Enhancing Relationship Quality Measurement: The Development of the Relationship Flourishing Scale

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Relationship quality is the most frequently assessed construct in the intimate relationships literature. Dozens of assessment instruments exist, but the vast majority conceptualize relationship quality in terms of satisfaction (or a similar construct), which focuses on the *hedonic* (pleasure or happiness) dimension of the relationship. Some scholars question whether the richness and depth of adult intimate relationships can be captured by satisfaction ratings and suggest focusing on a complementary *eudaimonic* (human flourishing) dimension of the relationship. This study evaluates the development of the Relationship Flourishing Scale, a 12-item measure of eudaimonic relationship quality that assesses meaning, personal growth, relational giving, and goal sharing. The study supports the construct validity of the Relationship Flourishing Scale, including its content, concurrent, convergent, discriminant, and incremental validity. Its incremental validity and independence suggest that it provides information about deeper and richer aspects of relationship quality than do current hedonic relationship quality measures.

Keywords: relationship quality, flourishing, meaning, personal growth, shared goals

Committed romantic relationships, including marriage, are among the most important relationships in adults' lives, with very significant implications for physical and psychological well-being. Simply being married predicts multiple indicators of psychological and physical well-being and mortality (Holt-Lunstad, Birmingham, & Jones, 2008; Lee & Ono, 2012; Liu, 2009). Relationship quality is an even better predictor of happiness and health (Miller, Hollist, Olsen, & Law, 2013; Robles et al., 2014). Consequently, considerable time and effort have been devoted to relationship quality measurement, with two noteworthy recent improvements in precision and power. First, Funk and Rogge (2007) developed a global, one-dimensional couple satisfaction inventory (CSI) with factor analyses and item response theory (IRT) analyses. This scale contains more information, greater precision, and greater predictive power than previous measures. Second, Fincham and Rogge (2010) created the Positive and Negative Relationship Quality (PNRQ) scales with factor analyses and IRT. These scales broadened relationship quality measurement by identifying satisfied, ambivalent, indifferent, and dissatisfied partners.

Since the 1940s, relationship quality measurement has focused on individuals' satisfaction (or closely related constructs). Although the PNRQ scales and the CSI improve relationship assessment, these measures remain squarely within the tradition of using partners' satisfaction and affect as the sole indicators of relationship quality. Relationship scholars have raised four critical questions about satisfaction-focused assessment. First, some have questioned the wisdom of using the same metrics for newly formed couples and longer-term marriages (e.g., Carroll, Knapp, & Holman, 2006). They suggested that, as couples live together over many years, the partners can mature together and shape one another's identity and habits. These partners have made many decisions and had many experiences together, creating a shared history and shared goals that often transcend individual satisfaction (Fowers, 2000). Without a measure of relationship flourishing, the development of this kind of richness and depth will be difficult to investigate.

Second, theorists have argued that seeing relationship quality only as individual satisfaction assumes that what matters most in

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relationships is the gratification of the partner's self-interests (Carroll et al., 2006; Fowers, 1998). They suggested the importance of testing the assumption of whether partners ever transcend self-interest in their relationships. Testing this would require relationship quality measurement that includes the degree to which partners act in one another's best interests, not just how much the partner gets from the relationship.

Third, reflection on relationship quality measurement has led many scholars to suggest that satisfaction may be an overly narrow and perhaps shallow metric (Carroll et al., 2006; Fincham & Beach, 2010; Fowers & Owenz, 2010). These scholars have hypothesized that relationships can have a richness and depth that cannot be adequately measured with satisfaction scales. They suggested that high quality relationships would include elements such as meaning, personal growth, sacrifice, forgiveness, and an identity as a couple (Fincham & Beach, 2010; Levinger, 1976; Fowers & Owenz, 2010; Stanley, Whitton, Sadberry, Clements, & Markman, 2006). When partners stay together for decades, particularly in good relationships, they are likely to become more invested in one another's well-being than is possible in a newly formed relationship.

Fourth, the thinness of relationship satisfaction and related constructs is due, in part, to the poverty of relationship quality theory and the sheer weight of unexamined assumptions, which many writers have bemoaned for decades (Carroll et al., 2006; Fincham & Beach, 1999, 2010; Finkel, Hui, Carswell, & Larson, 2014; Fowers & Owenz, 2010; Karney & Bradbury, 1995). Carroll, Knapp, and Holman (2006) commented that "what are sometimes called theories of marriage are often little more than 'empirical generalizations,'" which are inadequate "in terms of scope or level of abstraction" (p. 265). They echoed a similar statement by Fincham and Beach (1999) about "the relative absence of theoretical development" in marital research, and that available theory "remains rudimentary" (p. 55), who also suggested that "fundamental to further progress is the need to make explicit and critically analyze the assumptions that informed the choice of what to observe in the first place" (p. 55). Although some theoretical pathways have been outlined (Fowers & Owenz, 2010; Fincham & Beach, 2010), very little has changed since then. Theoretical innovations have yet to bear fruit in substantive improvements in the measurement of relationship quality.

Partly in response to these questions, Fincham and Beach (2010) called for greater attention to positive relationship science. They recommended research on "relationship flourishing," that may include a variety of components (e.g., meaning, sacrifice, forgiveness) that provide "a sense that their life as a couple is a life well lived" (p. 7). It is very unlikely that satisfaction measures can capture the richness and depth to which Fincham and Beach refer. Therefore, the purpose of this article is to develop a new relationship quality measure designed specifically to assess relationship flourishing. This new measure is an attempt to address the four criticisms of relationship satisfaction, in that it provides a metric to assess high-quality, longer-term relationships, explicitly assesses partner-interested actions, assesses a richer conception of relationships, and is based on well-articulated theory. We believe that developing better marital theory must begin by questioning key assumptions that have constrained our theories of close relationships. It is important for relationship scientists to be able to question those assumptions and possibly set them aside in order to open novel and vital avenues of theory development.

Questioning Ontological Individualism in Marital Quality Research

Foremost among the unexamined assumptions guiding marital quality theory and research is what Bellah, Madsen, Sullivan, Swidler, and Tipton (1985) called "ontological individualism." According to this view, humans are, first and foremost, discrete individuals that exist prior to social involvements. Thus, social groups and relationships are secondary aggregates of preexisting individuals. Ontological individualism is a cornerstone of Western cultures that greatly value individual autonomy and emotional well-being. Bellah et al. (1985) contrast ontological individualism with "social realism," the view that social relationships are just as real as the individual is.

Ontological individualism also emphasizes individual happiness and satisfaction as key indicators of the quality of life. This focus is apparent in the burgeoning literature on life satisfaction and positive affect, which is known as subjective well-being (e.g., Diener, 2012). The vast majority of relationship quality theory and measurement is also single-mindedly devoted to individuals' relationship satisfaction, suggesting that the purpose of relationships is to provide satisfying individual experiences. Thibaut and Kelley (1959) stated this tenet boldly: ". . . every individual voluntarily enters and stays in any relationship only as long as it is adequately satisfactory in terms of his rewards and costs" (p. 37). The scholarly literatures on individual and relationship satisfaction can be seen as an homage to the cultural value of individual satisfaction. Although there have been some forays beyond subjective assessments of satisfaction, "the way current scholars define the 'good marriage' has changed little since the early theorizing of the 1940s and 1950s," (Carroll et al., 2006, p. 273), remaining doggedly dependent on individual satisfaction as the prime indicator of relationship quality. Thus, these scholarly efforts embody ontological individualism in construing the subjective experiences of the partners as what is most important about relationship quality.

Despite this emphasis on individual satisfaction, glimpses of the social realist perspective have emerged in the relationship literature in concepts such as couple identity (Acitelli, Rogers, & Knee, 1999), interdependence (Rusbult & Van Lange, 1996), and shared goals (Fowers, 2000, 2005). Couple identity assesses the importance of being part of a couple (Acitelli et al., 1999). These authors suggested that marriage redefines the partner, and this identity shift to a focus on "we" is central to relationship commitment and duration. Shared goals have been defined as goals that can only be pursued and achieved in concert with others, never as an individual alone (Fowers, 2005). Shared goals include important relationship aims (e.g., harmony, cohesion, and fairness) and societal aims (democracy, justice, and solidarity), none of which can be achieved individually.

Yet it is interesting to note that even these social realist constructs are typically assessed as subjective individual perceptions and evaluations in relationship research. Of course, any self-report measure relies on the respondent's perspective, but ontological individualism has directed relationship quality researchers' attention to assessing the internal psychological experience of couple identity and interdependence rather than asking partners about

observable, durable features of the relationship. In contrast, the concept of shared goal pursuit is assessed in reference to concrete, observable relational activities (Owenz & Fowers, 2010).

The emphasis on individual satisfaction suggests that self-interest is the paramount concern of relationship partners. But Carroll et al. (2006) suggest that "rather than assuming that actors act in the name of self-interest, marital scholars can seek to ascertain when, where, and why self-interest might be an overriding concern and when, where, and why other forms of action inform the marital relationship" (p. 270). When partners give one another benefits, scholars generally see this in self-interested terms, as a matter of exchanging benefits. Yet Clark and her colleagues (e.g., Clark & Aragón, 2013) reported that committed relationships tend to have a communal orientation, in which people benefit their partners without keeping track of exchanges. We suggest that relational giving is inconsistent with the putative primacy of self-interest. Moreover, we suggest that relationships in which partners consistently benefit one another primarily to promote the partner's well-being are more desirable and durable than relationships in which exchanges are tallied and equalized.

In addition, there are other very important relationship quality indicators that may be only weakly tied to satisfaction, at least at times. Such indicators could include the meaningfulness of the relationship and the personal growth fostered in the relationship (Fowers, 2000). Indicators of these constructs may be related to relationship satisfaction over time, but meaning and growth often emerge in periods of acute adversity and suffering. We suggest that a meaningful relationship that offers the security necessary for personal growth is more desirable than one that does not include meaning or does not foster growth. Because satisfaction and positive affect may or may not be related to these features of high quality relationships, relying only on satisfaction and affective assessments limits our ability to recognize these aspects of relationship quality.

It seems clear that ontological individualism, with its prioritization of internal affective experience and self-interest, has been foundational to both individual well-being and relationship quality theory and research (cf. Fowers, 1998, 2000, 2005). Subjective well-being research has focused primarily on contentless indicators of satisfaction, and two-dimensional affect assessment (positive and negative; Diener, 2012; Watson & Tellegen, 1985). Relationship quality scholarship has closely paralleled individual well-being research by focusing primarily on relationship satisfaction and happiness. State of the art relationship quality measures also consist of contentless satisfaction items and a two-dimensional (positive and negative) structure (Fincham & Rogge, 2010). Therefore, the recent improvements in relationship quality measurement cited above remain solidly within the ambit of ontological individualism.

An important counterpoint to ontological individualism is the contemporary exploration of the ancient Greek concept of *eudaimonia*, which we translate as human flourishing. According to Aristotle (1999), eudaimonia is a matter of living well as a human being. He saw humans as reasoning, social beings. Because we need good reasons for our actions, meaning and purpose are central to eudaimonia. Because we humans are also attachment-oriented and deeply social beings, high-quality close relationships are central to a good human life. Therefore, understanding meaning and personal growth in high quality relationships is vital to comprehending how to live well.

Accordingly, some scholars have suggested that eudaimonia, indicated by meaning, purpose, personal growth, and deep relationships, is a vital complement to subjective well-being, indicated by satisfaction and positive affect, for well-being research (Fowers, 2005; Ryff, 1989). They have followed Aristotle's (1999) suggestion that *hedonia* (subjective well-being) and eudaimonia are related, but distinct constituents of "a good life." These constructs are related because eudaimonia includes the best forms of happiness and pleasure. Yet one could experience many simple pleasures without living eudaimonically. Scholars have attempted to enrich the measurement of well-being by developing measures of "eudaimonic well-being" (Peterson, Park, & Seligman, 2005; Ryff, 1989; Waterman et al., 2010). Research suggests that hedonic (subjective) well-being and eudaimonic well-being are related, but distinct (Fowers, Mollica, & Procacci, 2010; Huta & Ryan, 2010; Keyes, Shmotkin, & Ryff, 2002). Eudaimonic well-being measures complement hedonic well-being scales, broadening and deepening the assessment of individual well-being.

Parallel to the interest in eudaimonic well-being, many scholars have suggested that good relationships are sources of meaning (Fincham, Stanley, & Beach, 2007; Fowers & Owenz, 2010), characterized by commitment (Stanley & Markman, 1992), sacrifice (Stanley et al., 2006), personal growth (Finkel et al., 2014; Fowers & Owenz, 2010), and provide "an identity of *us with a future*" (Fincham et al., 2007, p. 280; Fowers & Owenz, 2010). Therefore, a eudaimonic approach to assessing marital quality may be necessary to transcend the limitations of ontological individualism and its thin affective, self-interested focus. Therefore, we developed the Relationship Flourishing Scale (RFS) to access the meaning, personal development, couple identity, and relational giving that are, at best, only indirectly assessed by relationship satisfaction measurement.

Relationship Flourishing

Aristotle (1999) suggested that human beings are meaning-making, self-evaluating, and highly social creatures. Thus, a good life for a human being includes meaning, personal growth, and high quality relationships. Therefore, intimate relationships, including marriage, have a central place in eudaimonia. Indeed, he argued that individuals are only able to flourish if they have excellent relationships. Romantic relationships are particularly important to contemporary adult well-being, so we see these relationships as vital contributors to eudaimonic well-being.

In addition, Aristotle defined eudaimonia as a form of *activity*. In contrast, hedonia is typically defined as *psychological experience*. Accordingly, the RFS emphasizes relational activities rather than subjective experiences. We began with six domains of flourishing identified by contemporary eudaimonic well-being investigators: (a) meaning, (b) personal growth, (c) goal sharing, (d) relational giving, (e) the expression of a person's "true nature," and (f) deep engagement with life (Fowers, 2005; Peterson et al., 2005; Ryff, 1989; Waterman, 1993). These domains are simply content areas to guide scale coverage. We see the RFS as unidimensional.

Meaning

Meaning and purpose are core elements of every version of eudaimonia of which we are aware. Clear understandings of the meaning and direction of one's life are deemed essential to living well. Romantic relationships are central arenas of activity for many adults, making these relationships potentially vital sources of meaning and purpose. A meaningful relationship will contribute to both individual flourishing and relationship vitality.

Personal Growth

Self-development is an important aspect of life, and widely included in accounts of eudaimonia. Aristotle (1999) emphasized that fulfilling one's human potential is central to the good life. This can include enhancing one's character, capacities, and knowledge, and other forms of growth. Aristotle saw friends (including romantic partners) as key sources of inspiration, support, and encouragement for self-development.

Goal Sharing

Aristotle (1999) saw sharing goals as central to relationships. In romantic relationships, goals like harmony and intimacy are particularly important. These are shared goals because they can only be achieved when both partners contribute to and share the goal attainment (Fowers, 2005). Couples have many goals they seek together, such as home ownership or retirement savings. Partners also have individual goals, such as career advancement or pursuing a hobby. A couple's capacity to have shared goals and to mutually support and celebrate one another's individual goals are central to relationship flourishing.

Relational Giving

A motivational shift toward prioritizing the partner and the relationship seems to characterize high-quality relationships (e.g., Stanley et al., 2006). Although this is sometimes termed "sacrifice," we prefer to call it "relational giving" because sacrifice connotes loss. In contrast, Aristotle (1999) emphasized that, in the best friendships (including romantic relationships), the friends "are eager to do good to one another" (p. 240). That is, benefitting each other is not a sacrifice, it is done gladly because one's friend's good is often inseparable from one's own good. Thus, we wish to preserve a distinction between exchange relationships in which one gives in order to receive future benefits and relationships in which one gives because one wants the best for one's friend (cf. Clark & Aragón, 2013).

Personal Expressiveness

Waterman (1993) suggested that personal expressiveness and eudaimonia were synonymous. He saw personal expressiveness as a marker of self-realization, with eudaimonia being defined by the fulfillment of an individual's potentials. We therefore included personal expression as an aspect of flourishing relationships.

Engagement

Peterson, Park, and Seligman (2005) included engagement in their definition of eudaimonia. This is similar to the state of flow, which is being caught up in an activity, and includes a diminished sense of time, a diminished awareness of self, and invigoration. It is possible that flourishing relationships may involve more engagement than lower quality relationships.

Relationship Flourishing Scale Item Development

We now describe the development and preliminary validation of a eudaimonic measure of intimate relationship quality based on the domains of flourishing outlined above. We begin by describing the development of the initial item pool, the expert feedback we obtained to assess content validity, and the cognitive interviewing we conducted. In the main study, we then detail our steps of psychometric evaluation for construct coverage, item reduction, construct validity, and incremental validity with respect to a more traditional measure of relationship satisfaction.

The item development process began with a table of specifications with six domains for the RFS. Following this framework, we constructed an initial pool of 80 items. We further refined the items with five criteria: (a) Is the item strongly related to the couple's relationship or to being a relationship partner? (b) Does the item describe a high quality relationship? (c) Does the item describe an activity rather than a psychological experience? (d) Could a respondent reasonably disagree with the item? (e) Is the item written at a sixth grade reading level?

Using these criteria for revision and culling, the item pool was reduced to 42 items, with the items concentrated in the meaning, personal growth, relational giving, and goal sharing domains. Because only two personal expression items survived these refinements, we excluded this domain and culled those two items. No engagement items survived this refinement stage. The personal expression and engagement concepts were originally defined and developed as intensely individual constructs, focused on individual subjective experiences. We found it extremely difficult to refocus the items on the relationship and on relational activities rather than psychological experiences. Neither personal expression nor engagement is widely included in accounts of flourishing, as they are each included in only one measure of individual flourishing. For these reasons, we do not believe that the absence of these items compromises the content validity of the RFS. We began our empirical assessment of the RFS with the remaining 40 items.

Expert Review

We assessed the content validity of the RFS by soliciting reviews from 12 internationally known experts in romantic relationship quality and in eudaimonia and eight provided feedback. The assessment focused on whether the items fit this definition of a flourishing relationship:

> A flourishing (eudaimonic) relationship: A relationship characterized by meaningful connection and purposeful activities that help partners to grow as individuals and as a couple. Partners actively pursue shared goals, which strengthens their shared identity as a couple. They spontaneously give to their partner and to the relationship because they are deeply devoted to each other. They actively support and facilitate each other's personal goals because they are interested in promoting their partner's well-being.

We asked the expert reviewers to assess each item with four response choices ranging from 1 = *very weak indicator* to 4 =

very strong indicator. We also solicited suggestions from the reviewers for revising each item. The expert ratings of the strength of the items as indicators of relationship flourishing ranged from 2.43 to 3.89. Thus, the ratings ranged from *a somewhat weak indicator* to *a very strong indicator*.

We excluded the six lowest rated items. We also culled four additional items in the lowest quartile because the reviewers questioned those items and revision was very difficult while remaining consistent with our six item criteria. We rewrote 12 retained items following the reviewers' recommendations, resulting in 30 retained items. The reviewers also recommended rewriting some items with frequency-based responses (rather than agreement-based responses).

Cognitive Interviews

We then conducted cognitive interviews (Willis, 2005) to evaluate the content validity of the items from the perspective of 10 relationship partners. This evaluation focused on the clarity and meaningfulness of the RFS items to lay individuals. All participants were in a cohabiting romantic partnership (including marriage) for at least 5 years, and fluent in English. There were three male and seven female participants, with an average age of 35.6 (24–58 years). Their relationships had an average duration of 12.4 years and they had cohabited an average of 9.1 years. All of the relationships were heterosexual.

The respondents completed the 30-item version of the RFS with a 5-point Likert response scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The cognitive interviews followed, with questions for each item. A sample probe was "What did you think about when answering this question?" Each item also had specific probes. The participants understood most, but not all of the items well. They identified items containing vague concepts or difficult words, which led to revisions in nine items. In addition, nine items were removed either because no participants disagreed with the item or the participants generally did not understand it. This resulted in 21 retained items (five meaning items, five growth items, four relational giving items, and seven goal sharing items).

We explored whether some items could be improved by using a temporal response scale rather than an agreement scale. These items included adverbs such as "regularly" or "always," which refer to temporal frequency. Respondents favored using a temporal scale virtually unanimously. As a result, we created a 5-point temporal scale for 14 items ranging from 1 = *never* to 5 = *always*. The 5-point agreement scale was retained for seven items.

Psychometric Evaluation Study

The primary study focused on assessing the psychometric properties of the RFS with the following four aims. First, we wanted to reduce the number of items in the scale to make it more useful for research purposes. We utilized item response theory (IRT) methods to select the highest quality items from the 21-item pool to represent the full range of the scale's underlying dimension. Second, although we expected the RFS to correlate moderately to strongly with other relationship quality scales, it must not be entirely reducible to satisfaction scales. The eudaimonic theoretical design of the RFS specifies that it measures flourishing, which should be both correlated with satisfaction as well as having some

degree of independence from it. Third, we examined the conceptual network of the RFS. That is, does it correlate in expected ways with indicators of other relationships constructs? We expected the RFS scores to correlate positively with measures of positive relationship quality and negatively with measures of relationship distress. Inasmuch as the RFS focuses on flourishing as a couple, we expected moderate to strong positive associations with scales that assess richness and depth in couple relationships, such as commitment, relationship centrality, and couple identity. Our fourth aim was to assess the incremental validity of the RFS. As a complement to relationship satisfaction, we expected the RFS to account for variance in other relationship measures when controlling for relationship satisfaction. In particular, we expected the RFS to account for variance in commitment, relationship centrality, and couple identity measures when controlling for satisfaction.

Method

Participants

A national sample included 408 married individuals, stratified by age and sex. The mean age was 42.71, with a standard deviation of 13.25. There were 207 female and 201 male participants. The sample was majority White, non-Latino (77.7%), with 8.8% Asian American, 7.6% Latinos, 4.7% African American, and 1.2% American Indian or Alaskan Native. Within this sample, 9.1% had a household income of less than $25,000, 26.7% had incomes from $25,000–$50,000, 26% from $50,000–$75,000, 17.9% from $75,000–$100,000, and 20.3% over $100,000. The majority of respondents had children (74%). The participants had been married an average of 14.69 years, with a standard deviation of 11.87. Most participants were in their first marriage (80.9%), with 15.7% in a second marriage, and 3.4% having been married three times or more.

Materials

Relationship Flourishing Scale. We used the initial 21-item RFS wherein seven items used a 5-point agreement response set from 1 = *strongly disagree* to 5 = *strongly agree*, and 14 items used a 5-point frequency response set from 1 = *never* to 5 = *always*.

Couple satisfaction inventory (CSI). Funk and Rogge (2007) developed the CSI by conducting factor and IRT analyses to select items from commonly used relationship satisfaction measures with the best precision and power. We used the 16-item version of their scale. The alpha coefficient was .98, and the scale has excellent concurrent and convergent validity. The alpha coefficient was also .98 in this study.

Positive and Negative Relationship Quality Scale (PNRQ). Using factor and IRT analyses, Fincham and Rogge (2010) identified positive and negative dimensions of relationship quality, which were moderately correlated. These scales provided more information than a widely used one-dimensional assessment of relationship quality, the CSI-4. Participants rate their relationships on a set of positive adjectives (e.g., pleasant, enjoyable) and a set of negative adjectives (e.g., bad, empty). In this study, the Positive Relationships Quality (PRQ) scale had an internal reliability of

.95 and the Negative Relationship Quality (NRQ) scale's alpha was .96.

Couple identity. This two-item scale assesses the extent to which individuals see themselves as "part of a couple" and how important that is (Acitelli et al., 1999). In a confirmatory factor analysis, couple identity items formed an independent factor from other aspects of individuals' more general "relational identity." Couple identity was moderately related to relationship satisfaction. The alpha coefficient in this study was .84.

Dedication commitment—Couple identity. This six-item scale assesses how much a respondent thinks of the relationship as a team (Stanley & Markman, 1992). Alphas for couple identity ranged from .80 to .90, and the scale loaded on the authors' dedication commitment factor, as expected. The scale had moderate to strong correlations with other commitment and relationship quality scales. This scale had an internal reliability of .82 in this study.

Relationship centrality. This four-item scale assesses how meaningful and important the relationship is to the respondent (Agnew, Van Lange, Rusbult, & Langston, 1998). It was positively related to relationship closeness and commitment, with alpha coefficients ranging from .82 to .92. The scale had an alpha of .92 in this study.

Desire for persistence. This four-item scale assesses the desire for the relationship to continue (Schoebi, Karney, & Bradbury, 2012). The median alpha coefficient for the scale was .73 and the scale correlated as predicted with satisfaction and other commitment measures. The scale had an alpha coefficient of .73 in this study.

Inclination to engage in maintenance behaviors. This four-item scale assesses the commitment to act in ways that maintain the relationship (Schoebi et al., 2012). It correlated with satisfaction and other commitment measures as expected and predicted long-term relationship dissolution. The median alpha for this scale was .70. We found an internal reliability of .61.

Inclusion of the other in the self. This single-item pictorial measure contains seven Venn diagrams which show different degrees of overlap between a circle representing the respondent and a circle representing the partner (Aron, Aron, & Smollan, 1992). Participants choose the diagram that best represents their relationship. Alternate form reliability was .93 and 2-week test–retest reliability was .83. It has performed as expected, supporting its construct validity (Aron et al., 1992).

Marital instability index (MII). This 14-item measure assesses thoughts and behaviors associated with divorce likelihood (Booth, Johnson, White, & Edwards, 1985). Respondents indicate the occurrence of divorce-related thoughts or actions in the last 3 years. Factor analysis suggested that the MII is distinct from marital satisfaction scales. It had an internal reliability of .89 (Booth et al., 1985) and predicted divorce 3 years later. Its alpha was .92 in this study.

Procedure

A national sample was recruited by the research firm Qualtrics, Inc. from their available panel. Inclusion criteria were that the respondent had to be married, be fluent in English, and have access to the Internet to complete the survey. The respondents completed the measures through the Qualtrics research web site. They were reimbursed $5 for their participation.

Results

The responses to the 21 RFS items indicated that the lowest two response categories (*strongly disagree* or *disagree* for the agreement items and *never* or *rarely* for the frequency items) had very low response rates (~2% of the entire sample). To allow adequate stability in the IRT-based psychometric modeling used for item selection (as described below), the lowest two response categories were collapsed into one scored category, yielding four scored response categories for each item. To evaluate the psychometric properties of each of the 21 items, the scored responses were calibrated using a partial credit model (PCM; Masters, 1982), which is a polytomous IRT model (Penfield, 2014). The PCM was selected over other potential models because it offered the most flexible model given the sample size. The calibration was conducted using the Winsteps computer program (Linacre, 2014).

Upon calibrating the initial 21 items with the PCM, two primary psychometric properties were evaluated: (a) the item's location on the latent scale, with location defined as the average of the step-level location parameter estimates (Penfield, 2014); and (b) the item's point-measure correlation (correlation of scored responses to the item and the measures of respondent trait level), which provides an index of item discrimination. Using the resulting psychometric properties of the 21 items, a subset of 12 items was selected for the final RFS scale. The 12 items were selected so as to have a range of item location (ranging from -0.87 to 0.97 on the unit logit scale with scale location fixed by setting the mean item location to zero), high point-measure correlations (ranging from .64 to .79), and representation across four domains of relationship flourishing (relational giving, goal sharing, personal growth, and meaning). All 12 selected items demonstrated desirable spread between the three thresholds underlying the four scored response categories, with the three thresholds spaced by approximately 2.0 units on the unit logit scale. This result indicates that the response categories effectively represented successively higher ranges of the measured trait. The model-data fit for each of the 12 selected items was evaluated using the infit statistic, with infit values falling within an acceptable range of 0.74 to 1.19.

Operationally, scores on the 12-item RFS scale are generated by summing the items, without collapsing any response categories. Cronbach's alpha for the 12-item RFS was .93. The RFS includes four agreement items and eight frequency items. There are three items for each of the four RFS domains. Analyses from this point forward were conducted with this 12-item scale, with scores ranging from 13 to 55, with a mean of 46.36 and a standard deviation of 7.60. Scale items and their properties are detailed in Table 1. Neither the RFS nor the CSI were related to any demographic variables (age, gender, years married, number of marriages, or number of children).

We examined zero order correlations between the RFS and a set of relationship measures to assess the conceptual network of the RFS. We expected moderate to strong positive correlations with satisfaction, commitment, closeness, and couple identity measures. We expected moderate to strong negative correlations with the NRQ scale and the MII. The complete correlation matrix is presented in Table 2. The results confirmed our predictions. The RFS

Table 1
RFS Items and Item Characteristics

Item	Item location	Point-measure correlation	Infit	RFS domain
		Agreement items		
1. I have more success in my important goals because of my partner's help.	.48	.71	1.08	Goal sharing
2. We look for activities that help us to grow as a couple.	.89	.79	.85	Personal growth
3. My partner has helped me to grow in ways that I could not have done on my own.	.29	.68	1.11	Personal growth
4. It is worth it to share my most personal thoughts with my partner.	.19	.84	.74	Relational giving
		Frequency items		
5. When making important decisions, I think about whether it will be good for our relationship.	−.26	.66	1.19	Meaning
6. It is natural and easy for me to do things that keep our relationship strong.	.31	.73	1.01	Goal sharing
7. Talking with my partner helps me to see things in new ways.	.31	.74	.98	Personal growth
8. I make it a point to celebrate my partner's successes.	−.83	.69	.92	Relational giving
9. I really work to improve our relationship.	.07	.73	.99	Meaning
10. My partner shows interest in things that are important to me.	.91	.71	1.19	Goal sharing
11. We do things that are deeply meaningful to us as a couple.	.97	.78	.85	Meaning
12. I make time when my partner needs to talk.	−.87	.64	1.14	Relational giving

had positive correlations with satisfaction measures (rs = .83 to .84), commitment scales (rs = .63 to .73), couple identity scales (rs = .53 to .72), and a closeness measure (r = .56). We found the expected negative associations with relationship distress scales (rs = −.46 to −.65).

We used confirmatory factor analysis (Muthén & Muthén, 1998–2012) to examine the independence of the RFS from the CSI-16, a high-quality measure of relationship satisfaction. We expected that a two-factor model would provide the best fit, with a substantial correlation between the factors. We first estimated a single-factor CFA model including all items from the CSI and the RFS using the robust variance-adjusted weighted least squares estimator (WLSMV) for ordinal categorical variables (Beauducel & Yorck Herzberg, 2006). As expected, the fit of the one-factor model to the data was unacceptable, $\chi^2(350) = 2131.734$, $p < .001$; CFI = .97; RMSEA = .11. We then estimated a two-factor CFA model with the 16 items from the CSI loading on one factor and the 12 items from the RFA loading on the other factor using the WLSMV estimator. The fit of the two-factor model to the data,

$\chi^2(349) = 1085.311$, $p < .001$; CFI = .99; RMSEA = .07, was good and significantly better than the one-factor model, a test of the difference in nested model fit for models using the WLSMV estimator (MDΔ$\chi^2(1) = 139.352$, $p < .001$). The correlation of the factors was $r = .85$.

The final set of analyses tested incremental validity by estimating models where both the RFS and CSI were entered as simultaneous predictors of relationship measures including positive and negative marital quality, marital stability, commitment, closeness, relationship centrality, and couple identity. Count regression was used because scores on these measures are typically quite skewed by numerous "perfect" scores. Zero-inflated count regression allowed us to determine the unique contribution of the RFS and CSI to an outcome while also accommodating the highly skewed distributions of these scales (Atkins & Gallop, 2007). Zero-inflated modeling is typically applied when there is a high preponderance of zero scores, as is common in the MII, for example. We reverse scored the positively valenced scales (e.g., couple identity) so that the large number of perfect scores became zero scores.

Table 2
Zero Order Correlations Among Relationship Scales

	RFS	CSI	PRQ	IM	DP	DC-CI	CI	RC	IOS	NRQ	MII
RFS	.930	.843	.832	.628	.725	.655	.720	.527	.561	−.654	−.456
CSI		.981	.909	.627	.781	.655	.695	.543	.563	−.769	−.580
PRQ			.954	.602	.736	.615	.686	.492	.530	−.679	−.473
IM				.606	.692	.734	.513	.547	.409	−.558	−.497
DP					.726	.707	.650	.554	.461	−.659	−.594
DC-CI						.815	.558	.564	.412	−.613	−.546
CI							.843	.463	.488	−.463	−.343
RC								.915	.359	−.479	−.504
IOS									—	−.439	−.315
NRQ										.956	.693
MII											.922

Note. RFS = Relationship Flourishing Scale; CSI = Couple Satisfaction Inventory; PRQ = Positive Relationship Quality Scale; IM = Inclination to Engage in Maintenance Behaviors Scale; DP = Desire for Persistence Scale; DC-CI = Dedication Commitment-Couple Identity Scale; CI = Couple Identity Scale; RC = Relationship Centrality Scale; IOS = Identity of Self in the Other; NRQ = Negative Relationship Quality Scale; MII = Marital Instability Index. All correlations are significant at $p < .01$. Entries on the diagonal are alpha coefficients.

As detailed in Table 3, the RFS emerged as a statistically significant and unique predictor of all the relationship measures above and beyond the CSI except for marital instability and negative relationship quality. This confirmed our prediction that the RFS would have incremental validity with the positively valenced scales, but was not consistent with our prediction of incremental validity with the negatively valenced scales.

Discussion

We created a theoretically designed relationship flourishing measure and assessed its relation to and distinctness from relationship satisfaction. Our theory is a contemporary appropriation of Aristotle's concepts of eudaimonia and close relationships. Given the centrality of close relationships to Aristotle's understanding of eudaimonia and the central importance of romantic relationships to contemporary well-being, it is important to be able to assess relationship flourishing. In addition to the most commonly recognized domains of meaning and personal growth, we included two

Table 3
Regressing Relationship Measures on RFS and CSI

Outcome/predictors	B	95% CI (b)	Rate ratio	p
Positive marital quality[a]				
RFS	.149	[.061, .254]	1.16	.005
CSI	.378	[.324, .443]	1.46	.001
Relationship centrality[a]				
RFS	.172	[.004, .340]	1.19	.045
CSI	.215	[.121, .309]	1.24	.001
Couple identity[a]				
RFS	.516	[.341, .691]	1.68	.001
CSI	.150	[.044, .256]	1.16	.005
Inclusion of other in the self[a]				
RFS	.352	[.161, .543]	1.42	.001
CSI	.139	[.006, .273]	1.15	.041
Dedication commitment[a]				
RFS	.363	[.096, .629]	1.44	.008
CSI	.677	[.425, .930]	1.97	.001
Desire for persistence[a]				
RFS	.347	[.081, .613]	1.41	.011
CSI	.563	[.412, .713]	1.76	.001
Inclination to engage in maintenance behaviors[a]				
RFS	.158	[.039, .277]	1.17	.009
CSI	.179	[.007, .016]	1.20	.001
Negative marital quality				
RFS	.015	[−.187, .218]	1.02	.883
CSI	−.506	[−.392, −.643]	.60	.001
Marital instability				
RFS	.301	[−.047, .650]	1.35	.090
CSI	−.870	[−1.086, −.653]	.42	.001

Note. All measures were modeled as counts using a negative binomial or zero-inflated Poisson regression (to account for any preponderance of zeros).
[a] As is typical with positive relationship measures, a proportion of participants reported the highest possible (summed) score at the upper end of the distribution of scores. To facilitate analysis, these positive indicators were reverse-coded to make zero equivalent to the highest possible score and modeled as a count outcome. To facilitate interpretation, coefficients for the positive relationship indicators were reported to reflect greater RFS or CSI scores predicting greater levels of the indicators.

domains in which relational aspect of flourishing might be most evident: relational giving and goal sharing.

Scale Development and Psychometric Assessment of the RFS

We employed two key substantive criteria in item development for the RFS. First, items had to reflect a high-quality relationship in one of the theoretical domains of relational flourishing. Second, an Aristotelian view of flourishing dictates that indicators of flourishing are activities rather than subjective experiences. All RFS items describe actions the respondent reported taking toward his or her partner, actions the partner took toward the respondent, or actions the couple undertook together. This focus on dyadic interaction differentiates the RFS from individual well-being measures. Using these criteria, we found it difficult to retain personal expression and engagement items. We concluded that these two domains are conceptually distinct from relationship flourishing in their primary focus on individual subjective experience.

The expert feedback and cognitive interviews supported the content validity of the RFS. The majority of items were deemed appropriate to our working definition of the construct. The expert feedback and cognitive interviews enabled us to reduce the number of items and refine the remainder, and we retained good item representation for the four specified RFS domains.

We evaluated the quality of the remaining items to make data-based decisions about item retention for the final version of the RFS with IRT analyses. Overall, the items performed well, and we selected the 12 best-performing items for the final scale. These items covered the underlying domain well, had excellent item characteristics, and represented the four domains of the RFS with three items in each domain. Responses to the RFS items also showed very good discrimination across levels of the construct. The 12-item RFS had excellent internal reliability.

We assessed the convergent validity of the RFS by examining its relationships with indicators that are particularly important for flourishing relationships: commitment, relationship centrality, and couple identity. The RFS had the expected valenced correlations with the validation scales and those associations were very similar in magnitude to the CSI associations. These results clearly indicate that the RFS is a relationship quality scale.

The concurrent validity of the RFS was supported by its strong correlations with the CSI and the PNRQ scales. The CSI and the PNRQ scales are hedonic measures of relationship satisfaction that focus on the contentless evaluation of the relationship. The RFS, in contrast, is focused on substantive, eudaimonic aspects of the relationship that emerge through specific relationship activities reflecting meaning, growth, relational giving, and goal sharing. In spite of these differences, the RFS shared 43%–71% of its variance with the CSI and PNRQ scales. This shared variance is consistent with eudaimonic theory in that flourishing should include satisfaction and happiness.

The magnitudes of the correlations between the RFS, CSI, and PRQ are large enough to raise questions about the distinctness of the RFS from the hedonic measures. To assess the discriminant validity of the RFS, we conducted one-factor and two-factor CFAs with the CSI and RFS items. Although the two scales correlate strongly, the two-factor model reflected substantially better fit, with all CSI items loading on one factor and all RFS items loading

on the second factor. This evidence is consistent with the eudaimonic theory of romantic relationships. Although eudaimonic theory predicts a strong relationship between satisfaction and flourishing, a flourishing scale should be independent of satisfaction because the richness and depth of flourishing should not boil down to satisfaction or positive affect.

We also tested the incremental validity of the RFS by investigating its correlations with other relationship measures while controlling for the CSI. The incremental validity of the RFS was very good for positive relationship quality, relationship centrality, commitment, and closeness, but the RFS did not account for additional variance in measures of relationship distress after controlling for relationship satisfaction. The bivariate relationships between the RFS and these two scales were negative and substantial, but when relationship satisfaction was controlled, the RFS did not account for any unique variance. This suggests that the RFS is less informative about relationship distress than the CSI. In hindsight, this should not have surprised us. Dissatisfaction should be more sensitive to negative relationship qualities than low relationship flourishing.

These two approaches to assessing the independence of the RFS may not allay all readers' qualms about the independence of the RFS and the CSI. Additional research is needed to assess this question. We suggest a number of interesting ways to investigate the value of the RFS in the next section. We must recall, however, that a strong correlation between two measures does not necessarily mean that they are assessing the same construct. The strong correlation only means that they *might* be assessing the same construct. Height and weight, for example, are very strongly correlated, but no one confuses height and weight, partly because there are interesting ways that they diverge in specific cases. We would never know this if we could only measure height. We have to be able to measure weight to learn about how it diverges from height. Because correlations are aggregate analyses, these divergences are obscured when looking only at between-person associations. We suspect that the same kind of divergence between satisfaction and flourishing is likely. The only way to answer this interesting question is by making a relationship flourishing measure available so this research can be conducted.

Implications and Future Research With the RFS

This study provides very good initial support for the construct validity of the RFS, which is important for four reasons. First, the theoretical derivation of the RFS (Fowers & Owenz, 2010) responds to decades of concern about the atheoretical nature of the field (Carroll et al., 2006). We identified ontological individualism as a primary source of the theoretical flatness of marital quality scholarship. This hedonic focus leaves us with a thin concept of greater or lesser satisfaction. As long as we limit ourselves to studying individual satisfaction, there is little to theorize. The innovation of measuring the positive versus negative experiences of relationships was valuable (Fincham & Rogge, 2010), but the individualistic focus on partner affect remained. The construct validity of the RFS suggests that the theoretical expansion of relationship quality to include a eudaimonic approach provides greater breadth in assessment of this key relationship. This indicates that eudaimonic theory may have significant value in studying close relationships, particularly longer-term relationships. For

example, the RFS may be especially useful for understanding what helps couples navigate the transitions to the empty nest and to retirement. It may also contribute to predictions of relationship processes and outcomes such as relationship dissolution.

Second, our theory of eudaimonic relationships draws on recent scholarship on eudaimonic well-being. A theoretical focus on meaning, growth, giving, and goal sharing offers a contrast to simple hedonic concepts and measures. This focus on the content of items intentionally cuts against the grain of the trend toward contentless relationship satisfaction scales. Although a case has been made for eliminating content from relationship quality measures, this measurement strategy is derived from the questionable assumptions of ontological individualism. Individualism specifies that the only legitimate definition of value must come from the individual's internal experience. Therefore, researchers should avoid specifying *what* should be satisfying and leave that to the respondents' subjective preferences. We recognize that specifying the content of relationship quality is contentious. Nevertheless, we think that scholarly reflection and debate about the assumptions of ontological individualism could be very beneficial in the maturation of relationship theory and research. To paraphrase Carroll et al. (2006), we think it is better to have the tools to question and investigate the importance of meaning, growth, relational giving, and goal sharing in relationships rather than assuming that these relationship features are purely personal preferences that are secondary to self-interest. The RFS provides one resource for this kind of investigation.

Third, the qualitative and quantitative assessments of the RFS suggest that it performs in the way that eudaimonic theory predicts. Given the novelty of the RFS, we felt that a thorough, systematic scale development process was necessary. In this, we have followed in the footsteps of investigators who have introduced a new level of sophistication in the design and assessment of relationship measures (e.g., Fincham & Rogge, 2010; Funk & Rogge, 2007).

We view the RFS as a complement to satisfaction-focused measurement rather than a replacement for it. Parallel to individual well-being research, some investigators find hedonic measures sufficient for their purposes and others employ both hedonic and eudaimonic assessment (e.g., Fowers et al., 2010; Huta & Ryan, 2010). For researchers interested in a quick, simple assessment of relationship quality, there are excellent scales available. For investigators who want a more fulsome picture of the relationship, we see the RFS as an important complement to relationship satisfaction. This is particularly true when researchers are interested in studying the features of high quality relationships and how they develop.

Finally, the RFS is valuable heuristically. Decades of research has demonstrated the importance of romantic relationship quality for psychological and physical well-being. The incremental validity of the RFS suggests that relationship flourishing could enhance our ability to predict well-being over and above relationship satisfaction. Relationship flourishing can also serve as an outcome variable for prediction and intervention studies, enriching our understanding of relationship quality in the way that eudaimonic well-being has enriched the study of individual welfare. The RFS also enriches eudaimonic well-being research in that it explicitly focuses on a key relationship for adult well-being. Eudaimonic well-being research has also been limited by ontological individualism in being overly focused on individual subjective experi-

ence. The RFS expands the domain of eudaimonic well-being to include its relational manifestations. It would also be valuable to examine whether implicit relationship judgments relate to the RFS in the ways they do with relationship satisfaction (e.g., Lee, Rogge, & Reis, 2010).

The RFS can contribute to what Fincham and Beach (2010) have called positive relationship science. They highlighted important relationship processes such as forgiveness, commitment, and trust that may "combine to give partners in a flourishing relationship a sense of meaning and purpose in life" (p. 7). Research on these processes can be enriched by the RFS because these processes should produce relationships that are flourishing, not just satisfying.

Other relationship researchers have investigated the role of partner virtues such as generosity and fairness in marriage (Fowers, 2000; Hawkins, Fowers, Carroll, & Yang, 2007). Aristotle (1999) believed both that good relationships are central to a flourishing life and that the virtues are vital contributors to good relationships and the best kind of life. Future research on the coincidence of relationship virtues and relationship flourishing could test that theory and perhaps shine a light on some forms of especially strong, vibrant relationships. Such an approach to studying relationships would provide an interesting alternative to the communication-satisfaction model that dominates the literature. An Aristotelian view suggests that the communication-satisfaction model would provide a good description of many romantic relationships, but that some couples could not be adequately described with this model. The latter type of couple would develop a flourishing relationship through exercising relational virtues and cultivating meaning, growth, relational giving, and goal sharing. We think this points the way toward an exciting set of research possibilities.

The reported results indicate the promise of the RFS, but replication and further research are necessary before its value can be unequivocally affirmed. For example, it is important to investigate the degree of concordance of both partners' reports of relationship flourishing. It is reasonable to expect a relatively high degree of dyadic correlation, given the RFS focus on couple activities and goal sharing. In addition, longitudinal research on relationship flourishing is needed. Aristotelian theory predicts that some couples will develop a flourishing relationship over time and others will not. If that is correct, it will result in different couple trajectories and couple types. It may also be interesting to study whether relationship flourishing is related to couples having shared experiences of adversity.

Although our quantitative analyses were based on a national sample of married individuals, it was not a representative sample. Questions remain about the value of the RFS for unmarried couples and for same-sex couples. In addition, the research we have presented was all based on self-report. Although this is an appropriate beginning for evaluating a self-report scale, it is important to investigate the relationships between RFS responses and behavioral indicators of relationship flourishing.

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