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Partner Attitude Certainty and Implications for Relationship Satisfaction, Mental Health, and Longitudinal Stability

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Abstract

The quality of a close relationship is characterized, in part, by the degree of positive regard each person has for the other. However, although two people may like their respective partners just as much as one another, they may nevertheless differ in how durable and influential those feelings are. We integrate the rich literature on attitude strength into research on partner attitudes in romantic relationships. Strong attitudes are defined as those resisting change and having influence over people's thoughts and behaviors. Attitude certainty has emerged as an especially reliable predictor of strength. We therefore examine how much people's certainty in their attitudes toward their partner moderate those attitudes' correspondence with relational and personal variables. Data from an online survey show that people report greater relationship satisfaction when they hold more positive attitudes toward their partner, and this correlation is significantly magnified when those attitudes are held with greater certainty. Moreover, this interaction on relationship satisfaction carries further implications for assessments of participants' subjective well-being and mental health. Together, these data highlight the importance of considering the metacognitive aspects of relationship partners' thoughts and feelings about one another.

Keywords: partner attitudes; attitude strength; certainty; relationship satisfaction; subjective well-being; mental health

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An emerging perspective in relationship science highlights the continued importance of considering people's attitudes toward their partners (Faure et al., 2024). Attitudes have been a fundamental concept in social psychology (Allport, 1935) and are defined simply as valenced associations with an object, which could be a physical object, abstract issue, person, social group, etc. In other words, attitudes are summary "evaluations" of a stimulus as positive or negative, which are assumed to be stored in memory rather than devised in the moment. For example, someone who likes sweet potato pie has a "positive attitude" toward that dessert.

Understanding the basic psychology of attitude processes is valued for its implications for attitude-relevant thought and action. However, over its long history, this area of research has contended with several important questions about attitudes' predictive validity, giving rise to new developments in measurement and theory. Drawing on this body of work, we propose that the concept of *attitude certainty* expands our understanding of relationship dynamics by considering meaningful variance in explicit partner attitudes that has, until now, received little attention. We first discuss the utility of further studying explicit partner attitudes and then turn to the literature on attitude strength to form novel hypotheses about when such attitudes are likely to be most durable and influential.

Partner Attitudes

Among the myriad topics of evaluation in people's daily experiences are their relationship partners. Simply put, "partner attitudes" are evaluations of one partner by the other. A husband who likes his wife very much has an extremely positive attitude toward his partner, and a woman who somewhat dislikes her girlfriend has a mildly negative attitude toward her

partner. Indeed, a long history of research on impression formation highlights how readily people form judgments about others (Uleman & Kressel, 2013). However, partner attitudes may be uniquely consequential.

In one innovative test of partner attitude effects, McNulty et al. (2013) conducted a four-year longitudinal study of newlywed couples. At baseline, participants completed measures of their attitudes toward the person they had recently married. Although couples generally experienced declining marital satisfaction over time, the more a person automatically associated their spouse with positivity (vs. negativity) at baseline, the less their marital satisfaction declined. Other work has similarly found robust correspondence between partner attitudes and measures of relationship satisfaction and endurance (e.g., Banse et al., 2013; Hicks et al., 2021; LeBel & Campbell, 2009; Lee et al., 2010; Scinta & Gable, 2007).

Much of the recent work on partner attitudes has considered automatically activated attitudes as assessed by implicit measures (see Faure et al., 2024); however, they can also be assessed by asking people directly for their evaluations. Although self-reported ("explicit") attitudes have been a cornerstone of basic attitudes research in social psychology, research on the predictive utility of explicit partner attitudes remains relatively scant. One recent synthesis of predictors of relationship satisfaction across 43 longitudinal datasets did not present basic self-reported partner attitudes as a commonly measured (or even at least occasionally measured) predictor (Joel et al., 2020). As another example, in the foundational work on the influential Vulnerability-Stress-Adaptation Model of marriage, partner attitudes are not among the set of marriage satisfaction and stability predictors evaluated in a large review of longitudinal research (Karney & Bradbury, 1995).

To be sure, researchers have measured constructs that overlap with explicit partner attitudes. For instance, "love" can be simply measured with a self-report assessment, even though it is a complex, multi-faceted experience (Sternberg, 1986). For instance, Fletcher et al. (2000) measure love using simple items such as "How much do you love your partner?" In some ways, this can be read as a measure of one's positively valenced evaluation of their partner (i.e., their attitude). However, according to theory, love typically involves more than a positive attitude. For instance, someone could love a person whom they evaluate negatively, such as loving a parent whose political beliefs seem abhorrent. Similarly, someone can evaluate a person positively without necessarily feeling love for them. Other work has asked people to rate their partner on a variety of traits as a means of assessing positive or negative regard (e.g., Murray et al., 1996). Although this measure may capture overall attitudes, it is primarily oriented toward specific beliefs about a partner's character and may overlook evaluative reactions that stem from other sources. A person could, for instance, like their partner despite acknowledging their character flaws.

Nevertheless, there is reason for concern that people's self-reported partner attitudes may not be very predictive of relationship outcomes. Researchers have long been concerned that such a direct assessment could be prone to bias and error stemming from people's inability to access their true feelings, desire to provide a particular response, etc. (Krosnick et al., 2019). This could be especially concerning in relationship science, given evidence regarding bias and inaccuracy in people's evaluations of their close relationships (Gagné & Lydon, 2004; Murray, 1999).

We suggest, however, that these challenges with explicit measures do not doom them to the inability to predict anything important. Rather, we adopt Fazio and Zanna's (1981) perspective that asking whether or not attitudes are consequential is the wrong question and that

we should be examining the conditions under which those attitudes are (or are not) influential. The present research thus proposes that self-reported partner attitudes do relate to relevant outcomes, such as relationship satisfaction, but primarily when held with relative certainty. In doing so, we draw on basic attitudes research to generate novel hypotheses for relationship science.

Attitude Strength

Innovations in attitude theory over the past several decades have highlighted critical ways in which one person's attitude may differ from another's. Of course, those attitudes can differ in their valence or extremity, such as one person holding an extremely positive view of a target while the other person holds a moderately negative view. But even when two people report exactly the same attitude on a survey, they can differ markedly in their *strength.* According to dominant frameworks in contemporary attitude theory, "strong" attitudes are defined as those that are quite *durable* and *influential* (Krosnick & Petty, 1995; Luttrell & Sawicki, 2020). Durable attitudes endure over time and resist the influence of forces such as persuasive arguments or social norms. Influential attitudes guide people's thoughts, judgments, and behaviors. As this notion pertains to partner attitudes, someone with a relatively strong attitude toward their partner would maintain that attitude over time and would express other relevant judgments, such as relationship satisfaction, that correspond to that attitude.

Many attributes of an attitude reliably predict its strength. For instance, attitudes that are more cognitively accessible, unambivalent, or rooted in relevant knowledge tend to be more durable and influential (see Luttrell & Sawicki, 2020 for a recent review). Perhaps the most commonly studied predictor of attitude strength is attitude certainty, which refers to a person's subjective sense of confidence that they know their true attitude and/or that it is the correct

attitude to have. Two people who hold the same overall attitude may nevertheless differ in how certain they are in that attitude; the person with greater certainty is more likely to maintain that attitude over time and in the face of persuasion, and they will be more likely to think and act in ways that correspond with that attitude (Tormala & Rucker, 2018).

Certainty's impact has been documented across a wide range of attitudes and has even been extended to other areas in which certainty enhances the strength of constructs, ranging from political ideology (Shoots-Reinhard et al., 2015) to self-views (DeMarree et al., 2007). Therefore, certainty may prove relevant to relationship science as well, raising the intriguing possibility that people with similar attitudes toward their partners may nevertheless differ in how certain they are of those judgments. This means that the predictive utility of self-reported partner attitudes will depend on people's certainty in those judgments.

Importantly, partner attitude certainty is distinct from commitment. Although commitment is an important predictor of relationship stability (Le & Agnew, 2003), it is conceptually distinct from partner attitude certainty. Indeed, established definitions of commitment highlight several components—psychological attachment, intention to stay, and a long-term orientation (Arriaga & Agnew, 2001; Rusbult & Buunk, 1993)—that go beyond partner attitudes. Therefore, one could be committed to a relationship despite uncertainty about how they feel about their partner (e.g., a couple pursuing relationship counseling for the benefit of their children while experiencing doubt about their feelings for each other). Newer work even highlights that commitment itself can be experienced with higher or lower certainty, which is consequential (Owen et al., 2014; Sawicki & Agnew, 2021).

The Present Study

Predicting Relationship Satisfaction

As others have shown, we expect that the more people like their partners, the more satisfied they will be in their relationships (Banse et al., 2013). However, according to models of attitude strength, this relationship should depend on certainty. The more certain a person is in their attitude toward their partner, the stronger the correspondence between that attitude and relationship satisfaction should be. In other words, we expect a positive partner attitude × certainty interaction predicting relationship satisfaction. Indeed, many studies have shown that people's overall judgments are informed most by the thoughts about which they are especially confident and can thus be treated as valid inputs into the final judgment (Briñol & Petty, 2022). Therefore, to the extent that partner attitudes constitute relevant inputs into judgments of the relationship, those attitudes will be most informative when held with relative confidence.

Downstream Implications for Mental Health

Furthermore, we expect that measuring certainty will not only improve predictions of relationship satisfaction but will also have implications for important downstream outcomes. Many investigations, for instance, have shown that people with more positive judgments of their romantic relationships also report greater subjective well-being and mental wellness (Be et al., 2013; Holt-Lunstad et al., 2008; Proulx et al., 2007). As such, we anticipate that the hypothesized interaction between partner attitude and certainty on relationship satisfaction will correspondingly relate to measures of subjective well-being and mental health. Specifically, we hypothesize that the partner attitude × certainty interaction has significant indirect effects on life satisfaction and mental health via its more proximal effect on relationship satisfaction.

Attitude Stability

Finally, another hallmark of strong attitudes is their durability. In a variety of domains, the more certain people are of an attitude, the less that attitude changes over time (Luttrell & Togans, 2021), particularly when the attitude is relatively one-sided (Luttrell et al., 2016). As such, we expect that although partner attitudes may generally stabilize over the course of a relationship, attitudes that remain prone to fluctuation can be detected by assessing certainty. These attitudes could fluctuate for many reasons, including changes within the perceiver, partner, or environment, or simply due to response instability. However, just as more confidently held sociopolitical attitudes change less in the face of new information or just the passage of time (Tormala & Rucker, 2018), we hypothesize that the more certain people are in their attitudes toward their partner, the less those attitudes will change over time. By contrast, the more uncertain someone is in their attitude toward their partner, the more we would expect that attitude to shift.

Methods

The full text of all variables is provided in the online supplement. Data and analysis scripts for reproducing all reported results are hosted on the Open Science Framework: https://osf.io/8z3u4/?view_only=5c432748690f4238862388a1680c6f50

Participants

We recruited participants 18 years old or older from the United States (6%) and United Kingdom (94%) who were in romantic relationships, defined as being married, living together, dating, cohabiting with a partner, in a civil union, or in a domestic partnership. We used Prolific's prescreening data to recruit only individuals who indicated that they were in such a relationship. A total of 503 participants enrolled in the study; however, eight of them indicated in

the survey that they were not currently in a romantic relationship. We thus omitted these respondents from the dataset as well as seven respondents who failed a simple attention check. Our final dataset included 488 participants (M_{age} = 43.4, *SD* = 13.8, *median* = 42, *range*: 18 – 78). Of these, 64.1% identified their gender as female, 34.4% as male, 1.0% as non-binary, and 0.4% as "Other." When asked to identify the gender of their partner, 98% of participants identified both themselves and their partner with a binary gender identity; 94.3% said their partner's gender was different from their own, and 3.7% said their partner's gender was the same as their own. The remaining respondents identified as female with a non-binary partner (0.4%), male with a non-binary partner (0.2%), non-binary with a female partner (0.2%), non-binary with a male partner, non-binary with a non-binary partner, "other" with a non-binary partner (0.2%), and "other" with a partner who would identify their gender as "other." The majority of our sample indicated their racial identity as White (85.3%), and the remaining sample indicated Asian (7.2%), Black (2.5%), Hispanic (1.0%), African (0.8%), Other (2.3%), or mixed race (1.2%). We used participant data supplied by Prolific to summarize employment and student status although the data had expired for 3.7% and 3.3% of the sample, respectively. Overall, 50.6% of the sample worked full time, 19.9% did not do paid work, 18.4% worked part time, 3.7% were unemployed and seeking employment, 1.0% were due to start a job within the next month, and 2.7% had indicated some "other" employment status. Only 8.4% of the sample were students.

Of these participants, 60.9% were married, 26.8% were living unmarried with a partner, and 12.3% were dating someone. The median length of their current relationship was 14.50 years (*MAD* = 13.28). A sensitivity analysis shows that our final sample size provided 90% power to detect an interaction effect size (f^2) as small as .02, traditionally considered a small effect.

To assess attitude stability, we re-contacted participants about four months after they completed the first survey. Only participants who met the first survey's relationship criteria were invited for the follow-up survey. The follow-up survey remained open for two weeks following the invitation to complete it, and 376 participants completed the survey (77% retention). We entered the key predictor Time 1 measures (partner attitudes, certainty, and relationship length) and demographic variables (age and gender) as predictors of retention in a logistic regression model. Although older participants were somewhat (but not significantly) more likely to complete the follow-up survey, $B = 0.03$, $z = 1.84$, $p = .07$, the other variables did not predict retention, ps > .31.

In the Time 2 survey, we asked about respondents' current relationship status. Only three people (less than 1%) reported that they were no longer in a relationship. For the remaining participants who reported also being in a relationship at Time 2, we implemented several checks to ensure that responses at each time point were about the same romantic partner. As in the first survey, we asked participants at Time 2 to enter their partner's initials. As a first check, we asked people whether this was "the same relationship you were in when you completed the initial survey four months ago." Two respondents said it was not the same relationship, and one said they were "not sure." At the end of the survey, we carefully asked whether they were truly in the relationship they said they were in, assuring them that they would receive compensation regardless. At this point, one person reported that they were no longer in a relationship with the person. For the remaining participants who self-reported being in the same relationship as they were at Time 1, we compared the initials they provided in each survey, but there was some ambiguity as to what constituted a consistent response. To use an especially conservative criterion, 84.5% of people gave exactly the same initials in each survey. However, sometimes

participants would give three initials (e.g., “SBG”) in one survey but two (e.g., “SG”) in another, so inexact matches could nevertheless be the same person. Thus, using another criterion, 86.7% gave the same first and last initial at each time point. Finally, according to a looser criterion, 94.0% gave the same first initial at each time point. For the focal analyses, we strike a balance by including participants who gave the same first and last initial in each survey; however, the robustness checks we report later highlight that the specific criterion we adopt is inconsequential. In sum, the final sample size for the focal longitudinal analyses is $N = 319$ (65.4% of the eligible Time 1 sample).

Research Design and Procedure

Participants responded to a series of questionnaires assessing their attitudes toward their partners, their certainty in those attitudes, their satisfaction in the relationship, their satisfaction with life, and their mental and physical health status on several dimensions. The survey was personalized by asking participants to enter their partners’ initials early in the study, which we piped into the question wording through the survey. See the online supplement for a full set of measures used in this study). Additional measures of trait perceptions and life stressors were included for exploratory purposes and not discussed further here.

Predictor Measures

Partner Attitudes

Partner attitudes were assessed using a three-item semantic differential measure (Osgood et al., 1957), which “is the foundational technique [of attitude measurement] used most often in research today” (Krosnick et al., 2019, p. 57). Prior research on partner attitudes (McNulty et al., 2013) has also used semantic differentials as the explicit measure.

Thus, each participant reported their attitudes toward their partner on three scales ranging from -4 (negative, dislike, unfavorable) to +4 (positive, like, favorable). This scale showed very strong internal reliability (α = .92), so items were averaged to form a composite measure of partner attitudes such that higher scores reflect more positive attitudes (M = 3.01, SD = 1.53). The same measure was given at Time 2 (α = .96; M = 2.86, SD = 1.62).

Partner Attitude Certainty

Partner attitude certainty was assessed using a single item asking participants how certain they were of their attitudes towards their partner, reflecting common practice in prior attitude certainty research. Response options ranged from 1 (not certain at all) to 5 (extremely certain) (Time 1: M = 4.35, SD = .71; Time 2: M = 4.27, SD = .74).

Outcome Measures

Relationship Satisfaction

The Relationship Assessment Scale (Hendrick, 1988) is a 7-item scale that assesses general relationship satisfaction. Some example items in this scale include “How well does your partner meet your needs?”, “In general, how satisfied are you with your relationship?”, “How good is your relationship compared to most?”, and “How often do you wish you hadn’t gotten into this relationship?” Responses were given on 1 – 5 scales with response labels suited to each question (e.g., “very poorly” – “very well”). Two of the items were reverse coded after which all scores were averaged so that higher values indicate greater satisfaction levels. In the current study, the scale showed very strong internal reliability (α = .93; M = 4.20, SD = .77.)

Life Satisfaction

The Satisfaction with Life scale (Diener et al., 1985) is a 5-item scale that assesses one’s overall sense of subjective well-being. Some example items include “In most ways, my life is

close to my ideal," "The conditions of my life are excellent," and "I am satisfied with my life." Response options ranged from 1 (strongly disagree) to 7 (strongly agree). The scale showed strong internal reliability (α = .92), so items were averaged to form a composite measure of life satisfaction such that higher scores indicate greater well-being (M = 4.95, SD = 1.31).

Mental Health and Emotional Well-Being

The Patient-Reported Outcomes Measurement Information System (PROMIS) is a set of validated instruments for assessing health outcomes. We used the PROMIS-29 v 2.0 scale (Ader, 2007), which is a 29-item non-disease-specific scale that measures health-related quality of life. It covers eight different areas of health, but we focus on those most relevant to mental health and emotional well-being (depression, anxiety, ability to participate in social roles/activities, fatigue, and sleep disturbance). Each of these domains is assessed with four items. Some example items include "In the past 7 days, I felt depressed," "In the past 7 days, I felt fearful," and "I have trouble doing all of my regular leisure activities with others." Responses were given on 5-point scales with response labels suited to the item (e.g., "Never" – "Always"). Internal reliabilities were strong for each subscale (αs > .86). We scored each subscale using the HealthMeasures Scoring Service, which computes standardized T-Scores (M = 50, SD = 10) calibrated against the PROMIS Profile v2.1.

The scale also assesses three other areas more relevant to physical health: the degree to which physical pain interferes with everyday activities, the intensity of one's physical pain, and ability to function physically. However, these are theoretically less likely to stem from the quality of one's romantic relationship, so we did not include these in our primary analyses. Indeed, these measures were generally not reliably associated with our variables of interest, but we include the results of those analyses in the online supplement.

Results

Our key research questions concerned the extent to which the effects of partner attitudes were moderated by the certainty with which people hold those attitudes. Thus, our analyses were primarily multistep linear regression models in which attitudes and certainty were entered as predictors in the first model, and the two-way interaction term was added in the second model. Results are interpreted from the first of the two models in which they appear. Across analyses, predictors were mean-centered unless otherwise noted. See Table 1 for descriptive statistics and zero-order correlations between primary variables measured at Time 1.

[TABLE 1 ABOUT HERE]

Relationship Satisfaction

First, our primary analysis examined whether the relationship between partner attitudes and relationship satisfaction would be moderated by partner attitude certainty. Overall, the more positively people felt about their partners, the more satisfied they were in their relationships, b = .33, 95% CI = [.30, .36], t(485) = 23.41, $p < .001$. Curiously, there was also an independent effect of partner attitude certainty such that greater certainty was associated with more relationship satisfaction, b = .31, 95% CI = [.25, .37], $t(485) = 10.31$, $p < .001$.

More notably, there was a significant interaction between partner attitudes and partner attitude certainty, b = .04, 95% CI = [.01, .07], $t(484) = 2.65$, $p = .008$, $f^2 = 0.014$ (Figure 1; see online supplement for full results of each coefficient across both models and each model's R^2). Specifically, the effect of partner attitudes was largest among people who were relatively certain of those attitudes (1 *SD* above the mean), b = .36, 95% CI = [.33, .40], $t(484) = 19.71$, $p < .001$. Although partner attitudes were still associated with relationship satisfaction among people with

lower certainty (1 *SD* below the mean), the effect was smaller, $b = .30$, 95% CI = [.27, .34], $t(484) = 16.89$, $p < .001$.[1]

[FIGURE 1 ABOUT HERE]

Well-being Outcomes

Our secondary question was whether certainty also moderates the relationship between partner attitudes and mental health and well-being indicators. Multiple regression analyses found no support for the expected attitude × certainty interactions on life satisfaction or mental/emotional health (*ps* > .27; see online supplement for full results). However, we explored the possibility that despite these null overall effects, the interaction's effect on relationship satisfaction carried over into these markers of mental health. We conducted a series of exploratory moderated mediation models testing the indirect effects of the attitude × certainty interaction on life satisfaction and mental health outcomes via their relationship with relationship satisfaction. We ran these analyses using the *mediation* package for *R* (Version 4.5.0; Tingley et al., 2014), which computes confidence intervals using the Quasi-Bayesian Monte Carlo method. Across analyses, we set the attitude × certainty interaction term as the key predictor, entering attitudes and certainty as covariates. Relationship satisfaction was set as the mediator, and each well-being outcome was entered as the outcome of interest in each analysis. Table 2 summarizes the results of these analyses. Overall, relationship satisfaction is a reliable predictor of well-being outcomes. Furthermore, the indirect effects of attitude × certainty on these outcomes via relationship satisfaction are generally significant.

[1] The items we included in the Time 2 survey allowed us to run a within-subjects replication of this key effect. Considering only partner attitudes, certainty, and relationship satisfaction reported at the 4-month follow-up, the same attitude × certainty interaction was significant, $p < .001$. See the online supplement for a full report of these results.

[TABLE 2 ABOUT HERE]

Notably, it seems that the effects on mental health outcomes as assessed by the PROMIS-29 inventory are not clearly differentiable. In some exploratory follow-up analyses, we found that relationship satisfaction did not reliably predict each PROMIS dimension when controlling for the others. Therefore, these results may be more appropriately interpreted as general relationships with mental health outcomes rather than five unique health effects. Indeed, if we create a mental health composite by averaging the T-scores on all five PROMIS dimensions we focus on, this general measure is uniquely predicted by relationship satisfaction, $b = -1.86$, $p < .001$, and the indirect effect of the attitude × certainty interaction on general mental health via relationship satisfaction is significant (95% CI: [-0.16, -0.02]).

The Role of Relationship Length

We also explored the possibility that the length of the relationships further moderates the effects of partner attitudes and attitude certainty. That is, perhaps it is only certainty that emerges from substantial experience with one's partner that reliably moderates the effects of partner attitudes. In our data, relationship length is positively skewed with relatively few people having been in their relationship for quite a long time (skewness = 0.89). Thus, for these exploratory analyses, we log-transform relationship length. Overall, participants who had been in their relationship longer were no more certain of their partner attitudes, $r = -0.03$, $p = .46$.

Data were submitted to a multistep linear regression model predicting relationship satisfaction, entering partner attitude, certainty, and relationship length in the first step, the two-way interaction terms in the second step, and the three-way interaction term in the third step (see online supplement for full results of each step). Overall, in addition to the main effects of

attitudes and certainty that we reported previously, people were somewhat less satisfied in their relationships the longer they had been in them, b = -0.04, $t(482)$ = -2.21, p = .03, 95% CI: [-0.08, 0.00]. Most notably, however, the three-way interaction was significant, b = 0.06, $t(478)$ = 3.36, p < .001, 95% CI [0.03, 0.10]. In Figure 2, we plot the estimated simple attitude × certainty two-way interaction for relationships ranging from one to 60 years, essentially capturing the range in our data. Predicted interaction effects were computed by centering relationship length in the full regression model at varying log-transformed values of relationship length. Although the hypothesized interaction holds for relationships 12 years or longer, it is not supported for younger relationships.[2]

[FIGURE 2 ABOUT HERE]

We repeated the same analyses for the well-being outcomes, but no three-way interaction was significant (ps > .05).

As we did for the overall attitude × certainty interaction results, we submitted the three-way interaction models to a series of mediation analyses to test whether the attitude × certainty × relationship length interaction was indirectly associated with the well-being outcomes via their relationship with relationship satisfaction. Indeed, the three-way interaction had significant indirect effects on life satisfaction and all indicators of mental health (ps < .03) except for social

[2] Relationship length is confounded with participants' age. Older participants tended to have been in their relationships longer (log-transformed) than younger participants, r = 0.75. We thus conducted an additional analysis in which we added participant age and its interactions with partner attitudes and certainty to the previous model predicting relationship satisfaction. Because the age distribution was not skewed in our sample (skewness = 0.39), we left age in its raw form; however, the pattern of results does not change if we also log-transform age. Although the partner attitude × certainty × relationship length three-way interaction remained significant in this model, b = 0.06, $t(474)$ = 2.09, p = .04, 95% CI: [0.00, 0.12], the corresponding partner attitude × certainty × age interaction is not significant, b = 0.00, $t(474)$ = .20, p = .84, 95% CI: [0.00, 0.00].

social functioning (p = .08). The nature of these effects was that the partner attitude × certainty indirect effects that we reported previously were stronger for people in longer relationships (ps < .02 for relationships 1 *SD* above the mean in length). See the online supplement for a full report of these indirect effects.

Partner Attitude Stability

We computed an index of attitude change by taking the absolute value of the difference between Time 1 partner attitudes and Time 2 partner attitudes. This captures the degree to which attitudes became either more positive or more negative over time and is a standard metric when testing predictors of attitude stability (e.g., Luttrell et al., 2016). We submitted data to a linear regression analysis entering Time 1 partner attitude certainty as a predictor of absolute attitude change. Results showed that the more certain people were in their initial partner attitudes, the less those attitudes changed four months later, B = -0.26, $t(317)$ = -2.90, p = .004, 95% CI: [-0.43, -0.08].

Upon closer inspection, the distribution of attitude change in this study is skewed, with 45% of participants showing no change at all in their partner attitudes. Therefore, we also dichotomized attitude change as “no change” (0) versus “change” (1) and submitted it to a logistic regression analysis with initial certainty as the predictor. This model also supports the attitude strength prediction; the less certain people were in their initial partner attitudes, the more likely those attitudes were to change, B = -1.06, z = -5.44, p < .001.

Because we made some post-hoc decisions about the Time 2 inclusion criteria and method for treating attitude change, we ran a multiverse analysis, testing the certainty effect in 16 different models, varying the analysis method and inclusion criteria. The certainty effect was reliable in all of these analyses, p < .004. We had also included an exploratory question at Time

2 asking people: “How much have your feelings about your partner changed in the last 4 months?” When we use this as the dependent variable instead, the same 16 permutations of the analysis all show that greater initial attitude certainty is associated with less self-reported attitude change four months later, *p*s < .001. Finally, as an alternative approach, we also assessed absolute change in relationship satisfaction between surveys and found that less initial attitude certainty was significantly associated with more change in relationship satisfaction (*p*s < .05) in all permutations of the analysis except two ($p = .07$). See the online supplement for a full report of these robustness analyses.

Discussion

In a two-wave study, we found that accounting for people’s certainty in their partner attitudes enhanced the predictive utility of those attitudes for relevant relationship outcomes. Partner attitudes were more strongly associated with relationship satisfaction when those attitudes were held with greater confidence, which further predicted a variety of mental health and well-being outcomes. These included a variety of important variables such as life satisfaction, depression, anxiety, and sleep quality. Furthermore, more confidently held partner attitudes changed less after a four-month interval.

Overall, these results highlight the value of understanding not only people’s primary attitudes toward their partners but also their secondary, metacognitive appraisals of those attitudes’ validity. This work joins a body of prior research showing that confidence in one's thoughts and attitudes enhances their influence and durability (Tormala & Rucker, 2018). It also helps bridge the constructs of interest to relationship science with basic attitude processes, namely models of attitude strength (Krosnick & Petty, 1995). The value of understanding attitude strength is often illustrated by comparing two attitudes that appear the same on a survey

(e.g., rating the target as a "+2") but differ in their influence and durability nonetheless. Because attitudes tend to be strong when they are rooted more in direct experience (Fazio & Zanna, 1981) and knowledge (Visser et al., 2008), one may have anticipated that by definition, attitudes involved in long-term romantic relationships are maximally strong. Indeed, certainty and stability were quite high in our study; however, variance was still detectable, emerging in patterns consistent with prior research on attitude strength.

Relationship scientists should continue considering variance in relationship-relevant attitudes and its relevance. Indeed, the recent work suggesting that self-reported variables cannot readily predict changes in relationship quality (Joel et al., 2020) mirrors a crisis that long ago struck research on basic attitude processes, namely that attitudes did not seem to be reliable predictors of behavior (Wicker, 1969). However, just as research on attitude strength has highlighted the benefit of asking whether attitudes predict behavior rather than whether they do, we suggest that the same perspective could clarify the impact of self-reported relationship variables. Indeed, certainty may enhance the durability and impact of more than just partner attitudes—many relationship-relevant perceptions may meaningfully vary in certainty.

Furthermore, some work has considered the accessibility of relationship-related cognitions (Etcheverry & Le, 2005; Fincham et al., 1995); however, there remain myriad strength-related attitude attributes that could prove revealing, such as ego-involvement, ambivalence, and internal consistency (Luttrell & Sawicki, 2020). Even though many strength-related variables are intercorrelated, it is important to consider their conceptually and empirically unique contributions to attitude processes (Visser et al., 2006).

The findings also point to an intriguing implication for relationships: changes in certainty may be the first sign of trouble. Despite several pressures encouraging positive regard for one's

partner, when certainty in those positive views begins to fracture, it could anticipate declining satisfaction and eventual relationship dissolution. From a more optimistic angle, positive experiences may deepen certainty in partner attitudes that are already positive by increasing the amount of attitude-congruent knowledge, strengthening them. Thus, changes in experiences with one's partner may most proximally affect certainty as a precursor to other changes that can and do unfold in relationships.

Nevertheless, some curiosities in our results deserve further theoretical analysis. First, effects on mental health and well-being emerged only indirectly, as a function of the partner attitude × certainty effect on relationship satisfaction. The absence of interaction effects on these outcomes themselves (i.e., null "total" effects) was inconsistent with our hypotheses. It may be that partner attitudes themselves do less to promote these outcomes than we anticipated, and they only have these sorts of consequences to the extent that they bolster a satisfying relationship. Indeed, although we observed a positive main effect of partner attitudes on life satisfaction, partner attitudes were not significantly correlated with our mental health measures (see Table S2). Therefore, there was little effect for certainty to moderate.

We did observe unique effects of certainty itself; the more people expressed certainty about their partner attitudes (whatever they may have thought of their partner), the more positive their mental health and well-being. That is, uncertainty was associated with more negative outcomes, such as less life satisfaction, more depression, and more sleep disturbances. Therefore, partner attitude certainty may have captured more than metacognitive assessments of one's relationship, such as a more generalized uncertainty, which may correspond to negative mental health experiences (Massazza et al., 2023). Future research in this area should aim to parse the variance in certainty that is directly relevant to partner attitudes versus other sources.

Second, we uncovered an intriguing pattern in which the moderating effects of certainty were stronger for longer-term relationships. This was a purely exploratory analysis based on cross-sectional self-report data and should be interpreted with appropriate caution; however, it raises tentative theoretical questions. We initially tested the role of relationship length, hypothesizing that certainty would matter more when relationships are earlier in their development, before people settle into established routines with their partners. However, we found the opposite, which perhaps speaks more to the role of relationship duration in the reliability of certainty. People can become certain for many reasons, and perhaps it is the confidence that comes from experience that seems more legitimate and serves as a clearer signal to those evaluating how relevant their attitudes are to other judgments. Future work in this area should consider whether the patterns of attitude strength in judgments about one's relationship shift over the course of the relationship. Finally, our data showed an overall small, negative relationship between relationship duration and satisfaction; people were somewhat less satisfied in their relationships the longer they had been together. Although not the focus of the study, this finding is notable, given prior evidence that such a negative association typically occurs only in unique populations (Anderson et al., 2010; Galovan et al., 2023). Perhaps the study's sample of online survey panelists participating in 2024 was somewhat more likely to experience stress early in their relationships, elevating their risk of longer term relationships satisfaction (Neff & Broady, 2011). Future data will be useful in corroborating this pattern (or not) and examining its causes.

As always, several limitations constrain this study's conclusions. First, our sample consisted of online panel respondents who self-selected into the survey, which may not accurately represent the demographic diversity of couples in the national or global population.

Because traditional attitude certainty effects have been documented in nationally representative surveys (e.g., Bassili, 1996) and non-U.S. samples (e.g., Itzchakov et al., 2018), we suspect that our sample does not strongly limit our findings, but future work should more deliberately examine these dynamics in diverse samples. Indeed, other basic attitude strength effects can vary across cultures (Barnes & Shavitt, 2024; Luttrell et al., 2022). Nevertheless, there may be important cultural variation in people's openness to reporting negative judgments of their relationships. Even in our sample, relationship satisfaction was generally positive. However, under strong situational pressures to obscure any negative judgments of one's relationship, such a restriction of variance would limit the ability to detect effects of certainty. Perhaps these situations would permit the expression of relative uncertainty, which could signal dissatisfaction that is not otherwise expressed. We also note that we did not collect data on participants' disability status and therefore cannot comment on this aspect of our sample. Future research should more deliberately account for this.

Second, although a four-month interval for assessing longitudinal stability may be notable in behavioral science research, it is a flash in the pan for relationships that have endured for decades. Therefore, it is meaningful that we observed any predictable attitude change over this time, but future research would benefit from assessing attitudes multiple times over a longer time period to better establish causal relationships and the potential for a reciprocal certainty-stability relationship (Petrocelli et al., 2010), which cross-sectional or simpler two-moment longitudinal designs cannot easily capture (see Hawkins et al., 2002). Indeed, another limitation of the present study is its inability to draw strong causal conclusions. Perhaps certainty makes attitudes more influential, or perhaps being in a satisfying relationship elevates certainty in one's

partner attitudes. Future research may benefit from independently manipulating momentary feelings of certainty or doubt to better understand their causal effects.

Finally, it remains possible that the observed certainty effects are driven by another more proximally relevant variable. We rely on a single, face-valid measure of attitude certainty, which could make it difficult to capture the specific construct of interest purely, although we note that single-item measures of certainty are common in influential work in this area (e.g., Bassili, 1996; Bizer et al., 2011; Clarkson et al., 2008; Fazio & Zanna, 1978; Muthukrishnan et al., 2001; Smith et al., 2008; Tormala & Petty, 2002). Indeed, some research reports include at least one study relying on a single-item measure and at least one using a multi-item measure of attitude certainty, and they produce consistent results (e.g., Bizer et al., 2011; Clarkson et al., 2008; Smith et al., 2008). Nevertheless, although the effects of attitude certainty are historically robust when controlling for a variety of similar variables (e.g., Bassili, 1996; Luttrell & Togans, 2021), perhaps in the domain of close relationships, our observed effects of certainty are driven by some other variable. For instance, despite critical differences between attitude certainty and relationship commitment, these variables are conceptually similar, and further research should clarify their distinct interplay in shaping the strength of partner attitudes.

This work adds to the small but growing literature bridging relationship science with basic attitudes research (Faure et al., 2024). Just as Krosnick and Abelson (1992) once called on pollsters to include measures relevant to attitude strength as a strategy for enhancing the predictive validity of their surveys, these studies make a similar argument for relationship science because interpersonal attitudes are among the defining features of a relationship.

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Data Availability

Data and analysis scripts for reproducing all reported results will be publicly available on the Open Science Framework (https://osf.io/8z3u4/?view_only=5c432748690f4238862388a1680c6f50). The OSF page will be de-anonymized following paper acceptance.

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Table 1

Zero-order Correlations Between Central Time 1 Variables

Variable	*M* (*SD*)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Partner Attitude	3.01 (1.53)								
2. Partner Attitude Certainty	4.35 (0.71)	0.38							
3. Relationship Satisfaction	4.20 (0.77)	0.77	0.54						
4. Life Satisfaction	4.95 (1.31)	0.38	0.32	0.56					
5. Depression	50.53 (9.60)	-0.16	-0.24	-0.25	-0.52				
6. Anxiety	52.64 (9.86)	-0.10	-0.20	-0.20	-0.44	0.80			
7. Fatigue	52.65 (10.36)	-0.12	-0.17	-0.19	-0.37	0.62	0.59		
8. Sleep Disturbances	51.65 (8.85)	-0.13	-0.18	-0.22	-0.31	0.41	0.39	0.56	
9. Social Functioning	52.81 (8.64)	0.13	0.15	0.17	0.36	-0.55	-0.52	-0.61	-0.41

Note. All correlations are significant at $p < .05$.

Table 2

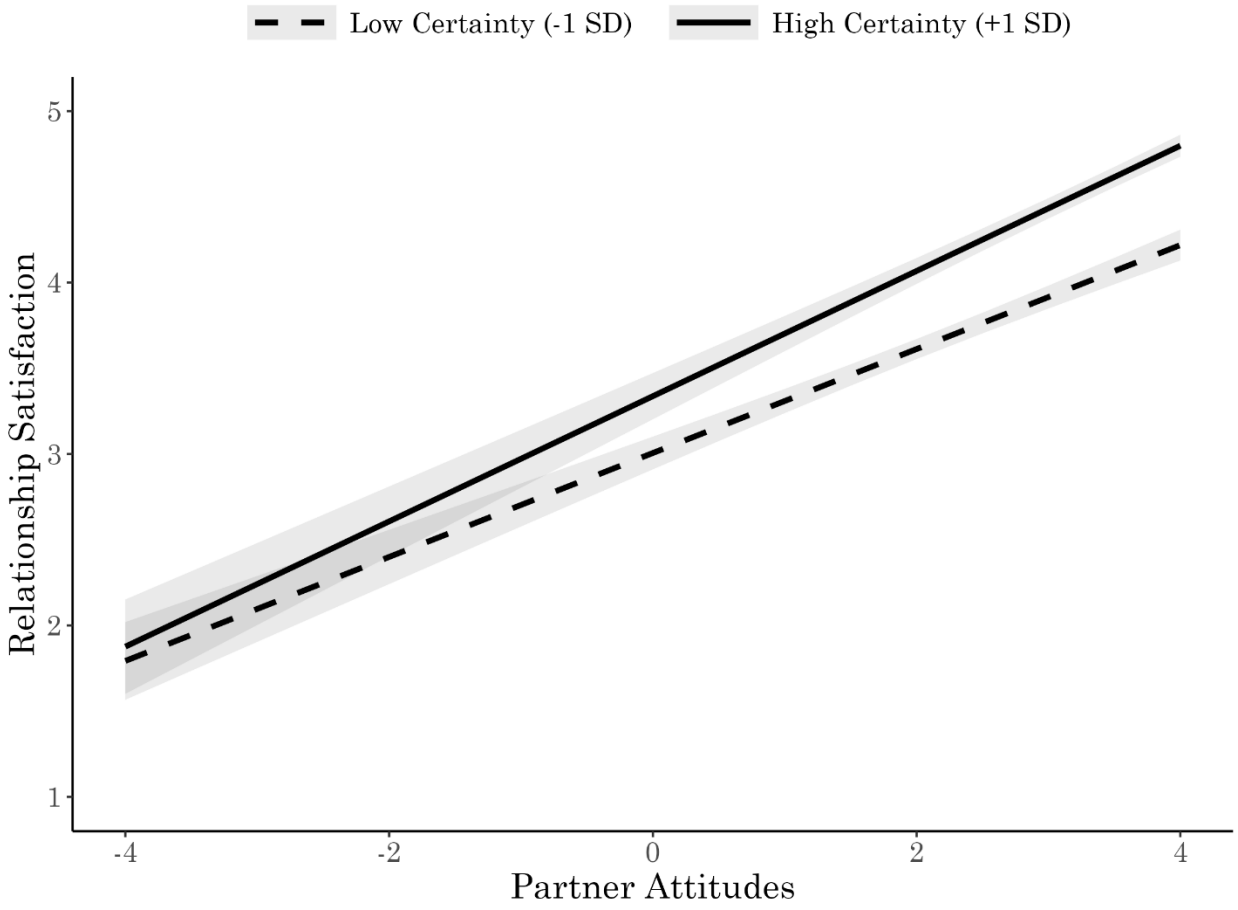
Indirect Effects of Partner Attitude × Certainty

Outcome	**RS → Outcome**		**Direct Effect**		**Indirect Effect**	
Variable	***b***	**95% CI**	***b***	**95% CI**	***b***	**95% CI**
Life Satisfaction	1.11**	[0.89, 1.33]	-0.08*	[-0.16, -0.00]	0.05*	[0.01, 0.09]
Depression	-3.09**	[-4.96, -1.22]	0.48	[-0.19, 1.15]	-0.13*	[-0.28, -0.03]
Anxiety	-2.82**	[-4.77, -0.88]	0.48	[-0.21, 1.18]	-0.12*	[-0.27, -0.02]
Fatigue	-2.37*	[-4.43, -0.32]	0.26	[-0.47, 0.99]	-0.10*	[-0.24, -0.00]
Sleep Disturbances	-2.53**	[-4.27, -0.78]	-0.24	[-0.87, 0.38]	-0.11*	[-0.24, -0.01]
Social Functioning	1.54†	[-0.18, 3.26]	-0.31	[-0.93, 0.30]	0.07†	[-0.01, 0.17]

Note. $^{**}p < .01$, $^{*}p < .05$, $^{\dagger}p < .10$. RS (Relationship Satisfaction). All values are unstandardized coefficients with 95% confidence intervals. “RS -> Outcome” reports the effect of RS controlling for attitudes, certainty, and their interaction. “Direct Effect” reports the effect of the attitude × certainty interaction controlling for RS.

Figure 1

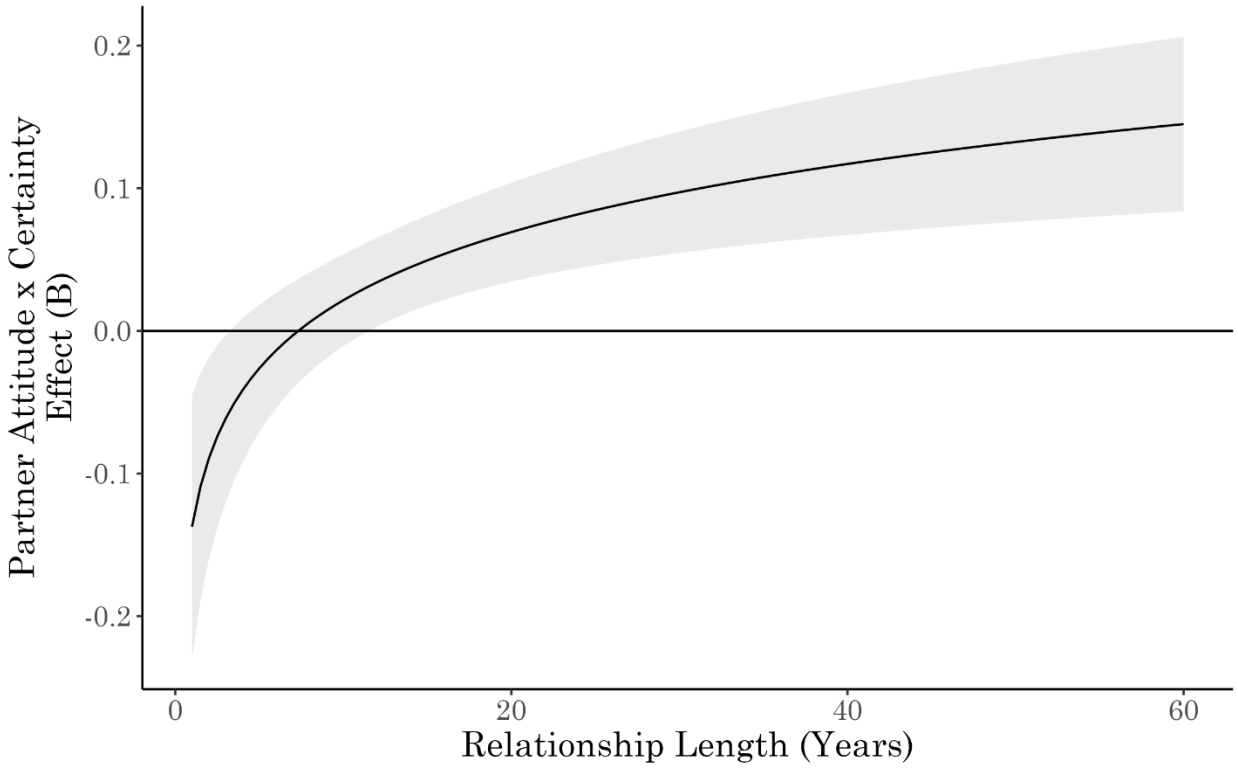
Interaction between partner attitudes and certainty on relationship satisfaction



Note. Error bands present 95% confidence intervals around predicted values of relationship satisfaction.

Figure 2

Estimated partner attitude × certainty interaction on relationship satisfaction by relationship length



Note. Log-transformed values of relationship length are converted back to the original units of the variable.