiles.** Dating profiles were created by the authors. All profiles included one of two counterbalanced attractive male photos gathered from the Internet, pilot tested for equivalency in physical attractiveness,  $F(1, 21) = 2.51$ ,  $p = .13$ . Each photo was accompanied by an "About Me" section that the men had supposedly written themselves. These biographies differed in the extent to which the man appeared responsive. Pilot testing revealed a significant difference in perceived caring and responsiveness between the two profiles,  $F(1, 20) = 303.60$ ,  $p < .001$ . Those in the high responsiveness target condition read a profile wherein the target made statements such as, "When I'm dating someone, I really care about putting in the effort and making it work. For me, that means paying attention to my girlfriend and getting to know who she really is as a person," and "I figure the most important thing is that we're there for each other, no b.s." Those in the low responsiveness target condition read a profile with statements such as, "I love what I do, so I need someone who respects that and is willing to take the back seat when necessary," and "I like to keep conversations light and not too serious when they're not work-related, and I most prefer situations that are easy and problem-free."

**Responsiveness.** As a manipulation check, participants rated the responsiveness of the male target. The manipulation check was an aggregate of the questions, "How caring is this individual?" "How considerate is this individual?" and "How responsive does this individual seem toward his future partner's needs?" rated on a scale from 1 (*not at all*) to 5 (*extremely*),  $M = 3.04$ ,  $SD = 1.29$ ,  $\alpha = .93$ .

**Attractiveness.** To confirm that the attractiveness of the target photos was not affected by responsiveness condition or fear of being single, participants rated the target male on the following items developed by the authors, on a scale from 1 (*not at all*) to 5 (*extremely*): attractive, handsome, and cute. Items were aggregated to form a single attractiveness rating ( $M = 3.37$ ,  $SD = 0.78$ ,  $\alpha = .85$ ).

**Romantic interest.** Participants evaluated the extent to which they were romantically interested in the target males. Romantic interest was assessed with items developed by the authors tapping

<sup>5</sup> This sample of participants was included in Study 5 of Spielmann, Maxwell, MacDonald, and Baratta (2013), but the present associations have not been published elsewhere.

into expectations that one would “click” romantically with the target, interest in learning more about the target, the target’s desirability as a romantic partner, and the extent to which participants desired to go on a date with the target. Ratings were made on a scale from 1 (*not at all*) to 5 (*extremely*);  $\alpha$  of the four items was .88 ( $M = 2.55$ ,  $SD = 0.94$ ).

**Anticipated romantic success.** We gauged participants’ anticipated romantic success with the target with the item “How successfully do you think you and this individual could form a lasting romantic relationship?” Participants indicated their anticipated relationship success on a scale from 1 (*not at all*) to 5 (*extremely*),  $M = 2.22$ ,  $SD = 1.00$ .

## Results

### Manipulation checks.

**Perceived responsiveness.** To confirm that responsiveness condition influenced participants’ perceptions of the targets’ responsiveness, we conducted a hierarchical regression analysis for perceived responsiveness. Condition (dummy coded: 0 = low responsiveness condition, 1 = high responsiveness condition) and fear of being single (standardized) were entered in Step 1. The interaction between responsiveness condition and fear of being single was entered in Step 2. The analysis revealed a main effect of responsiveness condition ( $\beta = .87$ ,  $p < .001$ ), such that those who read the high responsiveness profile rated the target as significantly more responsive than did those who read the low responsiveness profile. There was no effect of fear of being single ( $\beta = -.03$ ,  $ns$ ). Moreover, the interaction between condition and fear of being single was not significant ( $\beta = -.11$ ,  $ns$ ).

**Attractiveness.** The same regression analysis as above was conducted on ratings of target attractiveness. Neither responsiveness condition ( $\beta = .08$ ,  $ns$ ) nor fear of being single ( $\beta = .11$ ,  $ns$ ) was a significant predictor of attractiveness ratings; nor was the interaction between condition and fear of being single ( $\beta = -.06$ ,  $ns$ ).

**Romantic interest.** To explore our primary hypothesis that those with stronger fear of being single may express romantic interest in lower quality dating targets, we regressed romantic interest in the target onto responsiveness condition and fear of being single in Step 1 and their interaction in Step 2. Responsiveness condition was a significant predictor of romantic interest ( $\beta = .32$ ,  $p = .002$ ), such that those who read the high responsiveness profile were more romantically interested in the target than were those who read the low responsiveness profile. There was no main effect of fear of being single, although the data reflect a nonsignificant positive trend ( $\beta = .17$ ,  $p = .11$ ). However, the interaction between responsiveness condition and fear of being single was significant ( $\beta = -.29$ ,  $p = .05$ ; see Figure 3). Simple effects tests were conducted to explore the effects of fear of being single at  $\pm 1$   $SD$  within each condition. Within the high responsiveness condition, fear of being single was not a significant predictor of romantic interest ( $\beta = -.02$ ,  $ns$ ). Within the low responsiveness condition, fear of being single was a significant predictor of romantic interest ( $\beta = .37$ ,  $p = .01$ ), such that those with stronger fear of being single were more romantically interested in the low responsiveness target than were those with weaker fear of being single. Framed differently, although those with weaker fear of being single were more romantically interested in the high responsive-

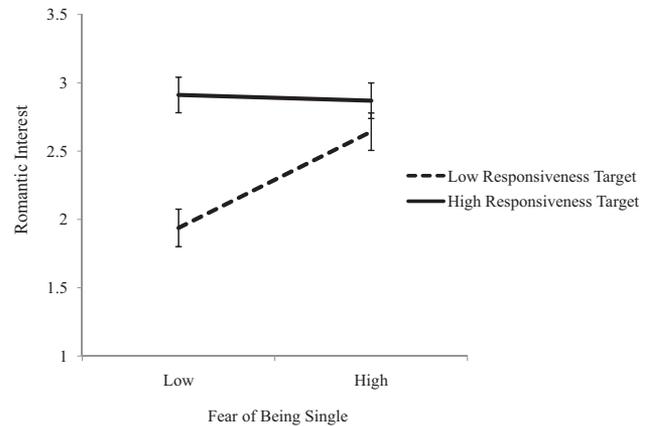


Figure 3. Romantic interest as a function of target responsiveness and fear of being single in Study 5. Error bars represent standard error.

ness target than the low responsiveness target ( $\beta = .52$ ,  $p < .001$ ), those with stronger fear of being single showed no difference in preference between the high responsiveness and low responsiveness targets ( $\beta = .12$ ,  $ns$ ). This interaction was not further moderated by participant age ( $\beta = -.009$ ,  $ns$ ).

All effects of fear of being single on romantic interest remained significant when accounting for anxious attachment, which was not a significant predictor of romantic interest in our model ( $\beta = -.12$ ,  $ns$ ). The fear of being single by responsiveness condition interaction remained significant ( $\beta = -.46$ ,  $p = .01$ ), when controlling for bias due to the interaction between anxious attachment and responsiveness condition (Yzerbyt et al., 2004). Importantly, the interaction between anxious attachment and responsiveness condition was not significant ( $\beta = .29$ ,  $ns$ ).

**Anticipated romantic success.** To examine the possibility that those with stronger fear of being single are more likely to believe that they could form a successful lasting relationship with less desirable targets, we regressed anticipated romantic success onto responsiveness condition, fear of being single, and their interaction. Responsiveness condition was a significant predictor of anticipated romantic success ( $\beta = .42$ ,  $p < .001$ ), such that people expected to be able to form a more successful lasting relationship with the high responsiveness target than the low responsiveness target. However, there was no main effect of fear of being single ( $\beta = .12$ ,  $ns$ ); nor was there a significant interaction ( $\beta = -.03$ ,  $ns$ ).

## Discussion

The results of Study 5 suggest that women with stronger fear of being single may select dating partners in a relatively nondiscriminating manner. Despite accurate recognition of the responsiveness of targets, and despite lower expectations of forming a successful, lasting relationship with the less responsive target, those with stronger fear of being single nonetheless expressed greater romantic interest in the low responsiveness target. That is, those with stronger fear of being single were not only more romantically interested in the less responsive target compared to their less fearful counterparts, but they were also relatively equally interested in both the responsive and unresponsive targets. These find-

ings suggest that romantic interest on the part of those with stronger fear of being single is not informed by perceptions of responsiveness or desirability in the same way that it is for less fearful individuals. As a consequence, women with stronger fear of being single may be prone to being equally drawn to both responsive and unresponsive partners.

### Study 6

Study 6 was designed to replicate and extend the results of Study 5. Study 6 included both male and female participants, to examine whether the effect of fear of being single on romantic interest in lower quality dating partners can be extended to both sexes. Furthermore, Study 6 tested for willingness to compromise more generally. Perhaps people are willing to compromise on responsiveness but not on other domains in order to enter a relationship. For instance, Study 4A demonstrated that fear of being single predicts higher standards for attractiveness (when controlling for anxious attachment). Study 6 therefore also included manipulations of physical attractiveness. Finally, participants in Study 6 reported their explicit desires for having sex, going on a date, and forming a long-term relationship with each target. Although participants in Study 5 evaluated romantic interest largely in terms of the target's general desirability and romantic appeal (e.g., only one item tapped into explicit desire to go on a date), this more explicit measure of romantic interest in Study 6 provides a powerful test of the effect of fear of being single on willingness to settle, as it taps into desires that may promote actual initiation of lower quality relationships. We again hypothesized that those with stronger fear of being single would express greater romantic interest in less responsive and less attractive dating targets than their less fearful counterparts.

### Method

**Participants and procedure.** Participants were single, heterosexual men and women recruited from Mechanical Turk. A total of 252 participants completed the survey, with 214 (123 women, 91 men) included in analyses. Two participants were excluded for being in a romantic relationship, one reported being neither heterosexual nor bisexual, and 35 revealed response sets. Participants ranged in age from 18 to 68 years old ( $M = 29.5$ ,  $SD = 10.8$ ).

The procedure was similar to that of Study 5, such that participants completed measures of fear of being single and anxious attachment and then evaluated an ostensibly real Internet dating profile. In addition to the manipulation of responsiveness used in Study 5, the targets in the present study also varied in attractiveness, with participants viewing either a highly attractive or less attractive photograph with the profile. To ensure that effects were not due to particular photos, participants were randomly assigned to view one of two attractive or unattractive photos.

#### Measures.

**Fear of being single.** Participants first completed the Fear of Being Single Scale ( $M = 2.79$ ,  $SD = 1.04$ ,  $\alpha = .85$ ).

**Attachment style.** Participants completed the anxious attachment ( $M = 3.20$ ,  $SD = 0.90$ ,  $\alpha = .90$ ) subscale of the ASQ (Feeney et al., 1994).

**Attitudes toward online dating.** Online dating is sometimes considered as a less desirable means of meeting someone (e.g.,

Wildermuth, 2004). We therefore wanted to take into account participants' general attitudes toward online dating when evaluating the dating targets. Participants were asked about their perceptions of the ease of meeting someone online and the quality of partners available online. Participants responded on a scale from 1 (*not at all*) to 5 (*very much*) to two items, "How easy do you think it would be to meet a romantic partner on an online dating website?" and "How likely is it you could meet a desirable, high-quality dating partner on an online dating website?" These items were aggregated to form a measure of positive attitudes toward online dating ( $M = 2.66$ ,  $SD = 0.99$ ,  $\alpha = .73$ ).

**Dating profiles.** Target responsiveness was manipulated with the same profiles as in Study 5. Furthermore, participants were randomly assigned to view either an attractive or unattractive photo in conjunction with the profile. Within the attractive and unattractive conditions, participants viewed one of two randomly assigned photos. Pilot tests revealed a significant difference in attractiveness between the attractive male photos ( $M = 3.01$ ,  $SD = 0.15$ ) and unattractive male photos ( $M = 1.40$ ,  $SD = 0.08$ ),  $F(1, 21) = 101.72$ ,  $p < .001$ , and between attractive female photos ( $M = 4.01$ ,  $SD = 0.11$ ) and unattractive female photos ( $M = 1.74$ ,  $SD = 0.11$ ),  $F(1, 24) = 399.08$ ,  $p < .001$ .

**Responsiveness.** As a check of the responsiveness manipulation, participants rated the extent to which the target was caring, considerate, and would be responsive to his or her partner's needs, on a scale from 1 (*not at all*) to 5 (*extremely*),  $M = 2.73$ ,  $SD = 1.31$ ,  $\alpha = .96$ .

**Attractiveness.** As a manipulation check of the attractiveness manipulation, participants rated the extent to which the target was attractive, cute, sexy, and handsome/beautiful (depending on target sex), on a scale from 1 (*not at all*) to 5 (*extremely*),  $M = 2.55$ ,  $SD = 1.05$ ,  $\alpha = .94$ .

**Romantic interest.** Building on Study 5, romantic interest in the present study was captured with items assessing more explicit romantic desires. As in Study 5, participants reported on a scale from 1 (*not at all*) to 5 (*extremely*) the extent to which they would like to go on a date with the target. However, participants additionally rated the extent to which they would like to have sex with the target and would like to form an exclusive relationship with the target. These three items were aggregated to form a single assessment of romantic interest reflecting relationship approach ( $M = 1.95$ ,  $SD = 1.05$ ,  $\alpha = .88$ ).<sup>6</sup>

**Anticipated romantic success.** Once again, participants indicated the extent to which they expected they could successfully form a lasting romantic relationship with the target, on a scale from 1 (*not at all*) to 5 (*extremely*),  $M = 1.90$ ,  $SD = 1.06$ .

### Results

**Attitudes toward online dating.** We first explored whether general attitudes toward online dating affected people's perceptions of the dating targets. The analysis revealed that the more positive attitudes participants held toward online dating, the more attractive they perceived the targets,  $r(214) = .12$ ,  $p = .08$ ; the more romantic interest they expressed toward the targets,  $r(214) =$

<sup>6</sup> The three items assessing interest in dating, sex, and long-term relationships loaded onto a single factor, suggesting that these items could not be parsed into short-term versus long-term mating goals (e.g., Gangestad & Simpson, 2000).

.16,  $p = .02$ ; and the more they expected being able to form a lasting relationship with the target,  $r(214) = .19$ ,  $p = .006$ . Because attitudes toward online dating were associated with our dependent variables of interest, all analyses included attitudes toward online dating as a covariate.

#### Manipulation checks.

**Perceived responsiveness.** To confirm that responsiveness condition influenced perceptions of the targets' responsiveness, we conducted a hierarchical regression analysis for perceived responsiveness. Responsiveness condition (0 = low responsiveness, 1 = high responsiveness), attractiveness condition (0 = unattractive, 1 = attractive), fear of being single (standardized), and online dating attitudes were entered in Step 1. All two-way interactions were entered in Step 2, and the three-way interaction was entered in Step 3. Online dating attitudes were entered only in Step 1. The analysis revealed a main effect of responsiveness condition ( $\beta = .80$ ,  $p < .001$ ), such that those who read the high responsiveness profile rated the target as significantly more responsive than those who read the low responsiveness profile. There were no main effects of attractiveness condition ( $\beta = .01$ ,  $ns$ ), fear of being single ( $\beta = .01$ ,  $ns$ ), or online dating attitudes ( $\beta = .03$ ,  $ns$ ). Moreover, neither the two-way nor three-way interactions were significant (all  $\beta$ s  $< |.111$ ).

**Attractiveness.** The same regression analysis as above was conducted on ratings of target attractiveness. The analysis revealed a main effect of attractiveness condition ( $\beta = .57$ ,  $p < .001$ ), such that participants rated the attractive photos as significantly more attractive than the unattractive photos. Moreover, there was a main effect of responsiveness condition ( $\beta = .18$ ,  $p = .001$ ), such that high responsiveness targets were rated as more physically attractive than low responsiveness targets. As shown earlier, online dating attitudes were also a significant, positive predictor of attractiveness ( $\beta = .12$ ,  $p = .04$ ). There was no main effect of fear of being single ( $\beta = -.04$ ,  $ns$ ). Once again, none of the higher order interactions were significant.

**Romantic interest.** As with the manipulation check analyses, romantic interest was regressed onto online dating attitudes, fear of being single, attractiveness and responsiveness conditions, and all two- and three-way interactions in separate steps. The analysis revealed a main effect of responsiveness condition ( $\beta = .23$ ,  $p < .001$ ) and attractiveness condition ( $\beta = .41$ ,  $p < .001$ ), such that participants were more romantically interested in the high responsiveness target and attractive target, respectively, than the low responsiveness and unattractive target, respectively. Online dating attitudes were also a significant, positive predictor of romantic interest ( $\beta = .15$ ,  $p = .01$ ). There was no main effect of fear of being single ( $\beta = -.05$ ,  $ns$ ).

Replicating the results of Study 5, there was a significant interaction between fear of being single and responsiveness condition ( $\beta = -.17$ ,  $p = .05$ ; see Figure 4). The pattern of results replicated those from Study 5. Simple effects tests show that within the high responsiveness condition, fear of being single was not a significant predictor of romantic interest ( $\beta = -.03$ ,  $ns$ ). However, within the low responsiveness condition, fear of being single was a marginally significant predictor of romantic interest ( $\beta = .21$ ,  $p = .06$ ), such that those with stronger fear of being single were more romantically interested in the low responsiveness target than those with weaker fear of being single. Framed differently, although those with weaker fear of being single were more romantically

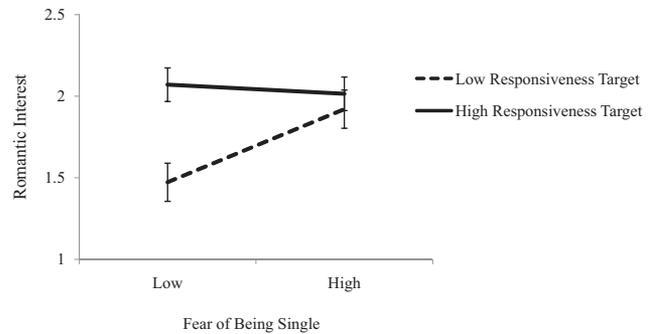


Figure 4. Romantic interest as a function of target responsiveness and fear of being single in Study 6. Error bars represent standard error.

interested in the high responsiveness target than the low responsiveness target ( $\beta = .29$ ,  $p = .007$ ), those with stronger fear of being single showed no difference in preference between the high responsiveness and low responsiveness targets ( $\beta = .05$ ,  $ns$ ).

Another significant interaction was found between fear of being single and attractiveness condition ( $\beta = -.20$ ,  $p = .02$ ; see Figure 5). Simple effects tests revealed that within the attractive condition, fear of being single was not a significant predictor of romantic interest ( $\beta = -.07$ ,  $ns$ ). However, within the unattractive condition, fear of being single was a marginally significant predictor of romantic interest ( $\beta = .21$ ,  $p = .06$ ), such that those with stronger fear of being single were more interested in the unattractive target than their less fearful counterparts. Furthermore, those with weaker fear of being single expressed considerably greater interest in the attractive target compared to the unattractive target ( $\beta = .48$ ,  $p < .001$ ), whereas those with high fear of being single expressed only marginally greater interest in the attractive target ( $\beta = .20$ ,  $p = .06$ ).

The two-way interaction between responsiveness condition and attractiveness condition was not significant ( $\beta = .13$ ,  $ns$ ); nor was the three-way interaction between all variables ( $\beta = -.02$ ,  $ns$ ). Inclusion of participant sex as a moderator in the model yielded a main effect of sex ( $\beta = -.40$ ,  $p < .001$ ), such that men expressed greater romantic interest than women. However, sex did not moderate the interaction between fear of being single and responsiveness condition ( $\beta = .14$ ,  $ns$ ) nor the interaction between fear of being single and attractiveness condition ( $\beta = .19$ ,  $ns$ ). Inclusion of participant age as a moderator yielded a main effect of age ( $\beta = -.13$ ,  $p = .04$ ), such that older participants expressed less romantic interest in the targets. However, age also did not moderate the interaction between fear of being single and responsiveness condition ( $\beta = .01$ ,  $ns$ ) nor the interaction between fear of being single and attractiveness condition ( $\beta = .19$ ,  $ns$ ).

The interaction between fear of being single and responsiveness condition was not significant when accounting for the main effect of anxious attachment and its interaction with responsiveness condition and attractiveness condition ( $\beta = -.12$ ,  $ns$ ). However, there was neither a significant main effect of anxious attachment ( $\beta = .10$ ,  $ns$ ), nor a significant interaction between anxious attachment and responsiveness condition ( $\beta = -.08$ ,  $ns$ ), nor a significant interaction between anxious attachment and attractiveness condition ( $\beta = -.05$ ,  $ns$ ). Therefore, although the interaction between fear of being single and responsiveness condition was not

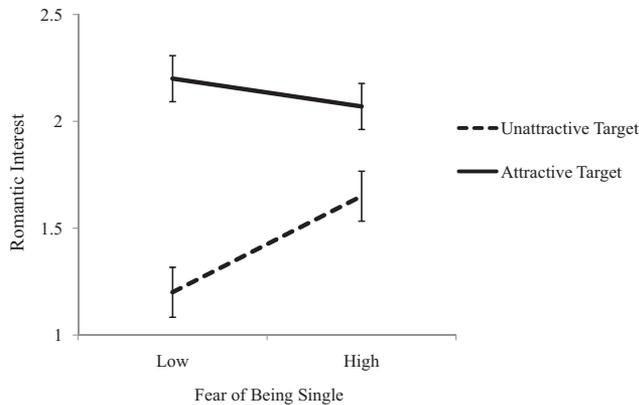


Figure 5. Romantic interest as a function of target attractiveness and fear of being single in Study 6. Error bars represent standard error.

significant when controlling for anxious attachment, the nonsignificant effects of anxious attachment make evident that the fear of being single effects cannot be explained by anxious attachment.

**Anticipated romantic success.** Anticipated romantic success with the target was regressed onto online dating attitudes, fear of being single, responsiveness and attractiveness conditions, and all interactions, as above. There were main effects of responsiveness condition ( $\beta = .40, p < .001$ ), as well as attractiveness condition ( $\beta = .14, p = .02$ ), such that participants anticipated greater romantic success with the high responsiveness target than with the low responsiveness target, as well as with the attractive target compared to the unattractive target. As previously mentioned, online dating attitudes were a significant positive predictor of anticipated romantic success with the target ( $\beta = .17, p = .007$ ). There was no main effect of fear of being single ( $\beta = .06, ns$ ).

Replicating the results of Study 5, the interaction between fear of being single and responsiveness condition was not significant ( $\beta = -.08, ns$ ), suggesting that those with stronger fear of being single do not necessarily express greater romantic interest in less responsive targets because they anticipate greater romantic success. However, there was a significant interaction between fear of being single and attractiveness condition ( $\beta = -.17, p = .05$ ). When participants evaluated the attractive target, fear of being single did not predict anticipated romantic success ( $\beta = -.008, ns$ ). However, when participants considered the unattractive target, fear of being single was a significant, positive predictor of anticipated romantic success ( $\beta = .23, p = .04$ ). Examined differently, those with weaker fear of being single anticipated greater romantic success with the attractive target than the unattractive target ( $\beta = .25, p = .03$ ), whereas those with stronger fear of being single anticipated equally high romantic success with both the attractive and unattractive targets ( $\beta = .006, ns$ ). No other interactions were significant. Once again, these results hold when accounting for anxious attachment.

This pattern of findings suggests that anticipated romantic success may explain (i.e., mediate) why those high in fear of being single express greater romantic interest in the less attractive targets. In the analysis predicting romantic interest, including anticipated romantic success as a mediator (by including the main effect as well as the interaction with attractiveness condition to account

for bias in the fear of being single by attractiveness condition interaction; Yzerbyt et al., 2004) reduced the fear of being single by attractiveness interaction to nonsignificance ( $\beta = -.14, p = .13$ ), with anticipated romantic success remaining a significant predictor of romantic interest ( $\beta = .51, p < .001$ ). A Sobel test suggested full mediation (Sobel =  $-1.93, p = .054$ ). There was, however, no evidence that romantic interest in less responsive dating targets is mediated by anticipated romantic success with those targets.

## Discussion

Those with stronger fear of being single appear to be willing to settle for less during mate selection. The results of Study 6 replicate those of Study 5, indicating that those with stronger fear of being single express relatively high romantic interest in less responsive dating partners. As in Study 5, participants generally recognized that the less responsive targets were in fact less responsive. However, despite this knowledge, those who more strongly feared being single expressed greater romantic interest in the unresponsive target than did their less fearful counterparts. Moreover, those who more strongly feared being single expressed relatively equal romantic interest in both the responsive and unresponsive targets. In other words, despite recognizing that some targets were less likely to be caring and supportive than others, those who more strongly feared being single did not seem to be taking a prospective partner's responsiveness into account when making decisions about romantic interest. Across both Studies 5 and 6, these results could once again not be accounted for by anxious attachment.

Anticipated romantic success did not serve to explain the desires of those with stronger fear of being single for less responsive dating targets. Those with stronger fear of being single were not expressing romantic interest in less responsive people because they more easily imagined being able to form successful relationships with them. Partner responsiveness is arguably one of the most fundamental components of satisfying, committed relationships (Maisei & Gable, 2009; Reis et al., 2004) and a key marker of high-quality, lasting relationships (Huston, Caughlin, Houts, Smith, & George, 2001; Karney & Bradbury, 1995). It is unfortunate, therefore, that those with stronger fear of being single may not be selecting partners on this trait. For one who fears being single, a responsive partner may provide the support and security needed to assuage concerns about abandonment, relationship dissolution, and future singlehood.

The results of Study 6 revealed that those with stronger fear of being single may be willing to settle not only for partners low in responsiveness but also those low in attractiveness. Unlike the responsiveness findings, however, greater interest in low attractiveness was explained by anticipation of greater romantic success. In fact, those who more strongly feared being single may have been attuned to the benefits of settling for a less physically attractive partner. A partner's lack of physical attractiveness may limit his or her romantic alternatives (e.g., Buss & Shackelford, 2008; Feingold, 1990), reducing mate competition and promoting the partner's romantic investment in the relationship (Rusbult et al., 1998). In this way, those with stronger fear of being single may be capable of securing their future relationship status if they are willing to settle for less attractive mates.

Although Studies 5 and 6 supported our hypothesis that those higher in fear of being single are more likely to settle for less at the mate selection stage, it is possible this effect emerged because participants were somewhat removed from the targets they were evaluating. Participants knew they were not going to meet the target being evaluated. Perhaps when coming face-to-face with a potential partner such that the costs of potentially compromising one's standards are more salient, those higher in fear of being single may not settle for less. Thus, in Study 7, we examined how fear of being single affects relationship initiation decisions in a speed-dating context. We hypothesized that those higher in fear of being single would be less selective during a speed-dating event by indicating interest in more potential partners. In addition, this study allowed us to examine the romantic attractiveness of individuals varying in fear of being single. By examining the romantic interest shown by others, we were able to assess whether fears about being single may be associated with relatively low interest from potential partners, which would suggest that fears of being single may be warranted. Finally, we explored whether the motivations people have to participate in a speed-dating event play a role in their decisions to be less selective. We hypothesized that those with stronger fear of being single would be motivated to speed-date in order to avoid being single rather than to pursue the potential rewards that a relationship has to offer such as a close, meaningful connection. Finally, we explored whether the motivations to speed-date served to explain why those with stronger fear of being single were less selective in expressing romantic interest.

## Study 7

### Method

**Participants and procedure.** Individuals who were attending speed-dating events organized by a local speed-dating company (25dates.com) were invited to participate in the study. Data were collected at six separate events in the Greater Toronto Area. In total, 120 individuals participated in the study. Eight participants were excluded from analyses for response sets, 3 for indicating a relationship status other than single, and 5 for not indicating their sex. The remaining participants (61 women, 43 men) ranged in age from 19 to 38 years old ( $M = 27.08$ ,  $SD = 4.02$ ).

At the speed-dating events, participants first completed measures of fear of being single, attachment style, and motivations to speed-date. They then went on a series of approximately 25 dates with members of the opposite sex, each date lasting three minutes. At the end of the event, participants indicated with whom they were interested in sharing their contact information.

#### Measures.

**Fear of being single.** Participants completed the Fear of Being Single Scale ( $M = 2.60$ ,  $SD = 1.00$ ,  $\alpha = .85$ ).

**Attachment style.** Attachment style was assessed with the Experiences in Close Relationship Scale Short Form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007), which asked participants to indicate their agreement with items on a scale from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Six items assessed participants' levels of attachment anxiety (e.g., "I need a lot of reassurance that I am loved by romantic partners";  $M = 3.78$ ,  $SD = 0.87$ ,  $\alpha = .56$ ).<sup>7</sup>

**Motivations to speed-date.** Participants indicated their reasons for attending a speed-dating event on a scale from 1 (*Disagree strongly*) to 7 (*Agree strongly*). These motivations were drawn from McClure et al. (2010), and two motivations expected to be particularly relevant to fear of being single were added ("to prevent being single any longer"; "to avoid being alone"). A factor analysis suggested that the scale items grouped into two broader motivation categories: avoidance goals (3 items: "to prevent being single any longer," "to avoid being alone," and "because I'm lonely";  $\alpha = .86$ ,  $M = 2.93$ ,  $SD = 1.55$ ) and approach goals (2 items: "because I could meet someone special," and "to look for a meaningful relationship";  $\alpha = .87$ ,  $M = 4.78$ ,  $SD = 1.61$ ).

**Romantic interest.** Following each date, participants indicated whether they would like to share their contact e-mail with each individual, by selecting yes/no beside that individual's dater number. At the end of the event, the total number of daters the participant selected was computed as a measure of romantic interest. The number of daters who indicated that they would like to share their contact information with the participant (regardless of the participant's mutual interest toward them) was computed to represent daters' romantic interest in the participant.

### Results

**Fear of being single and romantic interest.** We first tested whether fear of being single was systematically related to the number of daters in whom a participant expressed romantic interest and the number of daters who expressed romantic interest in the participant. The dependent variables represented frequency counts (number of daters the participant selected or was selected by), which violate the normality assumption of traditional regression. Thus, Poisson regressions with a log link function were used to account for the nonnormal distribution in the dependent variables (e.g., Cox, West, & Aiken, 2009; Gardner, Mulvey, & Shaw, 1995).<sup>8</sup> Because initial Poisson regressions evidenced significant overdispersion (whereby the data evidenced greater variability than expected for a standard Poisson regression,  $\phi_s > 2.74$ ), in each model a scaling parameter was estimated to correct for overdispersion (Cox et al., 2009). Participant sex significantly influenced the number of daters a participant selected,  $t(99) = 6.96$ ,  $p < .001$ , with men selecting significantly more daters ( $M = 12.7$ ,  $SD = 7.05$ ) than did women ( $M = 5.17$ ,  $SD = 3.86$ ). Sex was therefore entered as a control variable in all subsequent analyses. Sex did not significantly moderate the effects of fear of being single.

**Fear of being single and selectivity.** We first tested the hypothesis that those with stronger fear of being single would be less selective by opting to share their contact information with a greater number of individuals than their less fearful counterparts. The results supported this hypothesis. Fear of being single predicted romantic interest in a greater number of daters,  $b = .14$ ,  $SE = .07$ , Wald's  $\chi^2(1, N = 101) = 4.65$ ,  $p = .03$ . This effect remained

<sup>7</sup> One item ("I do not often worry about being abandoned") was less reliable than the other items. Reliability without this item is  $\alpha = .67$  and does not alter the pattern of results.

<sup>8</sup> Although the data were collected at different speed-dating events, the observations within a particular event were not significantly dependent (intraclass correlations  $< .10$ ,  $ps > .31$ ). Thus, nesting data within events using multilevel modeling techniques was not necessary.

marginally significant after controlling for the main effect of anxious attachment,  $b = .13$ ,  $SE = .08$ , Wald's  $\chi^2(1, N = 101) = 2.79$ ,  $p = .095$ , which was not a significant predictor of selectivity in the model,  $b = .02$ ,  $SE = .09$ , Wald's  $\chi^2(1, N = 101) = .06$ ,  $p = .81$ .

**Fear of being single and being selected.** We examined whether individuals higher in fear of being single garnered less romantic interest from others. We performed a Poisson regression predicting number of daters who expressed interest in dating the participant from fear of being single, entering sex as a covariate. Fear of being single did not significantly predict the number of individuals who were interested in dating the participant,  $b = -.04$ ,  $SE = .06$ , Wald's  $\chi^2(1, N = 101) = 0.52$ ,  $p = .47$ , an effect that did not change controlling for anxious attachment,  $b = -.07$ ,  $SE = .07$ , Wald's  $\chi^2(1, N = 101) = 0.96$ ,  $p = .33$ . Anxious attachment was not a significant predictor of selectivity in the model,  $b = .05$ ,  $SE = .08$ , Wald's  $\chi^2(1, N = 101) = 0.46$ ,  $p = .50$ .

**Fear of being single and motivations to speed-date.** Because the approach and avoidance goals for speed-dating were highly correlated ( $r = .58$ ), they were simultaneously regressed to predict fear of being single. Although avoidance goals were a significant positive predictor of fear of being single ( $\beta = .48$ ,  $p < .001$ ), approach goals were not a significant predictor of fear of being single ( $\beta = .05$ , *ns*).

**Fear of being single, avoidance goals, and selectivity.** We conducted a mediation analysis using the mediation package in R software, which enabled us to account for the fact the outcome variable was a count frequency (using a causal inference approach; Imai, Keele, & Tingley, 2010). We conducted a bootstrap analysis with 5,000 resamples, entering sex as a covariate in the mediation. This analysis revealed that the association between fear of being single and interest in a higher number of daters was fully mediated by avoidance goals (indirect effect estimate = 1.09, 95% CI [0.26, 2.10],  $p = .01$ ). When avoidance goals were taken into account, the association between fear of being single and number of daters selected became nonsignificant ( $b = .01$ ,  $SE = .09$ ,  $p = .87$ ). Importantly, the reverse mediation model was not supported (fear of being single remained a significant predictor of avoidance goals when number of daters selected was included,  $b = .91$ ,  $SE = .12$ ,  $p < .001$ ). Furthermore, the association between fear of being single and selecting more daters was not mediated by approach goals (indirect effect estimate = .29, 95% CI [-0.25, 0.99],  $p = .29$ ). These analyses suggest that speed-dating out of a desire to avoid being alone specifically may lead individuals higher in fear of being single to be less selective in a speed-dating context.

## Discussion

The results of Study 7 add further to the evidence that individuals higher in fear of being single are less discriminating in whom they are willing to date, even when the costs of compromise are sitting in front of them. Those higher in fear of being single were less selective, and this willingness to date a larger number of potential partners was explained by their motivations to avoid being alone. It is not the case that those with stronger fear of being single have to be less selective because they are less likely to be selected themselves. We did not find evidence that those higher in fear of being single garnered lower romantic interest from others than their less fearful counterparts.

The results of Study 7 once again hold accounting for anxious attachment. Importantly, attachment style in Study 7 was assessed with a different measure than the previous studies. The ECR-S used in the present study focuses more exclusively on attachment in romantic relationships than the ASQ. Therefore, the results of Study 7 suggest that the unique, predictive effects of fear of being single are distinguishable from anxious attachment even when both measures are focused on romantic relationships.

Previous research on speed-dating has found that prospective dating partners seem to be aware when others are being unselective in who they choose at the event. Moreover, such nonselective pursuit of relationships is typically perceived unfavorably by prospective dating partners (Eastwick, Finkel, Mochon, & Ariely, 2007; McClure et al., 2010). In the present study, however, we find no association between fear of being single—and its associated nonselectivity—and romantic interest garnered by others. It is possible either that fear of being single is not easily detected by prospective dating partners, or that the insecurity encompassed in fear of being single is perceived by prospective dating partners as relatively benign and thus not undesirable. Future studies should examine the extent to which fear of being single is detectable to others, and the perceptions people hold regarding others' fears about being single.

## General Discussion

The present research suggests that the fear of being single, long an aspect of lay theories of relationship behavior, may be a productive individual difference variable for relationship researchers. Studies 1, 2A and 2B explored the content of people's fears about being single and yielded a psychometrically valid and reliable Fear of Being Single Scale. Further, the present research suggests that those with stronger fears tend to lower their relationship standards both in existing relationships and when selecting new partners. Study 2C found that higher scores on the Fear of Being Single Scale predicted greater dependence in less satisfying relationships. Study 3 implemented longitudinal methodology to demonstrate that those with stronger fears of being single were less likely than their less fearful counterparts to initiate the dissolution of a relationship in which they were relatively dissatisfied. Turning to mate selection, Studies 4A and 4B showed that fear of being single was unrelated to ideal and minimum standards for a partner, showing that self-reports do not suggest a tendency to settle for less. However, Studies 5 and 6 (using experimental methodology) asked participants to indicate actual romantic interest and showed that those with stronger fears of being single were more interested in less responsive and less physically attractive targets. Finally, Study 7 explored the effects of fear of being single in a real-life, speed-dating context. Once again, fear of being single predicted less selectivity in choosing romantic partners. Taken together, these studies suggest that a fear of being single is consistently associated with settling for less from romantic relationships as a means of attempting to avoid ending up alone.

Importantly, these effects held accounting for age and sex and were found above and beyond more general insecurities typically investigated in the literature on close relationships, particularly anxious attachment. We found time and again that anxiously attached individuals experienced a stronger degree of fear of being single. However, the present research documented vulnerabilities

to compromising one's standards for a relationship related to fear of being single that were not related to anxious attachment. Taken together, the present research highlights how individual differences in fear of being single may clarify the previously mixed findings on the relation between insecurity and settling for less in relationships.

Given that fear of being single and anxious attachment are theoretically similar in the extent to which individuals experience chronic neediness and insecurity, why might fear of being single have such unique predictive power? Both types of insecure individuals may be chronically concerned about attachment figure availability and excessively seek reassurance about an attachment figure's devotion (e.g., Mikulincer, Birnbaum, Woddis, & Nachmias, 2000; Shaver, Schachner, & Mikulincer, 2005), but the key difference may be the specificity of the attachment figure desired. Those with stronger fear of being single may specifically require a romantic attachment figure to satisfy needs for security and intimacy. In contrast, individuals whose issue is more centered around anxious attachment generally may be able to find comfort with parents and close friends as attachment figures when they are single (e.g., Schachner, Shaver, & Gillath, 2008). Thus, the fear of being single construct may be more uniquely tapping into the motivation specifically to settle for less in the romantic domain. Future research examining the willingness to settle in domains such as friendship may help test this hypothesis.

The results of the present study suggest that singlehood is a relevant concern for a relatively large number of people. Close to 20% of participants in Study 1 openly expressed fears about being single, and another 15–20% expressed ambivalence or anticipated fear. Furthermore, the median scores on the Fear of Being Single Scale ranged from 2.67 to 2.83 on a 5-point scale across all studies in the present research, highlighting that half of the participants in our undergraduate and community samples were above the midpoint on the Fear of Being Single Scale. Considering how common fear of being single may be in the general population, it is important to consider its implications. The picture painted by the results of the present research is one of an individual high in neuroticism and social sensitivity who nevertheless may frequently remain in trying relational situations. This has the potential to be a toxic combination, and indeed, we see in Studies 2A and 2B that fear of being single is strongly associated with indicators of mental health difficulties such as depression and loneliness. Such difficulties may also serve to perpetuate the societal judgments of those who are single as being unhappy and unfulfilled (e.g., Greitemeyer, 2009), as the experience of those with stronger fear of being single may be generalized to singlehood overall. In other words, those with stronger fear of being single may be accurately portrayed in the quote by Anderson and Stewart (1994) presented at the opening of this paper. To the extent that this group of singles is more visible or salient, perceptions of singlehood as painful and lonely may be attributed more generally, perhaps serving to explain the negative judgments of singles documented in the literature (e.g., DePaulo & Morris, 2005; Greitemeyer, 2009; Hertel et al., 2007; Morris et al., 2007). However, the picture we are able to paint of those higher in fear of being single does not suggest that an accompanying feature is relatively low romantic attractiveness. The results of Study 3 demonstrate that those with stronger fear of being single were no more likely than their less fearful counterparts to experience a breakup, and Study 7 demonstrated that fear

of being single did not predict others' romantic interest in a speed-dating context. These findings suggest that those with stronger fear of being single may not be objectively off-putting to potential romantic partners and that such fears may be relatively unwarranted.

One issue that is important to consider is whether "settling for less" is in fact a maladaptive strategy. Indeed, willingness to weather difficult periods in relationships can be a valuable trait that may have positive relational effects. For instance, greater dependence and commitment predict sacrifice, forgiveness, relationship-maintaining attributions during conflict, and resilience against negative information about one's partner (e.g., Ariaga, Slaughterbeck, Cappelz, & Hmurovic, 2007; Finkel, Rusbult, Kumashiro, & Hannon, 2002; Menzies-Toman & Lydon, 2005; Van Lange et al., 1997). Furthermore, Joel, Gordon, Impett, MacDonald, and Keltner (2013) found that when people perceive their partner has invested in the relationship, they feel more grateful for their partner and experience increased commitment. In this way, those with stronger fear of being single may behave in ways that demonstrate their deep investment and commitment to the relationship, which may promote a lasting relationship by pleasing their partners and creating reciprocal dependence. A related issue is whether the prospect of being single is so frightening that those with stronger fear of being single experience higher well-being in dissatisfying relationships than when single. In supplemental analyses, we explored this question using the data in Study 2, which included participants who were single and in relationships. The results suggested that those who feared being single were no less (or more) depressed and lonely when in a less satisfying relationship than when single.<sup>9</sup> These data do not suggest that those who fear being single are better off in "bad" relationships than being single (which would justify settling for less), although perhaps measures of a sense of meaning or purpose would tell a different story.

A similar question arises as to whether lower fear of being single is always adaptive. For example, taken to the extreme, little concern over being single could be associated with an unwillingness to accommodate or settle for anything but the highest standards in a way that leaves romantic or sexual needs unmet. It is possible that relational status is a key moderator of any such effects, with a very low fear of being single among those in relationships reflecting security in the present relationship, and a low fear of being single among those who are single reflecting avoidance of intimacy. Nevertheless, these ideas are highly speculative, given that our data suggest almost exclusively positive consequences of a low fear of being single.

Although the present research has several strengths, including careful scale development, a multimethod approach to validation, diverse samples of students and community members, and consistent replication of key findings, the primary limitation of the present research is the exclusive focus on avoidance-based moti-

<sup>9</sup> For this analysis, high and low relationship satisfaction were categorized via median split. Three relationship groups were formed: single, low satisfaction relationship, and high satisfaction relationship. Relationship groups were dummy coded, and interactions with fear of being single were entered into hierarchical regressions. Fear of being single did not significantly interact with relationship group to predict depression ( $R^2$  change = .001,  $p = .79$ ) or loneliness ( $R^2$  change = .005,  $p = .34$ ).

variations. Our research focuses solely on perceptions of threat when it comes to being single and does not address the potential rewards of being single that may motivate people to be single. Similarly, we do not focus extensively on the potential rewards of being in a relationship that may motivate people to approach relationships (e.g., Spielmann, MacDonald, & Tackett, 2012). However, the results of Study 7 revealed that fear of being single was not associated with romantic approach motivations when it comes to relationship initiation. Although participants' open-ended responses in Study 1 provided some insight into the rewards of singlehood, such as independence and close connections with friends and family members, the wording of our question still prompted participants to focus on reasons for "not fearing being single" rather than explicitly wanting to be single. Future research would benefit from an exploration of the perceived rewards of being single and the relative influence of approach- and avoidance-based motivations when it comes to singlehood.

The present research also does not address the boundary conditions at which those with stronger fear of being single are not willing to settle for less. In our research, the targets under consideration were far from the least attractive and least responsive targets possible. This was necessary, given that Internet daters have a tendency to put their best face forward to get a date (Gibbs, Ellison, & Heino, 2006; Rowatt, Cunningham, & Druen, 1998). It would have been out of the ordinary for us to have depicted targets in an extremely unfavorable light. We cannot speculate on how undesirable targets would need to be before someone who fears being single would not be willing to be with them. Furthermore, there may be domains on which those with stronger fear of being single are unwilling to settle, such as parenting potential. Future research should explore how "low" those who fear being single will truly go and whether there are certain domains on which those with stronger fear of being single are unwilling to compromise.

Although the longitudinal results of Study 3 shed light on potential long-term consequences of fear of being single, the present research cannot speak to the antecedents of such fears. Some of the open-ended responses in Study 1 indicated that past experiences of heartbreak or loneliness affected the respondent's feelings about being single (either for better or worse), but the present research does not clearly examine the root of fears about being single. Although some of our results suggest that fear of being single may not be associated with objective desirability or greater likelihood of losing one's romantic partner, the extent to which these fears are prompted by past experiences of romantic rejection, prolonged singlehood, or other factors is not yet clear. Future research should further explore the antecedents of fears about being single to inform methods for preventing or resolving such insecurities in their early stages. Similarly, future research should explore additional long-term effects of fear of being single. Does selecting a relationship partner lower in responsiveness exacerbate fears of being single over time? Does a stable, fulfilling relationship alleviate fears over time? Research on insecure attachment styles suggests that repeated experiences with validating, responsive partners can slowly increase security over time (e.g., Fuller & Fincham, 1995; Mikulincer & Shaver, 2007; Ruvolo, Fabian, & Ruvolo, 2001). Although this may be the case with fear of being single as well, it is also possible that such relationship experience could potentially heighten people's fears of losing their current partner in particular. Future research could examine

whether length of the relationship and responsiveness of one's partner produces different concerns about losing one's specific relationship vs. being single more generally.

In conclusion, the extent to which one fears being single appears to have important consequences for relationship decisions. During relationship initiation and maintenance, those who fear being single may prioritize relationship status above relationship quality, settling for less responsive and less attractive partners and remaining in relationships that are less satisfying. This is the first research to empirically explore chronic concerns about singlehood, and it suggests that fear of being single may be an important construct to consider in relationship research.

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