

# Settling down without settling: Perceived changes in partner preferences in response to COVID-19

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## Abstract

The goal of this study was to explore the positive association between concern related to COVID-19 and single individuals' perceived changes to their partner preferences. In addition, we investigated the mediating role of fear of being single. Results indicated that people with greater COVID-19 concern perceived an increase in the importance of stability, family commitment, and physical/social attractiveness, as well as fear of being single. Fear of being single only negatively predicted the importance of physical/social attractiveness, whereas it positively predicted the importance of stability and family commitment. Thus, in most cases, people with a greater concern for COVID-19 perceived themselves to become more selective, even when they exhibit higher levels of fear of being single.

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**Keywords**

COVID-19, fear of being single, mate selection, partner preferences

The spread of COVID-19 has generated large-scale social changes. The most obvious of these changes is isolation: To slow the spread of the virus, government officials across the globe have asked people to stay at home, and to only leave home when necessary (CDC, 2020). Despite being encouraged to self-isolate, online romantic and sexual initiation attempts may have actually gained momentum. For example, OkCupid reported a 30% increase in messages sent by users worldwide since social distancing measures were put in place (OkCupid, 2020), suggesting a continued interest in forming connections during the pandemic. Yet, it is unclear who or what individuals are looking for on those platforms, especially during a global pandemic. Researchers have investigated under what circumstances people adjust their standards and preferences for a romantic partner, which include positive affect (Forgas, 1991), mortality salience (Hirschberger et al., 2002), and perceptions of partner scarcity (Taylor, 2012). With this study, we seek to understand whether the COVID-19 outbreak has prompted such adjustments in the way people seek romantic relationships.

In recent years, researchers have explored the predictive value of one's fear of being single in the context of partner preferences, which describes the desire to obtain a romantic relationship and avoid singledom (Spielmann et al., 2013). These desires have implications for relationship initiation and maintenance given that those with a greater fear of being single tend to be less selective when looking for a partner, settle for less in a romantic relationship, and yearn for dysfunctional relationships or relationships with past partners (Spielmann et al., 2013, 2016, 2020). Because fear of being single has been associated with romantic loneliness and unmet needs for belonging (Adamczyk, 2018), fear of being single may be sensitive to environmental stressors such as the COVID-19 pandemic, during which restrictions related to socializing have been enforced. Thus, a second goal of this study is to examine the role of fear of being single as a mediator linking concerns related to COVID-19 and perceived changes in preferences when seeking a long-term romantic partner.

***Factors influencing partner preferences***

When initiating relationships, people tend to prefer certain qualities in potential romantic partners over others. *Partner preferences* refer to the ideal characteristics that people look for in a relationship partner and that guide their choice of a suitable mate. In addition to the initial mate selection process, the criteria that people apply when choosing a mate can also have long-term implications for relationship development. For example, research has linked people's ideal partner preferences to the types of partners that people ultimately end up dating (Gerlach et al., 2019) and the quality (Fletcher et al., 2000) and stability (Eastwick & Neff, 2012) of those relationships. Finding a suitable partner seems to be somewhat of a balancing act: People who are overly selective may considerably limit their eligible dating pool. People who are not selective at all may minimize their likelihood of achieving reproductive fitness and finding a well-rounded,

desirable mate (Waynforth, 2001). Thus, perceived changes to partner preferences in response to COVID-19 deserve empirical attention as these temporary circumstances could have lasting effects on relationships.

Evolutionary psychologists have previously posited that women inherently desire partners who have many resources to invest, with good financial prospects and strong ambition, while men are often drawn to partners who are youthful and physically attractive (Buss, 1989). However, evidence suggests that preferences for romantic partners may vary according to circumstantial factors. Modern societies have observed a diminished emphasis on gender roles (Croft et al., 2015; Eagly, 2013). For example, women with aspirations to prioritize their career over building a family were more likely to indicate a preference for a potential mate with similar aspirations (Croft et al., 2020).

Stressful events may also facilitate changes in one's perceptions of relationships. At a basic level, humans desire social connection to fulfill both physical and psychological needs (Baumeister & Leary, 1995). When people experience a stressful event, they may increase their efforts to establish social connections. Close relationships fulfill a variety of adaptive needs (such as finding food, building shelter, and reproducing offspring; Buss & Schmitt, 1993), and thus may buffer against anxiety related to death and dying (Florian et al., 2002). For example, people experimentally primed with thoughts of death exhibited increased desire for intimacy and romantic commitment (Florian et al., 2002; Mikulincer & Florian, 2000). This suggests that an increased effort to secure *any* partner likely translates to a greater willingness to compromise on finding an *ideal* partner.

Despite evidence that people seek to strengthen social connections in response to stress, people under stress may actually be willing to increase their standards for certain attributes, such as those that contribute to stress-related need fulfillment. In an experiment, those primed with thoughts of death exhibited a willingness to compromise only on attributes such as partner attractiveness and social status (Hirschberger et al., 2002). Thus, although people may typically envision a partner who possesses both physical attractiveness and a pleasing personality, those in high-stress situations may opt to compromise on specific attributes while placing greater emphasis on others. In the context of this study, we operationalize the increased importance of a partner attribute to signal a greater level of selectivity, and a greater unwillingness to compromise, when searching for a partner who embodies that quality.

### **COVID-19 and partner preferences**

Given that people are likely to adjust their standards to accommodate their desire for romantic connection, it is possible that the social isolation mandated to protect against the spread of COVID-19 has prompted individuals to compromise on their ideal mate preferences. Previous research has linked social isolation with loneliness and negative mental health outcomes (Matthews et al., 2016). People have also reported high levels of stress in response to the COVID-19 pandemic related to their employment status, living situation, personal and family health, and loss of social connection (CDC, 2020). Nationally representative survey data recently revealed that adults in the United States experienced depressive symptoms in the early stages of the COVID-19 outbreak (Rosenberg et al., 2021). However, individuals reported lower levels of these symptoms

if they were afforded frequent in-person social and sexual contact with others, suggesting that in-person contact helps to protect against negative mental health outcomes. Research has also shown that approximately 20% of people have reached out to an ex-partner during this pandemic, many having reached out to multiple ex-partners, further suggesting that people may be willing to give failed romantic or sexual relationships another chance (Lehmiller, 2020). These findings seem to suggest that the pandemic has prompted people to not only pursue sexual or romantic relationships, but also to lower the threshold for those relationships, as some reported to reconsider lower quality relationships such as those with ex-partners.

We predict that the qualities that would be valued most during stressful life events, such as financial stability, good physical health, and family commitment, would become more important to single individuals seeking a romantic partner during the COVID-19 pandemic. Regarding financial stability, it seems that people generally prefer potential partners who have greater access to scarce resources (e.g., Marzoli et al., 2013). Some have argued that the importance one places on a potential partner's financial resources diminish as they themselves experience greater access to their own financial resources (Buss & Barnes, 1986). Thus, the economic uncertainty that is characteristic of the COVID-19 pandemic may lead people to place greater emphasis on their potential partner's economic standing or ambition.

The pandemic has also highlighted individuals' health concerns because people with certain medical conditions may face more severe complications from contracting COVID-19 (CDC, 2020). Research indicates that the virus may damage patients' cardiovascular health, and people who already have cardiovascular disease may be predisposed to contracting COVID-19 (Zheng et al., 2020). In a previous investigation across 30 countries, women's preferences for masculine facial features, which have been correlated with long-term medical health (Rhodes et al., 2003; Thornhill & Gangestad, 2006), were greater in countries with poorer national health scores according to the National Health Index (DeBruine et al., 2010). Thus, people may be concerned about finding someone in good health who may be less vulnerable to the potentially fatal virus.

Finally, the COVID-19 outbreak has affected family-related stress. Throughout the pandemic, many parents have reported on their struggles related to juggling their own full-time jobs along with full-time childcare and homeschooling duties (Carino, 2020). Research has found that women who expected to later become the primary breadwinners in their marriage exhibited a greater preference for family-oriented partners (Croft et al., 2020). Given these patterns, it is possible that single individuals who recognize the challenges associated with family management in times of COVID-19 seek long-term partners who would be willing to share the household duties after the pandemic ends.

Traditionally, having a physically attractive partner is considered important (Buunk et al., 2002). Yet, the importance of physical attractiveness may decrease in times of stress, when other partner qualities such as companionship and support may facilitate coping for the relationship seeker. An experiment showed that men who completed a task while experiencing low levels of stress preferred to affiliate with attractive women over kind women (Li et al., 2008). However, men placed in a high-stress situation preferred to interact with kind women over attractive women. These findings support the notion that, at baseline, men are motivated to secure a mate with short-term reproductive benefits

(Schmitt et al., 2001). To the contrary, in high-stress situations, men may prioritize their needs for safety and comfort. One study found that, although women wanted a physically attractive partner, women perceived physically attractive men to be more likely to engage in infidelity and to terminate a long-term romantic relationship. Further, women indicated that they were willing to trade off a partner's physical attractiveness (but not other qualities) for financial resources (Waynforth, 2001). People may thus be more willing to sacrifice a partner's physical attractiveness over other attributes that signal stability and companionship. We argue that, when faced with a stressful event that triggers thoughts of mortality such as COVID-19, people will be more willing to compromise on a long-term partner's physical/social attractiveness (i.e., physical attractiveness, social status, and sexual performance and satisfaction). In other words, they will report that physical/social attributes are less important to them. In turn, they will be less willing to compromise on a long-term partner's attributes related to stability (i.e., financial resources, faithfulness, physical health, and ambition) and family commitment (i.e., parenting qualities, desire for children, closeness to parents and siblings).

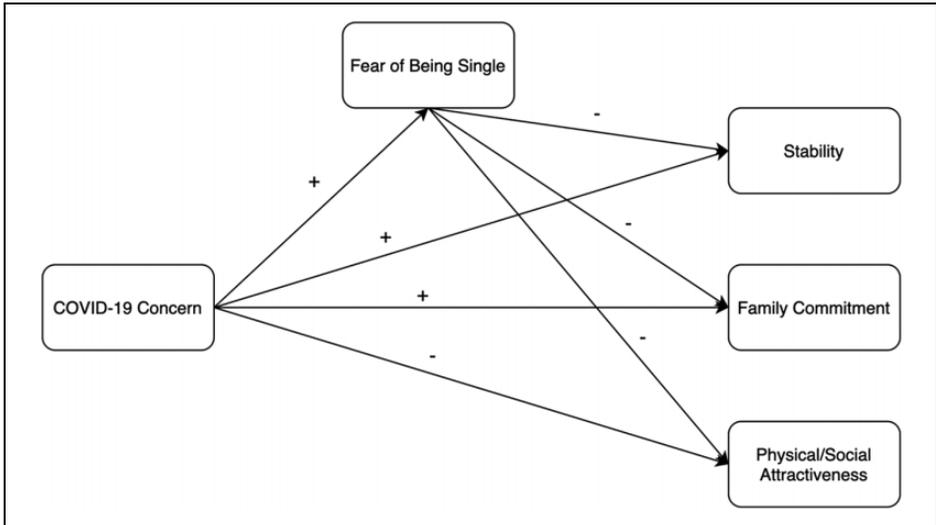
**H1:** COVID-19 concern will be associated with a reported increase in the perceived importance of a partner's a) stability and b) family commitment.

**H2:** COVID-19 concern will be associated with a reported decrease in the perceived importance of a partner's physical/social desirability.

### *Perceived changes in partner preferences out of fear of being single*

The fear of being single may play a role in the association between COVID-19 concern and partner preferences. Spielmann and colleagues (2013) defined the fear of being single (FOBS) as the "concern, anxiety, or distress regarding the current or prospective experience of being without a romantic partner" (p. 1049). A series of studies demonstrated that stronger FOBS predicts settling for less (i.e., selecting less responsive and physically attractive romantic partners as well as being less likely to initiate breakups with dissatisfying partners) and expressing interest in a larger number of people (Spielmann et al., 2013). Additionally, singles who experienced fear related to their single status were more likely to long for an ex-partner and attempt to renew the relationship (Spielmann et al., 2016). Thus, those with a fear of being single have the tendency to lower their relationship standards in pursuit of securing a mate. This may have implications for various partnering processes, such as securing potential new partners or for relationship renewal (i.e., on-again/off-again relationships; Dailey et al., 2009).

Although there is evidence related to the potential effects of experiencing a fear of being single, less is known about which factors impact experiencing this fear of being single. Fear of being single seems to be sensitive to changes in one's environment. For instance, individuals may be increasingly susceptible to fear of being single following a distressing relational experience (Spielmann et al., 2016), or exposure to romantic media content (Timmermans et al., 2019). When situations are uncertain, individuals may have varying behavioral responses (Babrow et al., 2000) or emotional appraisals of their experiences (Brashers, 2001). Hence, in uncertain times when people are urged to



**Figure 1.** Conceptual map.

maintain social distance, those without a partner may experience a stronger fear of being single. In turn, because an increased fear of being single is characterized by settling for less in a romantic partner, we predict that fear of being single will be associated with a perceived decrease in the importance of all partner attributes in response to the COVID-19 outbreak.

We predict that COVID-19 concern will be negatively associated with the perceived importance of partner stability, family commitment, and physical/social attractiveness via fear of being single, such that COVID-19 concern will be positively associated with fear of being single, and fear of being single will be negatively associated with a reported decrease in the importance of partner stability, family commitment and physical/social attractiveness. Overall, we tested three models, one for each partner attribute group (see Figure 1 for conceptual map).

**H3:** COVID-19 concern will be positively associated with fear of being single.

**H4:** Fear of being single will mediate the association between COVID-19 concern and reported partner preferences.

## Method

### *Sample and procedure*

A multi-national sample ( $n = 2614$ ) was recruited to complete an online survey from April 20, 2020 to May 10, 2020 via the research team's social media accounts (e.g., Facebook, Twitter, Instagram). They were not offered any compensation. Data collected were anonymous to all members of the research team, except the member who

**Table 1.** Demographic information.

Demographic	N	% (/693)
<b>Race</b>		
African or African American	15	2.2
Asian, Asian American, or Pacific Islander	26	3.8
European or European American (White)	573	82.7
Latinx or Latin-American (Hispanic)	46	6.6
Arab or Arab-American	2	0.3
Native American or American Indian	4	0.6
Other	26	3.8
<b>Sexual Orientation</b>		
Heterosexual	562	81.1
Bisexual	79	11.4
Gay or lesbian	27	3.9
Other orientation not listed	24	3.5
Not stated	1	0.1
<b>Country</b>		
United States	357	53.1
Netherlands	106	15.8
Belgium	98	14.6
Other	56	8.1
United Kingdom	34	5.1
Canada	32	4.8
Switzerland	10	1.5

submitted the Internal Review Board application and who subsequently contacted participants to complete a follow-up survey.

Only those who indicated they were at least 18 years old ( $n = 2609$ ) continued with the survey, and only those who indicated a relationship status of single ( $n = 539$ ) or casually dating/not in a romantic relationship ( $n = 154$ ) completed the measures below. The subsample of single or casually dating participants included in the current analyses identified as mostly female ( $n = 540$ , 78.0%; 18 to 72 years old,  $M_{age} = 30.3$ ,  $SD = 11.7$ ). Additional demographics including location, ethnic identity, and sexual orientation are provided in Table 1. Those who indicated being in a romantic relationship (i.e., seriously dating, engaged, married) were directed to another survey on relationship dynamics. Of the participants included in the current analyses, most reported working from home ( $n = 319$ ), followed by being unemployed before COVID-19 prevention measures began ( $n = 137$ ), still going to work ( $n = 129$ ), having been furloughed due to COVID-19 ( $n = 69$ ), and having been laid off due to COVID-19 ( $n = 39$ ). In addition, for a large majority of participants, lockdown had been implemented in their region ( $n = 582$ ). Others indicated that social distancing was strongly encouraged ( $n = 73$ ), quarantine had been implemented ( $n = 34$ ), or that people were advised to take precautions, but that day-to-day life continued as usual ( $n = 4$ ). Nearly all of the participants in our study ( $n = 669$ ) reported that they were personally engaging in social distancing at the time of data collection.

## Measures

**COVID-19 concern.** To measure participants' concerns about COVID-19, we used an adapted version of the Fear of Ebola Scale (Kim et al., 2016). Participants indicated the frequency with which they worried about getting infected by, felt vulnerable to, and thought about contracting COVID-19 (1 = *never*, 7 = *all of the time*;  $\alpha = .83$ ,  $M = 3.9$ ,  $SD = 1.4$ ).

**Fear of being single.** The Fear of Being Single Scale (Spielmann et al., 2013) assessed participants' distress related to being without a romantic partner. Participants indicated on a scale from 1 = *totally disagree* to 5 = *totally agree* the extent to which they agree with six statements, for example, "It scares me to think that there might not be anyone out there for me" ( $\alpha = .84$ ,  $M = 3.2$ ,  $SD = 1.0$ ).

**Perceived changes in partner preferences.** Participants completed a modified version of Buston and Emlen's (2003) mate-preference survey. The original version asked participants to rate the importance of 10 attributes when choosing a long-term partner. In the current study, we asked participants about their perceived changes in their partner preferences: "Compared to how important each quality was to you before social distancing began in your area, how important is each quality to you when choosing a long-term partner currently?" They rated the following attributes on a 7-point scale (1 = *much less important* to 7 = *much more important*): financial resources, physical attractiveness, faithfulness, parenting qualities, social status, physical health, desire for children, ambition, and closeness to parents/siblings. Buston and Emlen (2003) combined these items for an overall mate-preference score. We added a 10th item labeled "sexual performance/satisfaction" because, from an evolutionary perspective, a person's sexual performance and sexual motivation may have implications for their reproductive success and the mate selection process (Apostolou, 2015).

Due to the scale's adaptation and for ease of interpretation, an exploratory factor analysis with a direct oblimin rotation was conducted on the 10 items listed above. The analysis supported three factors, or partner attribute groups, with eigenvalues over 1, which accounted for 56.0% of the variance. These attribute groups were stability (financial resources, faithfulness, physical health, and ambition; factor loadings: .47–.84;  $M = 4.4$ ,  $SD = 0.6$ ), family commitment (parenting qualities, desire for children, closeness to parents/siblings; factor loadings: .56–.81;  $M = 4.10$ ,  $SD = 0.62$ ), and physical/social attractiveness (physical attractiveness, social status, sexual performance/satisfaction; factor loadings: .47–.77;  $M = 4.0$ ,  $SD = 0.5$ ).

**Risk perceptions.** We controlled for participants' risk perceptions to ensure that their concern specific to COVID-19 was not conflated with their general perceptions of risk in day-to-day life. Participants completed the 12-item Invulnerability Scale (1 = *strongly disagree* to 5 = *strongly agree*; Lapsley & Hill, 2010). Sample items included, "Nothing can harm me," and "Taking safety precautions is far more important to other people than it is for me" ( $\alpha = .79$ ,  $M = 2.1$ ,  $SD = 0.6$ ).

**Table 2.** Variable correlations.

Variables	1.	2.	3.	4.	5.
1. COVID-19 Concern	—				
2. Fear of Being Single	.17***	—			
3. Partner Stability	.15***	.13**	—		
4. Partner Family Commitment	.05	.14***	.35***	—	
5. Partner Attractiveness	.01	-.05	.35***	.25***	—
6. Risk Perceptions	-.33***	.01	-.05	-.07	.04

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

## Results

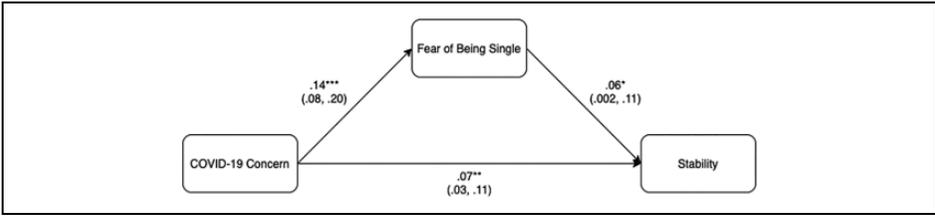
Variable correlations are reported in Table 2. To test H1–4, we tested three separate mediation models using PROCESS model 4 (Hayes, 2017). Participants' COVID-19 concern was entered as the independent variable, fear of being single was entered as the mediating variable, and each partner preference grouping (stability, family commitment, and physical/social attractiveness) was entered as a dependent variable. All models included perceived risk as a covariate. Participants' age was additionally included as a covariate in models where it significantly correlated with the dependent variable (stability:  $r = -.04$ ,  $p = .345$ , family commitment:  $r = -.12$ ,  $p = .003$ , physical/social attractiveness:  $r = -.10$ ,  $p = .020$ ). Other potential demographic variables, including participant sex, race, sexual orientation, and whether or not they reported having children, were not included as covariates as they were not significantly correlated with any of the dependent variables ( $ps > .050$ ).

Path coefficients, confidence intervals, indirect effects, and total effects are reported in Figures 2 to 4. Results provided support for H1a–b: COVID-19 concern was directly and positively associated with an increased importance of partner stability and family commitment. In other words, as COVID-19 concern increased, participants reported a perceived increase in the importance of partner stability and family commitment. Contrary to our expectations for H2, COVID-19 concern was directly and positively associated with physical/social attractiveness. As COVID-19 concern increased, participants reported a perceived increase in the importance of partner attractiveness.

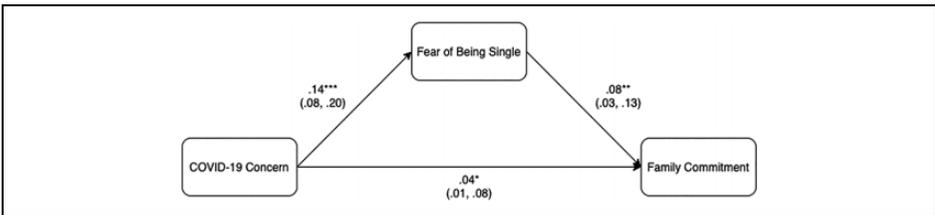
As expected for H3, COVID-19 concern was positively related to fear of being single. Concern was indirectly and positively related to stability and family commitment, but indirectly and negatively related to physical/social attractiveness. In other words, fear of being single was positively related to stability and family commitment, but negatively related to physical/social attractiveness, providing only partial support for H4. In each of these cases, the indirect effects of COVID-19 concern on partner preferences by way of fear of being single were modest.

## Discussion

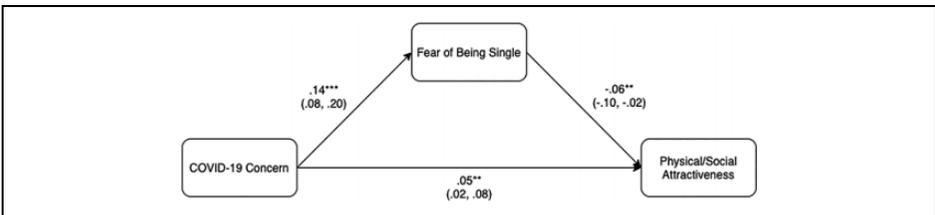
The COVID-19 pandemic has forced people to navigate employment- and health-related uncertainty. Evidence suggests that having and living with a romantic partner can buffer



**Figure 2.** Association between COVID-19 concern and importance of partner stability via fear of being single. Note. Perceived risk entered as a covariate. Path coefficients:  $b$  (LLCI, ULCI). Indirect effect:  $b = .01$ ,  $SE = .004$ ,  $LLCI = .001$ ,  $ULCI = .02$ ; total effect:  $b = .07$ ,  $SE = .02$ ,  $p < .001$ ; partially standardized indirect effect:  $B = .01$ ,  $SE = .01$ ,  $BootLLCI = .002$ ,  $ULCI = .03$ ; completely standardized indirect effect:  $B = .02$ ,  $SE = .01$ ,  $BootLLCI = .002$ ,  $BootULCI = .04$ .



**Figure 3.** Association between COVID-19 concern and importance of partner family commitment via fear of being single. Note. Perceived risk and participant age entered as covariates. Path coefficients:  $b$  (LLCI, ULCI). Indirect effect:  $b = .01$ ,  $SE = .01$ ,  $LLCI = .003$ ,  $ULCI = .02$ ; total effect:  $b = .05$ ,  $SE = .001$ ,  $p = .006$ ; partially standardized indirect effect:  $B = .02$ ,  $SE = .01$ ,  $BootLLCI = .005$ ,  $ULCI = .04$ ; completely standardized indirect effect:  $B = .02$ ,  $SE = .01$ ,  $BootLLCI = .01$ ,  $BootULCI = .05$ .



**Figure 4.** Association between COVID-19 concern and importance of partner attractiveness via fear of being single. Note. Perceived risk and participant age entered as covariates. Path coefficients:  $b$  (LLCI, ULCI). Indirect effect:  $b = -.01$ ,  $SE = .004$ ,  $LLCI = -.02$ ,  $ULCI = -.002$ ; total effect:  $b = .04$ ,  $SE = .02$ ,  $p = .011$ ; partially standardized indirect effect:  $B = -.02$ ,  $SE = .01$ ,  $BootLLCI = -.04$ ,  $ULCI = -.005$ ; completely standardized indirect effect:  $B = -.02$ ,  $SE = .01$ ,  $BootLLCI = -.05$ ,  $BootULCI = -.01$ .

against feelings of stress and anxiety (Greenfield & Russell, 2011; Pietromonaco & Collins, 2017). In response to those feelings of stress, single individuals may adjust their standards for a romantic partner (e.g., Hirschberger et al., 2002). This study examined perceptions of these adjustments in the context of the COVID-19 pandemic, which may

indicate which kinds of attributes are likely to attract possible dating partners in a time when dating partners become more difficult to access. Overall, the findings from this study demonstrate an association between COVID-19 concern and the perceived importance of all partner attribute groups (stability: financial resources, faithfulness, physical health, and ambition; family commitment: parenting qualities, desire for children, closeness to parents and siblings; physical/social attractiveness: physical attractiveness, social status, and sexual performance and satisfaction). One exception to this pattern is that, as we expected, those exhibiting a higher fear of being single perceived a partner's physical and social attractiveness to become less important since the outbreak.

### *Preferences for stability and family commitment*

We found that COVID-19 concern was directly related to a perceived increase in the importance of a partner's stability and family commitment, providing support for H1. This is consistent with previous research suggesting that attributes that facilitate coping with stress become more valuable when dealing with stress (e.g., Li et al., 2008). For example, in times of economic hardship, it may put one's mind at ease to know that their romantic partner can serve as an emotional or financial support system. This has been supported empirically: One experiment found that only participants primed with resource abundance exhibited increased interest in short-term relationships (Thomas et al., 2018). Further, it may also be helpful to be confident that the romantic partner is dedicated to the relationship and is not pursuing alternative partners. It is also likely that thoughts of COVID-19 have activated cognitions related to preserving good health. Recent research has found that risk perceptions related to COVID-19 (e.g., perceptions of one's susceptibility to and severity of the virus) were uniformly high across all 10 countries examined, with average risk perception scores falling above the scale's midpoint (Dryhurst et al., 2020). Perceptions of risk are key predictors in adopting preventative health behaviors (Rudisill, 2013), which may extend to the mate selection process. Rather than lowering one's standards in pursuit of expanding the eligible dating pool, the pandemic has prompted people to assess good physical health as an important partner attribute perhaps as a means of protecting themselves against a highly contagious virus.

### *Preferences for physical and social attractiveness*

As participants' COVID-19 concern increased, they generally attached greater importance to all attributes during the COVID-19 outbreak, including physical/social attractiveness (contrary to our expectations for H2). Previous research has found that people are more readily willing to compromise on physical attractiveness for other qualities (e.g., Hirschberger et al., 2002). During the COVID-19 outbreak specifically, we predicted that physical/social attractiveness would fail to fulfill the relational needs of someone concerned about their health and safety. However, people may have perceived physical/social attractiveness to become more important to them because physical attractiveness has been identified as a marker for good physical health. The

“good genes” explanation for prioritizing physical attractiveness indicates that people select attractive partners because certain physical qualities such as facial symmetry signal a person’s ability to maintain good health (Gangestad & Simpson, 2000; Møller & Swaddle, 1997). Previous research has also linked sexual functioning and health-related variables. For example, orgasm frequency was negatively related to mortality among men (Smith et al., 1997). From an evolutionary perspective, a partner’s sexual health may be perceived as an indicator of overall health status and ability to reproduce viable offspring. In contrast, problems with sexual performance and sexual functioning have been linked to poor psychological well-being and lower relational satisfaction (Burri et al., 2009; Flynn et al., 2016). Thus, physical attractiveness and sexual performance may provide indirect, as opposed to direct, benefits to a relationship-seeking individual during a pandemic.

In addition to physical attractiveness and sexual performance and satisfaction, the physical/social attractiveness attribute grouping also included social status (as indicated by our exploratory factor analysis). A romantic partner with a higher social standing may have a larger, more stable social network or a stronger social support system. Social participation and involvement have been found to be positively associated with proximity to resources and negatively associated with mortality among older adults (Levasseur et al., 2015; Sugisawa et al., 1994). Thus, although a higher social status may not directly benefit someone seeking a mate, there may be benefits in times of crisis. During the COVID-19 pandemic in particular, a social support system means greater access to information about the virus, greater access to resources (such as spare face masks or scarce grocery items), and a greater possibility for social contact. One popular way of dealing with social distancing guidelines has been to create a quarantine “pod,” in which two or three families or household units socialize with each other, but agree to maintain distance from everyone else (Moyer, 2020). People without close social ties are less likely to be included in the formation of a pod.

### *COVID-19 concern and fear of being single*

As we expected in H3, COVID-19 concern was positively associated with participants’ fear of being single, which may suggest that one’s fear of being single is susceptible to changes in the social environment that limit the possibility of forming new romantic connections. Though we cannot be certain about the causal direction due to the cross-sectional nature of these data, the significant association between COVID-19 concern and fear of being single after controlling for risk perceptions provides greater support for this assertion. From an uncertainty management perspective (Brashers, 2001), these data indicate that a fear of being single may be exacerbated by concerns over COVID-19 and uncertainty about the virus. If uncertainty in the context of illness is perceived as a potential threat, individuals may experience distress (Brashers et al., 2000). Certainly, single individuals may experience greater anxiety when it comes to singlehood when there is increased uncertainty about their exposure risk to COVID-19 and the various social implications of the pandemic (for example, maintaining social connections when someone lives alone).

Because fear of being single has been empirically linked to lower partner standards and settling for less in a romantic relationship (Spielmann et al., 2013), we predicted that fear of being single would mediate the association between COVID-19 concern and all three partner attribute groups such that greater fear of being single would be associated with perceptions of decreased importance of the attributes. This was only the case for attractiveness, whereby fear of being single was associated with a perceived decrease in the importance of physical and social attractiveness. Providing partial support for H4, people with higher levels of fear of being single have likely adjusted their standards for physical and social attractiveness in order to fulfill their needs for love, belonging, and social connection. This may be particularly important to people with a fear of being single because the COVID-19 outbreak has had a negative impact on people's mental health and psychological well-being.

However, contrary to H4, fear of being single positively mediated the relationship between COVID-19 concern and preferences for stability and family commitment. Notably, Spielmann and colleagues (2013) only found a significant association between fear of being single and higher standards for parenting when examining self-reported partner preferences, suggesting that parenting potential may be an important attribute for people with a greater fear of being single. This finding, consistent with what we have found in our study, may reflect these participants' desires for finding a partner for the purpose of having and raising children in the future.

This finding may also be a function of prolonged mediated communication. Before the COVID-19 outbreak, research indicated that people spent an average of approximately 3 weeks getting to know each other via online dating platforms or other mobile technologies before meeting face to face (Sharabi & Caughlin, 2017). Social distancing guidelines to prevent the spread of COVID-19 have undoubtedly made it more difficult for people to transition from communicating online to arranging face-to-face encounters. In fact, many people were advised not to meet face to face with people outside of their household. It may be that single individuals have been given the opportunity to spend more time considering what they want in a partner, and to spend more time gathering relevant information about prospective dates via an otherwise lean medium of communication. Those with higher levels of fear of being single, who likely experience greater relationship-related anxieties, may have reported an increased importance in stability and family commitment due to their information-seeking practices. This group of single individuals may choose to manage their uncertainty by increasing their information-seeking activities about COVID-19 risk or how closely a potential mate matches their preferences in a partner. Although some individuals prefer the status quo in order to "maintain hope and optimism" (Brashers, 2001, p. 491), those with a greater fear of being single may be motivated to seek additional partner information if they expect it will result in maximum rewards (Sunnafrank, 1986).

### *Limitations*

This study is not without limitations. First, the cross-sectional design of the study prevents us from making claims of causation. Though it seems unlikely that one's ideal mate

characteristics influence their responses to the COVID-19 pandemic, it is possible that trait-level individual differences (for example, trait loneliness, high levels of neuroticism; Schermer & Martin, 2019) elicit greater stress. A measure of fear of being single before the COVID-19 outbreak would provide greater support for the notion that widespread public fear prompts individual-level changes in perceptions of relationships and potential relationship partners. Moreover, it is possible that situational constraints that raise one's standards for a partner subsequently raise concerns about finding such a partner. Future studies using longitudinal or prospective designs would help to rule out this possibility.

Second, we employed a measure of partner preferences used in previous research (Buston & Emlen, 2003), which asks participants to identify their preferences for a long-term partner. However, in the current study, participants were not asked what kind of relationship they were seeking, if they were seeking one at all. It is possible that those who are single or in casual dating/sexual relationships are not interested in developing a long-term commitment, either at the time of taking the survey or otherwise. Their desired relationship type may influence which attributes they perceive to be most important. For example, people who are seeking short-term sexual relationships tend to prioritize sexual gratification (Jonason, 2013), while those who are seeking long-term relationships show greater interest in socioemotional and financial support (Brunell & Webster, 2013). It is also possible that partner selectivity would vary as a function of additional factors not measured in the current study, such as the extent to which participants were actively seeking a long-term relationship. Future research should examine the role of such factors in shaping partner preferences in response to environmental stressors such as COVID-19.

Third, nearly all of our participants indicated that they were following social distancing guidelines, which led us to assume that the availability of mates in their social environment was limited. However, a common concern—particularly in the United States, where most of our participants were located—is that many people are not taking basic precautions (Pew Research Center, 2020). Thus, it is possible that our results would look different in a sample that included more people who were not necessarily abiding by social distancing recommendations.

Finally, we relied on participants' reports of their perceived changes in their partner preferences, asking them to compare how much more or less important each quality was at the time of taking the survey to the time before the COVID-19 outbreak. This method forces participants to remember and provide assessments of a prior cognitive state, which may not always be accurate. Because of the potential for variation in participants' assessments, these findings should be interpreted strictly as a measure of their *perceived* changes in their partner preferences. Further, it should be noted that approximately half of our sample reported little to no change in their partner preferences. This suggests that online dating platforms may still have agency in creating how we perceive partner preferences. For instance, although the literature indicates that people would alter their preferences in response to environmental changes, the presence of dating apps may have attenuated more dramatic changes because the affordances of these online platforms have remained constant. Future investigations of perceived importance of partner preferences should utilize longitudinal designs to elucidate changes in partner preferences

during unique periods of change (i.e., social distancing mandates) that a cross-sectional study cannot.

## Conclusion

This study contributes to our understanding of how, in response to a pandemic, people may adjust their partner preferences as well as preoccupations with the single relationship status. During a pandemic rife with uncertainty and stress, single individuals may have a more critical mindset when it comes to partner preferences compared to prior to the onset of lockdown measures as a result of COVID-19. Interestingly, these uncertain times also induced increased fears of being single among single individuals, which was associated with perceived changes in partner preferences. Limitations notwithstanding, the findings in this study highlight the need to understand how societal changes related to public health may have implications for how singles view potential dating partners.

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## Open research statement

As part of IARR's encouragement of open research practices, the authors have provided the following information: This research was not pre-registered. The data used in the research are available upon request. The data can be obtained by contacting Dr. Cassandra Alexopoulos (c.alexopoulos@umb.edu) and Dr. Veronica Lamarche (v.lamarche@essex.ac.uk). This project forms part of a larger multi-lab dataset. The complete dataset and full survey materials will be made available publicly on the OSF once all researchers have completed their analyses and follow-ups.

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