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# Got Hope? Measuring the Construct of Relationship Hope with a Nationally

Representative Sample of Married Individuals

Sage Elizabeth Erickson

A thesis submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of

Master of Science

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School of Family Life

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# ABSTRACT

# Got Hope? Measuring the Construct of Relationship Hope with a Nationally Representative Sample of Married Individuals

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This paper explores an emerging construct: relationship hope. I define relationship hope as when individuals feel that regardless of the current quality of the relationship, there is significant hope for the relationship in the future if they keep working on it. The Relationship Hope Scale (RHS) is a new five-item scale that measures this construct. I evaluated the psychometric properties of RHS with Classical Test Theory (CTT) and Item Response Theory (IRT). I used a nationally representative sample of married individuals, ages 25-50 years old, in the United States. I found that RHS performs well in both CTT and IRT analyses, that we can assume measurement invariance between genders and first and second (or more) marriages, and that the mean levels of relationship hope do not differ by demographic variables like education, race, and income level. I also found that the RHS discriminates well between individuals that have thought about divorce a few times, several times, a lot of times, or not at all. These findings on relationship hope have valuable implications for relationship education, therapy, and future research because relationship hope measures a concept of change and potentiality.

Keywords: hope, relationship education, evaluation

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#### Introduction

"What oxygen is to the lungs, such is hope to the meaning of life."

- Emil Brunner

Hope is something vital to the success of all endeavors, especially romantic relationships. However, many Americans may be losing hope in their abilities to form and maintain a successful, long-term romantic relationship. Young adults today have less confidence than in the past that they will have a happy, stable marriage (Wilcox & Marquardt, 2011). Among lowincome and disadvantaged populations, it is now the norm to have more unstable and casual relationships that contribute to high rates of non-marital child birth and single parenting (Tach & Edin, 2011). Kathryn Edin has found that many low-income couples have put marriage on such a high pedestal that they have little hope of attaining it. These couples have desires to marry but few have hope to accomplish this desire due to economic and social expectations and barriers (Gibson-Davis, Edin, & McLanahan, 2005). And even if these disadvantaged individuals do marry, they have consistently lower levels of marital quality throughout the life course (James, 2015) and have high rates of marital dissolution (Cherlin, 2009).

Why have many Americans, especially low-income Americans, lost their hope in marriage and long-term romantic relationships? Many may have lost hope because of the current trends in cohabitation, marriage, divorce, as well as the bad experiences and/or abuse that existed in their own homes (Cherlin, Burton, Hurt, & Purvin, 2004; Edin & Kefalas, 2005; Edin & Nelson, 2013). In many ways, although the United States is a first-world county economically, it may be becoming an under-developed country when it comes to romantic relationships and healthy families. The evidence of this is multifold: a divorce rate of 40-50% with increasing percentages among persons aged 35 years and older (Kennedy & Ruggles, 2014), 39% of children being born to unmarried women (U.S. National Center for Health Statistics, 2009a) and

reports of 1 in 10 high school students becoming victims of dating violence (Child Trends Databank, 2014). Furthermore, in the United States, the rate of intimate partner violence is high. An estimated 22.3% of women and 14% of men have experienced severe physical violence by an intimate partner (Breiding, et al., 2014). Overall, today many children reside in increasing complex and often unstable families where they have seen their parents divorce, lived in a singleparent home, then seen at least one of the parents remarry or form a new cohabiting union (Brown, 2010). Of course, many of these rates vary by socio-economic class with lower rates in the upper classes and higher rates for low-income, disadvantaged populations (Cherlin, 2010). For example, divorce among women with a college degree is much lower than women with only a high school education. The same is true for unwed childbirth, with the majority of unwed childbirth occurring among lower educated women.

What are the effects of all these relational problems on children, adolescents, adults and the economy? Research shows that relationship failure is often associated with greater risks for a variety of poor outcomes for children and adults. Unwed childbearing is correlated with greater poverty and welfare assistance (Lichter, Graefe, & Brown, 2003). Children from single-mother families, be it from divorce, cohabitation, or widowhood, have a greater propensity for health risks like headaches, emergency room visits, and domestic violence than children living with two married parents (Bloom, Cohen, & Freeman, 2010). These children also have greater risks for depression, truancy, substance abuse and suicide (Amato, 2010). Even children who experience a "good" divorce are at higher risk for poor outcomes like substance abuse, early sexual activity, and increased number of sexual partners (Amato, Kane, & James, 2011).

The negative effects of failing relationships, however, impact more than children. Divorce and separation among adults is associated with lower levels of physical and mental

health, increased depression and anxiety, more substance use, and greater risk of mortality (Amato, 2010). Furthermore, employees in failing relationships often cost employers money due to productivity declines (Turvey & Olson, 2006). Moreover, one economist conservatively estimated that family fragmentation costs taxpayers at least \$112 billion a year (Scafidi, 2008).

Another aspect of America's relational problems is the rate of dating violence among teenagers and young adults. Dating violence among teenagers is associated with poor emotional well-being, low self-esteem, suicidal thoughts and attempts, risky sexual behaviors, teen pregnancy, and eating disorders (Ackard, Eisenberg, & Neumark-Sztainer, 2007). Overall, many aspects of the relationship poverty that characterizes the United States, especially the lowincome population of the United States, affects the economy, the community, families, and individual lives.

With this evidence, it is easier to see why many Americans may have lost hope in marriage and long-term relationships. Nearly half of young adults now agree that marriage is becoming obsolete (Wang & Taylor, 2011). However, even if many may have lost hope in achieving stable marriages, this does not stop them from having children and forming relationship after relationship. The rates of non-marital child birth and divorce attest to this. Overall, Americans are still forming relationships and becoming parents, but many may not have the hope or confidence that these relationships can and will last.

This discouraging state of romantic relationships in the United States gives the background and context for exploring an emerging concept: relationship hope among individuals and couples. What is relationship hope? There is some research in nursing that has started to grapple with the idea of hope in a human to human relationship (Hammer, Mogensen, & Hall, 2009). However, they define this "relational hope" broadly as a hope that comes from interacting

with others, feeling a connection with someone, and feeling human. Body image research has also started to frame the concept of "relationship hope" as a hope that you will be able to have social and romantic relationships (Cole, Davidson, & Gervais, 2013). Other than these articles, there is no other research on the concept of hope within relationships. I did a PsycINFO search on "marital hope" and it yielded no results. Thus, by looking at the research available on hope and seeing that there is a large gap, I have developed a working definition of relationship hope by consulting with professionals in the area and drawing upon my own experience. I define relationship hope as, when individuals feel that regardless of the present quality of the relationship, there is significant hope for their relationship in the future if they keep working on their relationship. The concept of relationship hope that I will try to define and clearly articulate in this paper is a feeling of potentiality. Even though a relationship may have problems in the present, there is still growth in the future. However, this growth cannot come without work. So relationship hope is a concept of growth, change, and potential in human relationships.

In this paper, I will analyze the concept of relationship hope by looking at what it could be correlated to, what this construct means for individuals, and how it could work in relationship education programs. Theoretically, relationship hope may have a large effect on the satisfaction and longevity of romantic relationships. Relationship hope may also be a form of intrinsic motivation and a buffer to relationship uncertainty and disillusionment. However, is relationship hope just a by-product of the quality of a relationship? Or is relationship hope distinct from current relationship quality? Positive psychology theories suggest that happy thoughts are not just the by-product of a happy life, but that producing more happy thoughts can lead to a happier life (Seligman, Steen, Park, & Peterson, 2005). It is also hypothesized that targeting relationship hope in relationship education programs could improve their efficacy and positive outcomes. Thus, an additional context for this question comes from the work done on relationship education in the United States.

# **Hope through Relationship Education**

Education in less developed countries alleviates suffering and brings new possibilities for each person (Cremin & Nakabugo, 2012). Education helps people help themselves and improve their own situations (Tarabini & Jacovkis, 2012). Education helps to lift people out of poverty and into more stable situations. In theory, education is a self-help mechanism that invests in people, and then the people reciprocate by giving back and improving their lives and surroundings. Since this has been seen numerous times with scholastic education, the same principle could apply to a country or subpopulation that is apparently poor in relationship knowledge. With this metaphor, I am referring mostly to more disadvantaged individuals in the United States, instead of the entire community. Additionally, there are probably more forces at play than a lack of relationship knowledge. Circumstances like poverty, unemployment, abuse as a child, and substance abuse also make it harder for people to form happy, stable relationships and marriages (Johnson, 2012). However, prominent scholars now speculate that economic poverty is a result of both structural factors (e.g., unemployment, poor education) and cultural factors (e.g. attitudes and behaviors about family life and non-marital childbearing) (Cherlin, 2014; Sawhill, 2014). Thus, knowledge about how to form good relationships - and how to avoid bad ones - could play a role in relieving these issues. Could relationship education help relieve the suffering that comes from failing relationships, help people help themselves, and give them more hope in their relationships? If the answer is yes, then this could be a primary rationale and value for relationship education programs. The theory is simple: knowledge brings power.

Relationship education is where participants learn about how to have healthy and stable relationships. Specifically, relationship education allows individuals to develop knowledge, attitudes, and skills that facilitate healthy romantic relationships (Halford & Snyder, 2012). Although relationship education is usually done in a group setting, it can also be administered in a variety of forms: online, self-directed, classroom, workshop, or in the form of self-help books. There are many different relationship education programs. Some address engaged couples (PREP), single young adults (How to Avoid Marrying a Jerk/Jerkette), and/or lower income married and cohabiting couples (Within Our Reach). All programs strive to introduce knowledge concepts, allow for discussion and questions, and then help the participants try out these new principles in practice with specific techniques and skills.

Early on, relationship education was focused on married couples that needed a "tune-up" or additional enrichment for their relationship or on engaged couples who were preparing for the challenges of marriage (Duncan & Goddard, 2010). The participants were primarily couples who already had a fairly strong commitment to each other and to the relationship. With these programs, researchers found that relationship education improves the relationship quality of participants and can even prevent marital dissolution (Fawcett, Hawkins, Blanchard, & Carroll, 2010; Hawkins, Blanchard, Baldwin, & Fawcett, 2008; Hawkins & Ooms, 2012). However, as overall trends in relationships have changed, so has the curricula and focus of relationship education changed. There are now more and more distressed couples coming to relationship education classes (Bradford, Hawkins & Acker, in press). These distressed couples come in all different forms now: they may be married but distressed, they may be unmarried, they may not have been together for a long period of time, and they may be uncertain about their futures. This change in the population of relationship education participants happened partly as a result of the

changing relationship demographics in the United States, but also partly because the Administration for Children and Families (ACF) decided to focus funds on relationship education for low-income couples using public funding through the Temporary Assistance to Needy Families (TANF) program (National Healthy Marriage Resource Center, 2010). Consequently, relationship education now includes more low-income married and cohabiting couples. These couples are significantly different from the previous target population. Many of these couples do not have a strong sense of relationship commitment and are not sure of the future of their relationship together. Thus, with this new target population in relationship education, focusing on increasing the level of relationship hope might be vital for couples.

Furthermore, a recent meta-analysis was completed to address the question of whether relationship education works for low-income and ethnically diverse participants. The researchers found statistically significant, small positive effects for experimental studies and larger positive effects for pre-post studies (Hawkins & Erickson, 2015). They found stronger effects for more ethnically diverse samples and participants that were "near poor" (twice the poverty level) vs. poor (under the poverty level). However, the effects for low-income couples were small and not as robust as earlier research with middle-class, white couples. Thus, more work needs to be done in this area. Perhaps greater focus on building relationship hope in relationship education programs could improve program results for low-income, diverse populations.

# **Relationship Hope: An Emerging Construct**

Most evaluations of relationship education programs so far have focused on measuring changes in relationship skills such as communication, conflict resolution, and overall marital satisfaction (Fawcett et al., 2010; Hawkins et al., 2008). However, one concept that has not been evaluated is relationship hope. Again, I define relationship hope as when an individual feels that

regardless of the current quality of the relationship, there is significant hope for the relationship in the future if they keep putting forth work and effort. In this context, I am exploring hope for the relationship, but this hope is individual to each person. Two married people may have different levels of hope for their relationship.

Theoretically, this construct might be the first thing that changes as a result of a relationship education program. After a relationship program, an individual or couple emerges having "learned about," or rather "heard about," a number of different skills like effective communication, methods for solving conflict, ideas for fun dates, and recommendations on how to express their feelings more clearly. However, it is highly unlikely that the individual or couple has already been able to successfully apply all of these new skills and behaviors into their relationship. Change in behavior takes time and lots of effort. And many individuals and couples already come to these relationship education workshops with serious problems. We know that a lot of distressed couples are participating in these relationship education classes (Bradford, Hawkins, & Acker, in press). These individuals and couples may wonder: Can I really change how our relationship is going? Can we really fix our problems? Many may feel powerless to change their unhealthy but entrenched relationship habits into loving and healthy ones. Changing the unhealthy or damaging patterns of a relationship takes time and effort. That is why measuring the overall levels of a couple's relationship hope at the end of a workshop might be a more realistic measure of the immediate impact of a program than measuring their acquisition and implementation of newly learned skills.

But why is giving couples hope for the future so important? From a therapist's point of view, the difference between hope and hopelessness is great (Flaskas, 2007). Whether or not people have hope affects their motivation and ability to change. The importance of hope is also

supported by positive psychology theories which suggest that focusing on the positive instead of the negative aspects of one's life leads to better outcomes (Seligman, 2002; Seligman & Peterson, 2003; Seligman, Rashid, & Parks, 2006; Seligman et al., 2005). Martin Seligman averred that pathologies arise when life is barren and meaningless (Seligman & Csikszentmihalyi, 2000). His colleague, Mahaly Csikszentmihalyi, further claimed that optimism can be learned (Csikszentmihalyi & Nakamura, 2011). Researchers have also found that one of the most vital keys to recovering from trauma is developing a sense of hope for the future (Stanton-Riggs, 2007). Moreover, Everett Worthington has developed an entire hope-focused marital counseling program based on this principle. He divides hope into three different components: a positive motivation to change (i.e., willpower), a variety of pathways to change (i.e., waypower), and perseverance (i.e., waitpower) (Worthington, 2003, 2005).

Medical researchers have also found that having hope for the future is associated with your physical health. Dr. Hilary Tindle found that those who scored high on optimism, or being hopeful about the future, showed significantly lower rates of cancer, heart disease, and mortality than those women who scored high on pessimism. She also found that those who scored low on optimism after a coronary-bypass surgery had twice the complication and rehospitalization rate compared to the more optimistic patients (Tindle et al., 2012).

Giving people hope for the future is also a form of intrinsic motivation. Intrinsic motivation is when an individual wants to do something for internal reasons (because of his or her own beliefs, values, and goals). According to Self-Determination Theory (Deci & Ryan, 2012), individuals that are intrinsically motivated to keep working on their relationship will fare better than individuals who are extrinsically motivated (staying together for the sake of the children, public image, and/or financial security). Couples need to internalize the reasons for

staying in their relationships so that they will feel more motivation to work on problems. Having intrinsic reasons for continuing the relationship will also help individuals to develop more of an internal locus of control. A person with a strong internal locus of control believes that outcomes in their life develop primarily from their own actions vs. external factors that they cannot control (Rotter, 1966). An internal locus of control is associated with greater well-being and personal meaning (Singh & Choudhri, 2014) along with greater mental health (Shojaee & French, 2014).

We can explore this concept of relationship hope further by thinking again of the couple's experience coming out of a relationship education class. Perhaps the couple has heard about many different kinds of skills in the class, but unless the couple actually *believes* that these skills will help, the mere acquisition of skills likely will not make a difference. Similarly, even if the couple thinks the skills are helpful, but still does not *believe* that they - the couple - can personally apply those skills, then the acquisition of skills is again useless. Thus, program success should be measured not only by whether the couple has learned skills, but whether the couple believes that they can have a happy marriage in the future so that they are motivated to use those learned skills. In essence, programs should measure if the couple has developed some sense of relationship hope as a result of the intervention. This question, whether relationship hope is a process study question and still needs to be explored. Since the current study will not address this process question, this is an area that needs future research before we make any conclusions.

In order to further define this construct of relationship hope, we can look at what could be the antithesis: relationship uncertainty and disillusionment. According to Knobloch (2010), being uncertain about your relationship makes people interpret comments, actions, or behaviors in a negative light and can lead to more negative communication (Knobloch, 2010). Thus,

relationship hope should make individuals interpret their partner's comments, actions and behaviors in a more positive light. On a similar note, marital disillusionment, a feeling of disappointment resulting from the discovery that something is not as good as one believed it to be, is a strong predictor of divorce (Gruppen, 2011; Niehuis, Reifman, & Lee, 2013). Marital disillusionment is even thought to be a stronger predictor of divorce than marital dissatisfaction. In order to evaluate this construct, Niehuis and Bartell created the Marital Disillusionment Scale and found that it significantly differentiates married from divorced participants (Niehuis, 2007; Niehuis & Bartell, 2006). If marital disillusionment differentiates between married and divorced participants, should relationship hope also differentiate prospectively between those who stay married or divorce? Furthermore, should relationship hope differentiate between people who are thinking about divorce and those who are not, and those who are thinking about it a little vs. a lot?

The decision to divorce or not can be a difficult one. However, there is little research on how individuals make the decision to divorce or stay together, and the research that is available is not current (Albrecht & Kunz, 1980; Donovan & Jackson, 1990; Kitson & Langlie, 1984). There is multitudinous research on what attitudes or demographic variables predict divorce (Amato, 2010). One study explored the question of what groups of people are more likely to be thinking about divorce. They found that young people, Blacks (vs. Whites), and parents (vs. nonparents) are more likely to be thinking about divorce (Broman, 2002). However, these researchers also found that 90% of those who think about divorce do not actually divorce and those that stay married report significantly greater satisfaction years later than those who divorced. This void in the area of making the decision to divorce is a reason for this study. Could relationship hope be a buffer to divorce? Could relationship hope be a significant factor in

making the decision to divorce? There are many different ways that the concept of relationship hope could inform our research on divorce.

The concept of relationship hope is also connected to the concept of commitment. According to Scott Stanley, commitment is the intention to be together in the future, or deciding to have a future together (Stanley, Rhoades, & Whitton, 2010). He speculates that many individuals have missed this stage of deciding because they have slid into the relationship through the inertia of cohabitation. A relationship education class might actually be an ideal time for the couple to finally think about their relationship and decide whether they want to have a future together. Having relationship hope would be an integral part of this decision. Or making that decision together could fuel their sense of relationship hope. However, there may be those couples who come to relationship education classes that realize that their relationship should not go on, perhaps because of physical abuse. Thus, some couples might come out with less relationship hope. If the relationship is abusive, less relationship hope and the decision to break up might be a successful outcome for the class.

One concept that is closely related to relationship hope is relationship confidence. Relationship confidence measures the amount of confidence the couple has in their future together (Whitton et al., 2007). Relationship confidence has been measured using the Confidence Scale (Trathen, 1995), a twenty-item instrument. However, the concept of relationship hope is still distinct from relationship confidence. Relationship confidence (as measured by the Confidence Scale) implies that the couple possesses the skills and qualities now to feel confident about their future. Relationship hope does not assume that the individual or couple is proficient in certain skills in the present, but only indicates that they have hope for a healthy relationship in the future and for working out their problems now and in the future. An item from the Relationship Hope Scale demonstrates this concept: "I'm hopeful that we have the tools we need to fix problems in our relationship now and in the future."

The few published studies on relationship confidence give us insight into the properties of this construct. One recent study indicated that relationship confidence can be increased through educational interventions (Visvanathan, in press). Another study showed that those couples who cohabited before they were engaged or married had lower relationship confidence than those who did not cohabit until after engagement or marriage (Kline et al., 2004). Finally, another study found that relationship confidence fully mediated the association between negative marital interactions and depression for women (Whitton et al., 2007). This means that even though a woman may have negative marital interactions with her husband, if she has a strong sense of relationship confidence, she is less likely to fall into depression. Thus, while exploring the concept of relationship hope, family structure and gender might be significant moderators.

Finally, an important context to consider while exploring relationship hope is family stability. It is theorized that relationship hope is even more important as family structures become even more complex and irregular. It is much easier for an individual to have relationship hope in a first marriage than in a third remarriage or fourth cohabiting relationship where each partner brings first-hand experience of relationship dissolution, as well as children and complexities from previous relationships. It may be that if people have had many negative experiences in the past, it is even harder to help them develop a sense of relationship hope for their future. Thus, it may be that increasing the levels of relationship hope will be harder for those who have already been through several negative relationships.

# **Current Study**

Since relationship hope is an emerging construct with important applications for relationship education and relationship longevity and satisfaction, I propose to explore this concept with a large, nationally representative sample of married individuals. First, the psychometric properties of a measure of relationship hope need to be established. After the psychometric properties of the Relationship Hope Scale (RHS) are evaluated, I will look at the basic distribution of relationship hope in married individuals, ages 25-50, in the United States. Approximately how many married individuals struggle with relationship hope in the United States? (Because of the limitations of the sample, this study will not examine relationship hope in unmarried relationships.)

Thus, my research questions and hypotheses are as follows:

1. What is the basic dimensionality of the Relationship Hope Scale? Is it unidimensional or multidimensional?

Hypothesis 1: Relationship hope is a unidimensional construct.

 Does this construct work similarly for different groups including men vs. women, and first and second (or more) marriages?

Hypothesis 2: Relationship hope will work similarly for the indicated different groups.

3. What are the psychometric properties of these items when analyzed with Item Response Theory? Do these items cover the full range of the construct? Do these items precisely and validly assess the construct of relationship hope?

I have no specific hypothesis for this question.

- 4. What is the construct validity of RHS? What are the correlates of relationship hope?
  Does RHS discriminate between distressed and non-distressed individuals?
  Hypothesis 4: Relationship hope will be positively correlated with relationship happiness and negatively correlated with thoughts about divorce.
- 5. What is the mean level and distribution of relationship hope among currently married couples? What percent struggle with relationship hope? Does the mean level and distribution differ by basic demographic characteristics such as gender, age, education, race, and first and second (or more) marriages?

I have no specific hypothesis for this question.

#### Method

# Procedures

This study was done in connection with the Thinking About Divorce project. This project used a web-based survey firm, YouGov, to collect a nationally representative sample and administer the surveys. YouGov is an international market research company with survey panels all over the world. YouGov recruits people to take online surveys a few times a year about various topics. Participants earn points by participating in online surveys. The participants can then redeem these points for cash, gift certificates, or select merchandise on the YouGov site. The survey, administered in early February, 2015, took approximately 10 minutes to complete. The final sample consisted of 3,000 participants. All participants had been married at least one year and were between 25-50 years old.

YouGov interviewed 3,089 currently married respondents who were then matched down to a sample of 3,000 to produce the final dataset. The respondents were matched to a sampling frame on gender, age, race, education, political party identification, ideology, and political

interest. The frame was constructed by stratified sampling from the full 2010 American Community Survey (ACS) sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file). Data on voter registration status and turnout were matched to this frame using the November 2010 Current Population Survey. Data on interest in politics and party identification were then matched to this frame from the 2007 Pew Religious Life Survey. The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was estimated for inclusion in the frame. The propensity score function included age, gender, race/ethnicity, years of education, and ideology. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles. Thus, in the end, weighted data closely approximates a nationally representative sample.

# Measures

**Relationship Hope Scale**. The scale developed for relationship hope consisted of five items. These items were measured on a Likert scale (1=*Strongly Disagree* to 7 = *Strongly Agree*). These items were: 1) I believe we can handle whatever conflicts will arise in the future (Q7); 2) I am very confident when I think of our future together (Q8); 3) I'm hopeful that we can make our relationship work (Q9); 4) I'm hopeful that we have the tools we need to fix problems in our relationship now and in the future (Q10) ; and 5) I feel like our relationship can survive what life throws at us (Q11). The Relationship Hope Scale (RHS) items were developed by Dr. Scott Stanley and Dr. Alan Hawkins with feedback from the Oklahoma Marriage Initiative Researchers Advisory Group. They borrowed a few items from the Confidence Scale (Trathen, 1995). Items were constructed to capture the concept of relationship potential, change, and growth.

With this survey, we also measured relationship happiness as well as a variety of items about thoughts about divorce such as divorce attitudes, reasons for divorce, etc. Most of these items are new, single-item measures constructed for this survey.

**Relationship happiness**. Relationship Happiness was measured with one question: "Taking all things together, on a scale from 0 to 10, where 0 is not at all happy and 10 is completely happy, how happy would you say your relationship with your partner is?" This question was taken from the Building Strong Families survey (Wood et al., 2012). (Building Strong Families was a federal project analyzing relationship education programs for low-income parents at eight different sites in the United States.)

**Thoughts about divorce**. Thoughts about divorce were measured with a variety of items, going from more general questions to more specific details. Participants were asked "In the past 6 months, have you had serious concerns about your marriage that included thinking about a possible divorce?" The scale for this item was 1 = No, not at all, 2 = Yes, a few times, 3 = Yes, several times, and 4 = Yes, A lot of times. Participants were also asked to report the reasons why they are thinking about divorce. These ranged from harder reasons (e.g., infidelity, alcohol or substance abuse, and physical violence) to softer reasons (e.g., problems with being able to talk together, problems with growing apart, problems with losing romantic feelings, etc.). Participants were asked to rate whether these were a "major reason," "minor reason," or "not a reason."

In addition, participants were asked to pick the attitude that mostly closely fits how they feel about getting a divorce. The potential answers were: "*I'm done with this marriage; it's too late now even if my spouse were to make major changes*"; "*I have mixed feelings about getting a divorce; sometimes I think it's a good idea and sometimes I'm not sure*"; "*I would consider working on my marriage and not divorcing if my spouse got serious about making some major* 

changes"; "I don't really want a divorce; I'm willing to work hard to keep us together; and "None of these statements really fits my own attitude right now."

We also measured demographic information about family income level, education, race, gender, and whether they were in their first or second marriage. See Appendix A for the full survey.

# **Plan for Analyses**

First, I evaluated the basic dimensionality and psychometric properties of the Relationship Hope Scale. I evaluated a measurement model using Confirmatory Factor Analysis in MPLUS computer software (Version 7.3) (Muthén & Muthén, 2010). I analyzed whether Relationship Hope seems to be a unidimensional construct.

Second, I evaluated the measurement invariance of RHS. I compared the measurement model for multiple groups. I compared the construct of relationship hope with men vs. women, and with first vs. second (or more) marriages.

Third, I evaluated the psychometric properties of RHS using Item Response Theory to see if the items cover the full range of the construct. Item Response Theory (IRT) is generally regarded as superior to Classical Test Theory (CTT), thus it is the preferred method for measurement instruments (Gordon, 2015). Item Response theory analyzes each item and each item response level for difficulty and discrimination. IRT has certain advantages over CTT because IRT is not sample-dependent (Embretson & Reise, 2000). IRT makes stronger assumptions than CTT because it looks at the holistic and individual validity of each item and how well each item and each response level measures the latent construct. As a result, IRT can provide stronger findings. Thus, if the Relationship Hope Scale performs well with IRT, then we have confidence that the items are well-written and discriminative.

Fourth, I evaluated the construct validity by seeing if RHS is correlated with other constructs in the survey such as relationship happiness and thoughts about divorce. Specifically, I analyzed if relationship hope accurately discriminates between those who are happy and unhappy in their marriage and those who are thinking about divorce and those who are not.

Fifth, I analyzed the basic mean level and distributions of RHS with this nationally representative sample of married individuals, and break these analyses down by gender, age, education, and first or second marriages.

# Results

In this study, I found that the Relationship Hope Scale (RHS) functions well when analyzed by both CTT and IRT theories.

# **Results by Research Question**

**Research question 1**. What is the basic dimensionality of the Relationship Hope Scale? Is it unidimensional or multidimensional?

I analyzed the RHS items in SPSS, employing Exploratory Factor Analysis, which is a preliminary analysis for Item Response Theory. The factor loadings for these items were high (.883, .916, .816, .844, and .924) and loaded cohesively onto one factor. The eigenvalues also indicated that all items loaded onto one factor (see Table 1 in Appendix B) that explained 81% of the variance. The scree plot also indicated that all items load onto one factor and that this is a unidimensional construct. The Cronbach's Alpha for the five item scale was .942, indicating high internal consistency reliability.

Next, I ran a Confirmatory Factor Analysis in MPLUS. I found that the factor loadings in MPLUS were also very high (891, .914, .778, .825, and .931.) and all loaded cohesively onto one

factor. This supports my hypothesis that the Relationship Hope Scale is a unidimensional construct.

**Research question 2**. Does this construct work similarly for different groups including men vs. women, and first and second (or more) marriages?

I hypothesized that relationship hope will work similarly for the indicated different groups. I found that the overall model had good model fit: RMSEA = .061, CFI = .998, TLI = .992. Because these variables are categorical, I ran a set of "difftest" analyses to see whether we could assume measurement invariance. When I ran a multiple group analysis in MPLUS to compare measurement invariance across gender, I found that we could assume measurement invariance because there was not a significant chi-square difference when I constrained both groups to have similar factor loadings (difftest = 7.838, df = 5, p = .165). (A non-significant finding indicates acceptance of no difference in measurement.)

I also tested for measurement invariance with first and second marriages. There were 547 individuals (18% of the sample) that were in their second (or more) marriage. I found that we could assume measurement invariance with first and second marriages because there was not a significant chi-square difference when we constrained both groups to have similar factor loadings (difftest = 7.594, df = 4, p = .108).

Overall, this supports my hypothesis of measurement invariance between males and females, and first and second (or more) marriages. I tried to analyze the measurement invariance with different races, but there was insufficient data to do this.

**Research question 3**. What are the psychometric properties of these items when analyzed with Item Response Theory? Do these items cover the full range of the construct? Do these items precisely and validly assess the construct of relationship hope?

Before running IRT analyses, one needs to confirm that the construct is unidimensional and that the items all load onto one construct. In the above research questions, I found that the eigenvalues indicated that the construct was unidimensional. The confirmatory factor analysis also indicated that these items loaded strongly onto one construct.

Because these preliminary assumptions were met, I analyzed the five items of the Relationship Hope Scale (RHS) with IRT. I ran a 2PL IRT model, which constrains pseudochance to zero. I chose this model because I assumed that people would not need to guess on the relationship hope questions. Running this model, I found that the factor loadings were again high (.890 - .960) (see Figure 1 in Appendix B). All of the items were cohesive and loaded onto one construct. The Item Characteristic Curve (ICC) plots were all satisfactory for all five items (see Figures 2-6 in Appendix B). In the Item Information Curves (IIC), we see that the scale gives the most discriminative information for those that are low on the RHS and the least information for those that are high on the scale (see Figure 1). We also see in both the IIC plots and the ICC plots, that question 9 (*"I'm hopeful that we can make our relationship work"*) and question 10 (*"I'm hopeful that we have the tools we need to fix problems in our relationship now and in the future"*) are slightly less informative and discriminatory than the other three items (see Figure 2 and Figures 2-6 in Appendix B). However, compared to most items tested with IRT methods, these two items are still considered satisfactory.

Figure 1. Item Information Curve for all five items combined.

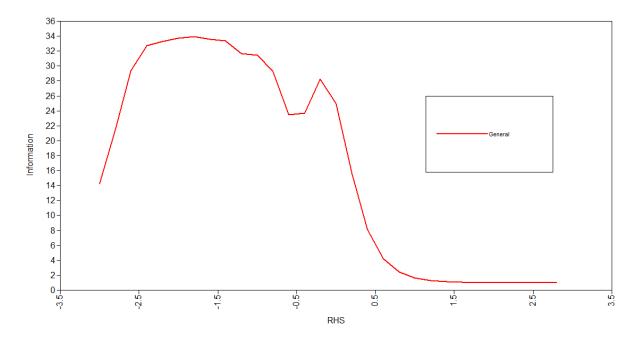
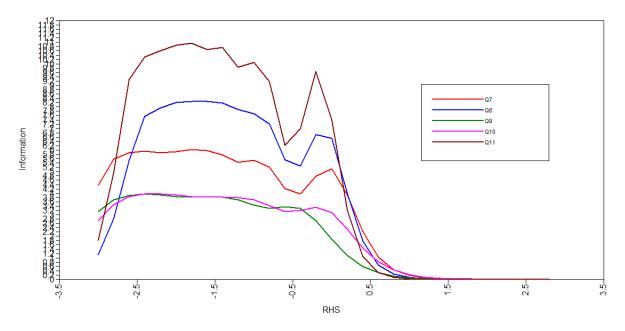


Figure 2. Item Information Curve for all five items in RHS.



Overall, the RHS appears to cover the full range of the construct and precisely and validly assesses the construct of relationship hope.

**Research question 4**. What is the construct validity of RHS? What are the correlates of relationship hope? Does RHS discriminate between distressed and non-distressed individuals?

To measure the construct validity, I found that relationship hope is strongly correlated, but not isomorphic, with relationship happiness (r = .779, p < .001, N = 3000). I also found that relationship hope is strongly associated with attitudes about divorce for those who have had recent thoughts about divorce (F(3, 694) = 63.5, p < .001). The attitudes of "I'm done with this marriage", "I have mixed feelings" and "I would consider working on my marriage and not divorcing if my spouse got serious about making some major changes" have a much lower mean level of relationship hope (M = 4.28 - 4.69, SD = 1.2 - 2.24) than those who had the attitude of "I don't really want a divorce; I'm willing to work hard to keep us together" (M = 5.84, SD = .93).

To determine whether RHS discriminates between distressed and non-distressed couples, I ran a one-way ANOVA. I found that relationship hope significantly discriminates between those who have thought about divorce a lot of times, several times, a few times, or not at all in the last six months (F(3, 2995) = 636.9, p < .001). There is about a one unit standard deviation difference in the overall relationship hope mean between each of these categories: those who have not at all thought about divorce have a relationship hope mean score of 6.54 (SD = .66), those who have thought about divorce a few times have a mean of 5.57 (SD = 1.03), those who have thought about divorce several times have a mean of 4.82 (SD = 1.34), and those who have thought about divorce a lot of times have a mean of 3.66 (SD = 1.85).

I also checked the discriminant validity of RHS with only those who are thinking about divorce (n = 745). Is there a difference in relationship hope between those that are thinking about divorce for harder reasons (e.g. infidelity, alcohol or substance abuse, and physical violence) vs. those that are thinking about divorce for softer reasons (e.g. growing apart, not being able to talk, losing romantic feelings, etc.)? Somewhat surprisingly, I found that there was not a significant difference in relationship hope between these two groups (t = 1.29, p = .19).

Overall, the Relationship Hope Scale (RHS) has good construct validity and discriminates well among those thinking about divorce. RHS is also strongly correlated with relationship happiness.

**Research question 5**. What is the mean level and distribution of relationship hope among currently married couples? What percent struggle with relationship hope? Does the mean level and distribution differ by basic demographic characteristics such as gender, age, education, race, and first and second marriages?

I found that the overall mean level of relationship hope among currently married couples was high: 6.21, SD = 1.06 (on a scale of 1=*Strongly Disagree* to 7 = *Strongly Agree*). The distribution was strongly negatively skewed. However, if we look at the subsample of those who had recent thoughts about divorce (n = 745), the mean level of RHS is 5.20 (SD = 1.37). The distributions of these two groups are different (see Table 1). If struggling with relationship hope is operationalized as scoring below the full sample mean (6.2), then 34% are struggling in the full sample and 72% in the subsample. If struggling with relationship hope is loosened to scores below 6, then 25% are struggling in the full sample and 64% in the subsample. If struggling with relationship hope is operationalized as scoring below 4, then only 5% are struggling in the full sample and 18% in the subsample. Note that even in the subsample of those with recent thoughts about divorce, there is substantial variation in relationship hope. More than a third still score high on this measure.

Value on RHS	Full Sample ( $N = 3000$ )	Subsample of those thinking about divorce $(n = 744)$
6.0 +	74.6%	35.7%
5.0 - 5.99	14.9%	29.9%
4.0 - 4.99	5.5%	16.7%
3.0-3.99	3.1%	10.4%
> 3.0	2%	7.3%
Mean (SD)	6.20 (1.06)	5.20 (1.37)
Median	6.60	5.53

*Table 1. Distribution of the Relationship Hope Scale among full sample and subsample of those thinking about divorce.* 

Overall, I found that there were no large difference in relationship hope across demographic characteristics. By running a set of ANOVAs, I found that there was no significant difference in the mean level of relationship hope by educational level (F (5, 2994) = .667, p= .648), race (F (7, 2991) = 1.083, p = .371), or family income level (F (4, 2738) =1.353, p= .248). I also found that age was not significantly correlated (r = -.017, p = .355, N = 3000). Also, I examined these correlations in a multivariate context. I ran a multiple regression (F (7, 2988) = 672.115, p < .001,  $R^2$  = .611) with all the variables to see if there were significant partial correlations. (Relationship happiness was included in the model, as well, and was significant and strong ( $\beta$  = .427, p < .001.) Gender, race, education, and income level were not significant. First or second (or more) marriages ( $\beta$  = -.048, p < .001) and age ( $\beta$  = .052, p < .001) were each significantly correlated to relationship hope, although the associations are small in magnitude. However, I did find that there is a significant difference between the mean level of relationship hope for men and women (t (2997) = 2.318, p = .021). Men (M = 6.26, SD = 1.00) are slightly higher on relationship hope than women (M = 6.17, SD = 1.11). But when I ran this same means test looking at only the subsample of those currently thinking about divorce, the difference was not significant (t(742) = .488, p = .625). Additionally, I found that there is a significant difference between the mean level of relationship hope for first marriages and second marriages (t(728) = 2.719, p = .007). Individuals in their first marriages (M = 6.24, SD = 1.02) have slightly higher levels of relationship hope than individuals in their second or higher-order marriages (M = 6.09, SD = 1.09). Nevertheless, even these differences are small in magnitude.

#### Discussion

Relationship hope is an emerging construct with strong implications for relationship education programs and other helping agencies. Theoretically, relationship hope will be important to measure because it might change more quickly than specific skills in relationship education programs. Relationship hope is a form of intrinsic motivation and internal locus of control (Deci & Ryan, 2012). Relationship hope is connected with commitment and could be vital to the longevity of relationships. Hope is also seen to influence the physical health of a person (Tindle et al., 2012). Additionally, the construct of relationship hope is supported by positive psychology (Seligman & Csikszentmihalyi, 2000). However, can this construct of relationship hope be operationalized for use in research? In this study, I found that this concept can be operationalized through a short five-item scale that has strong reliability and validity.

In this study, I found that relationship hope is a unidimensional construct. All of the factor loadings in the Relationship Hope Scale were very high, giving the scale sound reliability according to CTT theory. I also found that the RHS works similarly for males and females and for first and second marriages, which facilitates the use of the instrument because it can be used in comparison analyses. I also found that overall this scale does not differ significantly by

demographic characteristics. There were slight differences in relationship hope between men and women and first and second marriages, but even these differences were small. Thus, I found that the psychological concept of relationship hope is not particularly sensitive to such sociological factors as income level, education level, or race. This finding is a little surprising since there are such disparities in divorce proneness among different education levels, races, and income levels (Cherlin, 2010).

By analyzing the RHS items with Item Response theory, I found that the psychometric properties were good for all five items. All the Item Characteristic Curves (ICC) and Item Information Curves (IIC) were satisfactory, illustrating that all items were informative and discriminative. I found that two items (Q9 and Q10) were a little less satisfactory than the other three items (Q7, Q8, and Q11), but even these less satisfactory items worked very well compared to typical unsatisfactory items (Lambert et al., 2003). This means that the scale could be shortened to only those three items (Q7, Q8 and Q11), if necessary, for easier implementation.

The Item Information Curves did illustrate that this scale gives the most information at the lower levels of the relationship hope construct. These items do not discriminate very much with those that have high levels of relationship hope. However, this is not particularly troubling because educators, researchers, and therapists want to help those that are struggling. They are not focused on those that are high in relationship hope. Thus, this scale works well for those needing to increase the amount of hope in the relationship but does not differentiate well between different levels of "high hope." Yet, if researchers wanted to discriminate between those on the higher levels of hope, how could the questions be adapted for this purpose? I believe that we could add more "work" and "effort" focused phrasing in the questions to capture those that have a passive hope or casual belief vs. those who have an active hope and are willing to work towards that potential. I believe that the concept of work and change are key with developing this construct further.

In support of this thought, I found that RHS is associated with different attitudes about divorce. The attitude of "I don't really want a divorce: I'm willing to work hard to keep us together" is associated with higher scores on relationship hope than the other attitudes, as expected. However, I did not expect the other three attitudes to be similar in relationship hope. The attitudes of "I'm done with this marriage; it's too late now even if my spouse were to make major changes," "I have mixed feelings about divorce: sometimes I think it is a good idea and sometimes I'm not sure," and "I would consider working hard on my marriage and not divorcing if my spouse got serious about making some major changes" each had similar lower mean scores on relationship hope, and were not significantly different from each other, although they seem to indicate different attitudes about the possibility of divorce. The scores between these three attitudes were not significantly different although they may have a different feel to an outside observer. Perhaps this can be explained by thinking about the internal vs. external locus of control (Rotter, 1966). The last three attitudes all emphasize an external locus of control where the person focuses on the spouse (an external person) or does not feel that they control their feelings or intentions to divorce. In contrast, the attitude of "I don't really want a divorce; I'm willing to work hard to keep us together" is an example of an internal locus of control where the person focuses on what she or he can do to help the relationship. Thus, if relationship hope is a form of intrinsic motivation and an internal locus of control, this explanation could account for the difference in relationship hope between these divorce attitudes. Again, this indicates that a large part of relationship hope is individual effort and work.

I found that RHS strongly discriminated between those who are currently thinking about divorce, at all different levels. I found a one-unit standard deviation decrease between each of these categories: those that are not thinking about divorce at all, those that are thinking about it a little, those that are thinking about it some, and those that are thinking about it a lot. The one unit decrease across all of these categories illustrates that there is substantial variability in relationship hope among distressed couples. This discriminating quality of relationship hope might be useful for educators and therapists in trying to distinguish which couples need the most help. However, with this finding, researchers need to determine what the cutoff would be for those that are struggling with hope and need help.

I also found that among the full sample, the overall mean of relationship hope is high and the distribution of the Relationship Hope Scale is negatively skewed. However, there is still substantial variation in relationship hope, especially among those with recent thoughts about divorce. This brings up a curious finding: although only 11% of the sample struggles with relationship hope, 25% of the sample has had thoughts about divorce in the last 6 months. Can people have thoughts about divorce and yet have high levels of relationship hope? This intriguing situation might be explained when we see that the majority of those "divorce-thinkers" are thinking about divorce for softer reasons. Only a third of those thinking about divorce are facing the harder problems like infidelity, substance abuse and physical abuse. Thus, most who are thinking about divorce are still quite high on happiness and hope. Perhaps in a divorcesaturated culture, it is easy to think of divorce almost as a coping mechanism when individuals are faced with challenges and struggles in their marriage. Thus, it may be that "thoughts about divorce" are not necessarily as serious as they may seem. This nuance in the findings about

divorce and relationship hope could be very helpful for those striving to help couples that are in the shady areas of relationship uncertainty.

These findings bring up some interesting implications for educators, therapists and researchers. First, for practitioners, relationship hope might be a vital construct to target and evaluate in relationship education programs and therapy. Relationship hope captures growth and potential in relationships and could motivate couples to keep working. For researchers, there are many implications for future work. I have established with a nationally representative sample that the Relationship Hope Scale (RHS) has strong reliability and validity and discriminates well. Additionally, because the scale is short with only five items, it would be easy to use in future research. Future research will need to clarify the distinctions and correlations between similar constructs such as relationship disillusionment, relationship confidence, divorce proneness, commitment, self-efficacy, and others. Future research should also explore relationship hope among unmarried couples. Does relationship hope work similarly for cohabiting couples? How does relationship hope work with dating couples that have not yet made commitments? How are relationships affected when each individual has different levels of relationship hope? Can the higher partner increase the relationship hope of another? Can a revised version of relationship hope be applied to singles? Further studies should also explore the relationship process around relationship hope: does relationship hope precede skills or do skills precede hope? Understanding how relationship hope is increased through educational interventions and therapy will help to improve these interventions.

#### Conclusion

Overall, I found that the construct of relationship hope was measured well by the Relationship Hope Scale (RHS). The Relationship Hope Scale gives researchers more 30

information about couples and their relationship health, potentially pointing out certain nuances about couples that are thinking about divorce but are still high in relationship hope. How will this concept be applied in social science research? Relationship hope as it is defined now is all about growth and change in relationships. It is about the potential for a relationship to become something else, something better through time and effort. As social scientists, we are not measuring static variables. These variables are always changing and adapting, ebbing and flowing. Relationship hope is not just a different name for relationship quality or satisfaction; it is the potential for a certain relationship to become better and develop. Some might argue that life is about growing and becoming, so that might be why hope is so essential to the meaning of life. Hope is looking forward.

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#### **Appendix A: Thinking about Divorce Survey**

#### **About Your Marriage Survey**

### [Filter questions #1-5:]

1. What is your marital status?

 $\Box$  Married  $\Box$  Separated  $\Box$  Divorced  $\Box$  Widowed  $\Box$  Single, never married

Domestic partnership (living together) [If not married, end survey.]

How many years have you been married?
 Years \_\_\_\_ [If less than 1 year, end survey.]

3. Is this a first marriage for you or a second (or later) marriage?

 $\Box$  First Marriage  $\Box$  Second (or Later) Marriage

4. In what year were you born? \_\_\_\_\_ [If not between 25 and 50, end survey.]

5. Are you male or female?

 $\Box$  Female  $\Box$  Male

[Informed Consent]

### [Marital Happiness questions #6-20.]

6. Taking all things together, on a scale from 0 to 10, where 0 is completely unhappy and 10 is completely happy, how happy would you say your relationship with your spouse is? You can pick any number from 0 to 10

104	Tou can plok any number nom o to To.											
0	1	2	3	4	5	6	7	8	9	10		
Not										Co	mplete	ly
At A	.11									Ha	рру	
Hap	ру											

Now, thinking about your relationship with your spouse, do you agree or disagree with the following statements?

7. I believe we can handle whatever conflicts will arise in the future.

					[			
0	1	2	3	4	5	6	7	
Strongly Neither Strongly							ongly	
Disa	igree		1	Agree			Ag	ree
Nor Disagree								

8. I am very confident when I think of our future together.

0	1	2	3	4	5	6	7
Stro	ngly		1	Neithe	er		Strongly
Disa	igree		1	Agree	Agree		
			1	Nor D	isagre	ee	

9. I'm hopeful that we can make our relationship work.

0	1	2	3	4	5	6	7	
Stro	ngly		]	Neithe	r		Str	ongly
Disa	agree		1	Agree			Ag	ree
Nor Disagree								

10. I'm hopeful that we have the tools we need to fix problems in our relationship now and in the future.

0	1	2	3	4	5	6	7	
Stro	ongly		N	Veithe	r		Sti	rongly
Dis	agree		P	Agree			Ag	gree
Nor Disagree								

11. I feel like our relationship can survive what life throws at us.

					] [				
0	1	2	3	4	5	6	7		
Strongly Neither							Strongly		
Disa	gree		1	Agree			Ag	ree	
Nor Disagree									

12. Sometimes couples experience serious problems in their marriage and have thoughts of ending their marriage. Even people who get along quite well with their spouse sometimes wonder whether their marriage is working out. Have you <u>ever</u> thought your marriage was in serious trouble?

 $\Box$  Yes  $\Box$  No [If no, then skip to question #19.]

13. (If "Yes" to question #12): Did you and your spouse ever talk about the possibility of divorce?

 $\Box$  Yes  $\Box$  No  $\Box$  Maybe, we sort of talked about it.

14. Are you glad or not glad you are still married?

- $\Box$  I'm glad we are still married.
- □ I have mixed feelings about still being married; sometimes I'm glad and sometimes I'm not.
- $\Box$  I'm not glad we are still married.
- $\Box$  I'm just not sure how I feel about my marriage.

[If responded "I'm glad" or "Mixed feelings" to question #14, then ask question #15; otherwise, skip to question #16.]

15. If you have had some serous problems in your marriage but are generally glad or sometimes glad you are still together, what helped you either to improve your marriage or just stay together?

	Helpful	Not Help		
	to us	to us		
	Staying	Staying	Not	
	Together	Together	applica	ble
Over time, things changed and just got better or weren't as had	rd.			
We got some counseling together.				
I got some counseling.				
My spouse got some counseling.				
I worked at fixing some problems and improving our relations	ship.			
My spouse worked at fixing some problems and improving				
our relationship.				
I adjusted some of my attitudes that made things better.				
My spouse adjusted some attitudes that made things better.				
My commitment to keeping my marriage together is strong (e	even if			
things aren't much better).				
My commitment to keeping my family together is strong (eve	en if			
things aren't much better).				
Other (please describe briefly):				

16. In the past 6 months, have you had serious concerns about your marriage that included thinking about a possible divorce?

(1)	(2)	(3)	(4)
No,	Yes, a	Yes,	Yes,
Not at	Few	Several	a Lot of
All	Times	Times	Times

[If respond "no" (1) to #16, then skip to question #19.]

17. Have you talked to your spouse in the last 6 months about your thoughts about divorce?  $\Box$  Yes  $\Box$  No  $\Box$  Maybe, we sort of talked about it.

18. There are many reasons why people may think about divorce. Please indicate to what extent each of these potential problems is a reason in your situation.

	Major Reason	Minor Reason	Not a Reason
Problems handling money.			
Problems with alcohol or drugs.			
Problems with personal habits.			
Problems with mental health problems			
(such as depression).			

Problems with working too many hours. Problems with how we divide up housework		
and childcare.		
Problems with infidelity/affair(s).		
Problems with our sexual relationship.		
Problems with physical violence.		
Problems with emotional abuse.		
Problems with arguing too much.		
Problems with being able to talk together.		
Problems with not paying enough attention to		
the marriage.		
Problems with growing apart.		
Problems with losing romantic feelings or		
falling out of love.		
Problems with being committed to the marriage.		

19. In the past 6 months, has your spouse mentioned to you that he or she has been thinking about the possibility of divorce?

(1)	(2)	(3)	(4)
No,	Yes, a	Yes,	Yes,
Not at	Couple of	Several	a Lot of
All	Times	Times	Times

20. Do you agree or disagree with the following statement: "I would feel like a failure if my marriage were to end."

(1)	(2)	(3)	(4)	(5)	
Strongly	Disagree	Neither	Agree	Strongly	Not
Disagree		Agree nor		Agree	Sure

[If "No" to question #12 OR (1) "No, Not at All" to question #16 AND (1) "No, Not at All" to question #19, then skip to question #31: Demographic Questions.]

[If (1) "No, Not at All," to question #16 BUT (2, 3, or 4) "Yes . . ." to question #19, then skip to question #28: Leaning-In Spouse Questions.]

[If (2, 3, or 4) "Yes . . . " to question #16, then proceed with question #21: Leaning-Out Spouse Questions.]

### ["Leaning Out Spouse questions 21-27.]

21. How long have you had these thoughts about divorce?

(1)	(2)	(3)	(4)	(5)
0-3	4-6	7-12	12-24	More than
Months	Months	Months	Months	24 months

22. People have different attitudes about getting a divorce. Please check the one statement below that most closely fits your own attitude right now.

 $\Box$  I'm done with this marriage; it's too late now even if my spouse were to make major changes.

 $\Box$  I have mixed feelings about a divorce; sometimes I think it's a good idea and sometimes I'm not sure.

 $\Box$  I would consider working on my marriage and not divorcing if my spouse got serious about making some major changes.

□ I don't really want a divorce; I'm willing to work hard to keep us together.

□ None of these statements really fits my own attitude right now. Please write your attitude here: \_\_\_\_\_\_

23. Do you agree or disagree with the following statement: "I've struggled to come to clarity about my decision to divorce or stay together."

(1)	(2)	(3)	(4)	(5)	
Strongly	Disagree	Neither	Agree	Strongly	Not
Disagree		Agree nor		Agree	Sure

24. If you have made a decision to divorce or stay together, how confident are you that this is the right decision for you (or have you not made a decision yet)?

I Have	(1)	(2)	(3)	(4)	(5)
Not Made a	Not at				Very
Decision Yet [Skip to #25.]	All Confident				Confident

25. Have you talked about your thoughts of divorce with any of the following people? [If yes\_activate follow-up:] Was it helpful or not helpful?

LI	yes, activate follow-up:]			Was it helpfu	l or not helpfu
		Yes	No	Helpful	Not Helpful
a.	A family member?			aa. 🗆	
b.	A friend or co-worker?			bb. 🗆	
c.	A religious leader?			cc. 🗆	
d.	A marriage counselor?			dd. 🗆	
e.	A divorce mediator?			ee. 🗆	
f.	A divorce lawyer?			ff. 🗆	

26. Have you done any of the following to try to repair your relationship?

[If yes, activate "helpful" follow-up:]	Yes	No	Was it h Helj	-	or not helpful? Not Helpful
a. Read a self-help book(s).			aa.		
b. Looked at a self-help website(s).			bb.		
c. Taken a marriage strengthening class.			cc.		
d. Talked to others about how to improve	_	_			_
my marriage.			dd.		
e. Seen a counselor by yourself.			ee.		
f. My spouse has seen a counselor.			ff.		
g. We saw a counselor together.			gg.		
h. Talked to a religious leader.			hh.		
i. Had a serious talk(s) with my spouse about	ut				
fixing some problems in our marriage.			ii.		
j. I just worked harder to fix some problems	5				
in my marriage.			jj.		
k. My spouse just worked harder to fix som	e				
problems in our marriage.			kk.		
l. Forgiven my spouse for something?			11.		
m. Your spouse forgave you for something?			mm		
n. Something else? (please describe):			nn.		
	-				

27. Have you filed for a legal divorce (or received a petition for divorce)?

□ Yes □ No

[Skip to #31 Demographic Questions.]

### ["Leaning-in" spouses questions #28-30.]

28. Since your spouse talked to you about a possible divorce, have you talked with any of the following people about this?

[If	yes, activate follow-up:]			Was it helpful	or not helpful?
		Yes	No	Helpful	Not Helpful
a.	A family member?				
b.	A friend or co-worker?				
c.	A religious leader?				
d.	A marriage counselor?				
e.	A divorce mediator?				
f.	A divorce lawyer?				

19. Have you done any of the following to try to repair your relationship?If yes, activate "helpful" follow-up:Was it helpful or not helpful?				
	Yes	No	Helpful	Not Helpful
a. Read a self-help book(s).				
b. Looked at a self-help website(s).				
<ul><li>c. Taken a marriage strengthening class.</li><li>d. Talked to others about how to improve</li></ul>				
my marriage.				
e. Seen a counselor by yourself.				
f. My spouse has seen a counselor.				
g. We saw a counselor together.				
h. Talked to a religious leader.				
i. Had a serious talk(s) with my spouse about	ıt			
fixing some problems in our marriage.				
j. I just worked harder to fix some problems	5			
in my marriage.				
k. My spouse just worked harder to fix som	e			
problems in our marriage.				
1. Forgiven my spouse for something?				
m. Your spouse forgave you for something?				
n. Something else? (please describe):				

30. Married couples sometimes have different views about getting a divorce. Which of the following statements most closely fits your own attitude right now.

□ I really don't want a divorce; I'll do almost anything I need to do to save my marriage.

□ I really don't want a divorce, but I'll go along if my spouse insists.

\_\_\_\_\_

 $<sup>\</sup>Box$  I have mixed feelings about a divorce; sometimes I think it's a good idea and sometimes I'm not sure.

- □ I'm leaning towards getting a divorce.
- $\Box$  I'm certain I want a divorce.
- □ None of these statements fits my own attitude right now. (Please write your view here:)

### [Demographic questions #31-37.]

Finally, we want to ask a few basic questions about you.

- 31. How much education have you completed?
- $\Box$  I haven't graduated from high school.
- $\Box$  I completed high school or my GED.
- □ I have had some college but haven't received an associate or bachelor degree.
- $\Box$  I have a college associate degree.
- $\Box$  I have a college bachelor degree.
- $\Box$  I have had graduate school training or have a graduate degree.
- 32. How do you describe your race or ethnicity?
- $\Box$  African American
- $\Box$  Asian
- □ Bi-Racial or Multi-Racial
- $\hfill\square$  Caucasian or White
- □ Hawaiian or Pacific Islander
- □ Hispanic
- □ Indian
- □ Middle Eastern
- $\Box$  Native American
- □ Other \_\_\_\_\_

33. How many children do you and your spouse have? (Include all biological, adopted, and stepchildren.)

34. How many children under 18 years of age do you have living with you? (Include all biological, adopted, and stepchildren.)

35. In the past year, how often have you attended a religious service?

(1)	(2)	(3)	(4)	
Never	A Few	A Few	Once a	Not
	Times a	Times a	Week or	Sure
	Year	Month	More	

36. Would you agree or disagree with this statement? "Religion is an important part of my life."

(1)	(2)	(3)	(4)	(5)	
Strongly	Disagree	Neither	Agree	Strongly	Not
Disagree		Agree nor		Agree	Sure

[If participant responded to Q#12 with "Yes" OR to Q#16 with "Yes . . ." (2-4), then ask this final question. Otherwise, skip to "Thank you."]

A few times a year, YouGov conducts focus groups, in-depth interviews by telephone, and, or online video interviews with unique panelists. These types of interviews typically include a generous incentive, such as a gift card, as a token of YouGov's appreciation of your time.

37. Please indicate if you would be willing to be contacted by YouGov in the near future to participate in such an interview to talk in more depth about your responses to questions on this survey.

 $\Box$  Yes.

 $\Box$  No.

 $\Box$  It depends.

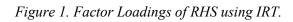
Thank you for your time completing this survey!

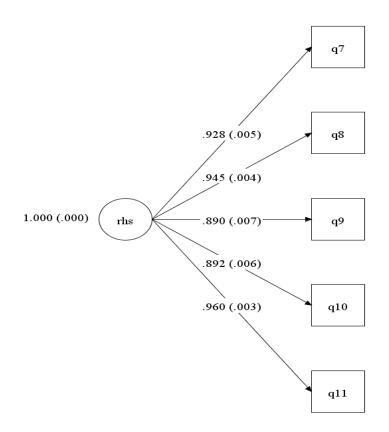
We recommend that you quit our of your browser software now to ensure that no one else can recover your responses on this survey.

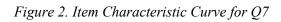
# Appendix B: Additional Tables and Figures

Table 1. Eigenvalues of RHS items.

	Initial Eigenvalues				
Component	Total	% of Variance	Cumulative %		
1	4.073	81.453	81.453		
2	.370	7.409	88.862		
3	.226	4.523	93.385		
4	.179	3.587	96.972		
5	.151	3.028	100.000		







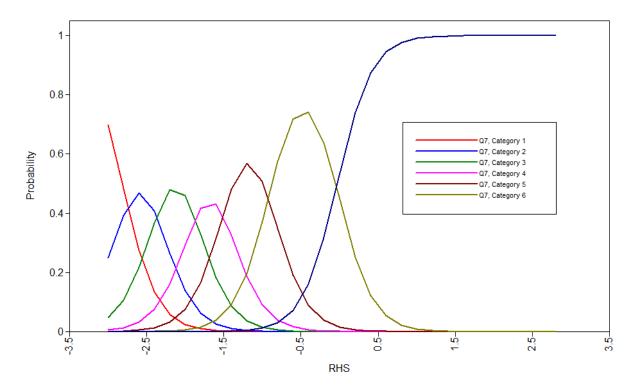
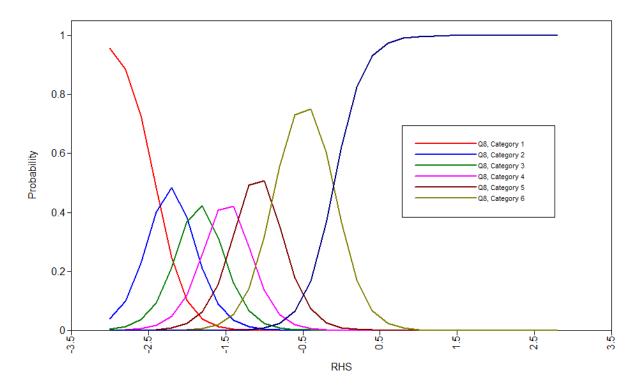
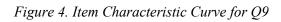


Figure 3. Item Characteristic Curve for Q8





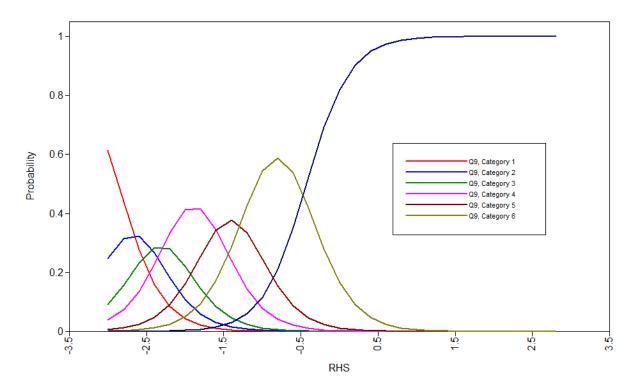


Figure 5. Item Characteristic Curve for Q10

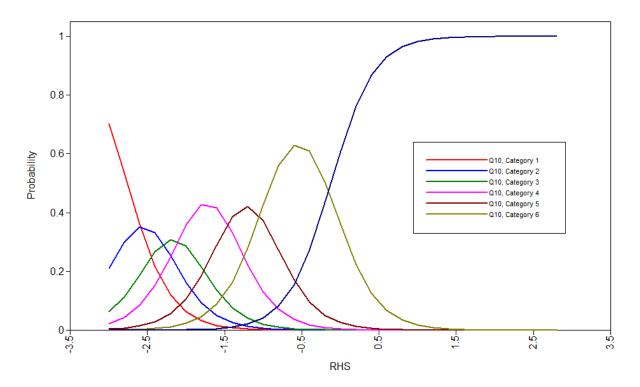


Figure 6. Item Characteristic Curve for Q11

