

Which Relationship Skills Count Most? A Large-Scale Replication

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ABSTRACT



In a large-scale follow-up to a recently published study, data obtained from 25,507 subjects in 58 countries (mainly the United States and Canada) were analyzed in an attempt to rank order seven important relationship competencies. In both studies, two competencies—communication and knowledge of partner—proved to be the strongest predictors of self-reported satisfaction in current relationships, a finding that might help provide some guidance for relationship education and therapy. Although both studies showed little differences overall between the relationship skills of males and females—that is, only small, nonsignificant differences in total scores obtained on the testing instrument—both studies found clear differences in the kinds of skills males and females bring to intimate relationships, a finding that is consistent with the findings of other studies. Effects were also found for race, education, and sexual orientation but not for age or country of residence.

KEYWORDS

Relationship skills; relationship competencies; relationship education; relationship therapy; Epstein Love Competencies Inventory; ELCI

Introduction

In a recent Internet-based study with 2,201 subjects, Epstein, Warfel, Johnson, Smith, and McKinney (2013) used regression analysis to rank order seven relationship competencies according to how well they predicted various self-reported indicators of relationship success. Specifically, subscale scores on a test of relationship competencies—the Epstein Love Competencies Inventory (ELCI, pronounced “Elsie,” accessible at MyLoveSkills.com or MyRelationshipSkills.com)—were used to predict self-reported answers to questions about past and current relationship satisfaction and other variables. The seven competencies, all of which have been shown in multiple studies to have value in relationships, were communication, conflict resolution, knowledge of partner, life skills, self-management, sex and romance, and stress management (Table 1).

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Table 1. Seven important relationship competencies.

Communication: knowing how to listen, sharing one's thoughts and feelings honestly, refraining from criticizing, etc.

Sample item: "I often ask for feedback from my partner."

References: Baptist, Norton, Aducci, Thompson, & Cook, 2012; Braithwaite et al., 2010; Buzzella, Whitton, & Tompson, 2012; Goddard, Marshall, Olson, & Dennis, 2012; Jonathan & Knudson-Martin, 2012.

Conflict resolution: staying focused on the topic, staying focused on the present, being ready to forgive or apologize, etc.

Sample item: "I'm always ready to forgive when my partner apologizes."

References: Baptist et al., 2012; Goddard et al., 2012; Jonathan & Knudson-Martin, 2012; McRae, Dalgleish, Johnson, Burgess-Moser, & Killian, 2014.

Knowledge of partner: knowing how to have fun with one's partner, knowing about his/her preferences, caring about one's partner's hopes and dreams, etc.

Sample item: "I always remember my partner's birthday and other special days."

References: Ciccocioppo, Frieze, & Votruba-Drzal, 2011; Jonathan & Knudson-Martin, 2012.

Life skills: managing money responsibly, exercising and staying fit, being able to find and keep a job, etc.

Sample item: "I'm always prepared for possible hard times."

References: Owen, Rhoades, & Stanley, 2013; Schofield et al., 2015; Williamson, Karney, & Bradbury, 2013.

Self-management: knowing one's strengths and weaknesses, striving to overcome one's weaknesses, identifying and reaching one's goals, etc.

Sample item: "I regularly take time to reflect on my dreams and obstacles."

References: Gordon & Baucom, 2009; Proulx, Helms, & Buehler, 2007; Schofield et al., 2015.

Sex & romance: inquiring and caring about how to please one's partner sexually, setting aside time for intimacy, staying attractive for one's partner, etc.

Sample item: "I always make time for sensual intimacy with my partner."

References: Butzer & Campbell, 2008; MacNeil & Byers, 2009; Yabiku & Gager, 2009.

Stress management: using imagery techniques, thought management techniques, planning and organizational skills, muscle-relaxation techniques, etc.

Sample item: "I have trouble prioritizing."

References: Bradbury & Lavner, 2012; Frost, 2014; Williamson, Karney, & Bradbury, 2013.

In the prior study, test scores predicted current relationship satisfaction moderately well (Spearman's $\rho = .23$, $P < .001$). Females outscored males in three competency areas (communication, knowledge of partner, and self-management) and males outscored females in two competency areas (conflict resolution and life skills). Females also outscored males overall, but the difference was small (0.9%) and non-significant. Total scores on the test were positively correlated with the number of hours of couples counseling or coaching subjects reported, which supported the findings of other research on the value of such interventions (Barnacle & Abbott, 2009; Larson, Vatter, Galbraith, Holman, & Stahmann, 2007; Stanley, Allen, Markman, Rhoades, & Prentice, 2010; cf. Bradley, Friend, & Gottman, 2011; Futris, Barton, Aholou, & Seponski, 2011).

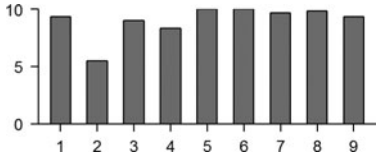
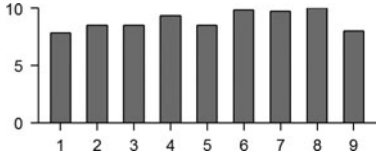
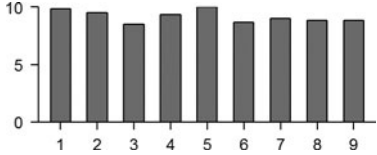
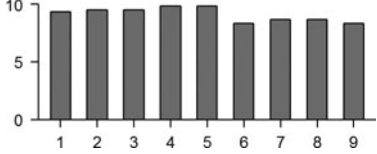
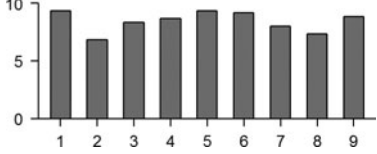
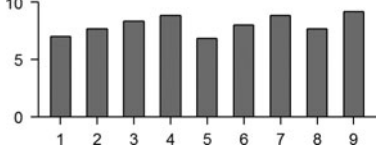
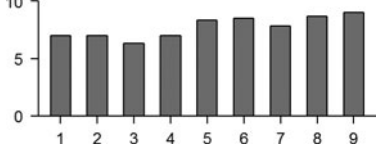
Perhaps most important, after communication, knowledge of partner and life skills proved to be the next best predictors, respectively, of current relationship satisfaction, with conflict resolution not ranking as a significant predictor. The rankings were surprising given that communication and conflict resolution are often emphasized in couples education programs (Braithwaite, Lambert, Fincham, & Pasley, 2010; Burr, Hubler, Gardner, Roberts, & Patterson, 2014; Buzzella, Whittton, & Tompson, 2012), with relatively little attention paid to training knowledge of partner or life skills (Williams & Davis, 2002; cf. Burr et al., 2014).

To assess the content validity of the test, Epstein et al. (2013) also reported ratings of the value of both the items and the competencies by seven independent clinical professionals. A double-blind procedure was used to obtain the ratings. Six of the seven competencies received high ratings (mean ratings between 9.3 and 9.8 on a 10-point scale); the seventh competency, life skills, along with most of its accompanying items, was rated poorly by comparison (mean rating, 7.8). Notably, the highest ranked competency in the content validity study was knowledge of partner, rated even above communication (Table 2).

One deficiency in the Epstein et al. (2013) study was the sample. It was, by current standards, relatively small, and most of the participants were referred by clinical professionals who subscribed to an online newsletter maintained by SmartMarriages.com. Of the participants, 37.5% reported that they had had some formal training in relationship skills, a number that is likely higher than the value for the general population, although precise values are hard to find. The recent book, *The Normal Bar*, which was based on online survey data collected from more than 70,000 people in multiple countries (Northrup, Schwartz, & Witte, 2013), stated that 39% of participants reported having had some form of relationship counseling. The sample used in *The Normal Bar* was skewed, however, “toward women, people between the ages of 25 and 44 years, well-educated Caucasians with liberal leanings, prosexual, and proromanticism strivers” (McCarthy & Wald, 2013, p. 562). In both the Epstein et al. (2013) study and the Northrup et al. (2013) book, the samples were likely skewed toward people with a history of relationship counseling or coaching; presumably, people with relationship problems, some of whom have sought help for those problems, are more likely to take an online relationship test than are people who have not experienced such problems. (We mention the Northrup et al. [2013] book here only in the context of sampling problems. As McCarthy and Wald [2013] note in their review of the book, it does not purport to present reliable or valid scientific data).

The mean age in the Epstein et al. (2013) study was also relatively high (36.6 years). Sixty-five percent of subjects identified themselves as female, 84.0% identified themselves as white, and 31.1% indicated that they held master's or doctoral degrees. As one might expect, given the relatively high rate of skills training, the Epstein et al. study also found that people's skill levels were fairly high. The mean percentage score on the ELCI was 70.5%, with subscale scores ranging from a low of 60.6% on the stress management scale to a high of 77.4% on the communication scale.

Table 2. Competency and item ratings by independent clinical professionals.

Competency	Mean rating of importance of competency	Mean rating of appropriateness for all items	Mean ratings of appropriateness for individual items*
Knowledge of partner	9.8	9.0	
Self-management	9.7	8.9	
Sex and romance	9.7	9.2	
Communication	9.5	9.1	
Conflict resolution	9.3	8.4	
Stress management	9.3	8.0	
Life skills	7.8	7.7	

Notes: *Mean scores of appropriateness of item for its competency category given to all 63 scoreable items (nine items for each of seven competencies) on the ELCI by seven licensed therapists using a blind scoring procedure.

With these concerns in mind, and given the important role that relationship skills play in maintaining long-term intimate relationships (Jonathan & Knudson-Martin, 2012; Stafford & Canary, 1991), as well as the central role that such skills play in relationship education and counseling (Bradley et al., 2011; Braithwaite et al., 2010; Burr et al., 2014; Buzzella et al. 2012; Futris et al., 2011), we sought to replicate the earlier study with a larger, more representative sample, in both the main geographical area

of interest (the United States and Canada) and other countries. A question about sexual orientation was also added to the list of demographic questions.

Methods

Test Instrument

The present study used the same testing instrument that was used by Epstein et al. (2013), modified only to include a demographic question regarding sexual orientation. Before subjects were given the test itself, they were asked a number of demographic and criterion questions. Among the criterion questions was an item that asked participants to report whether they had ever received “any counseling or coaching in relationship skills,” and a follow-up question that asked participants to report the approximate number of hours of counseling or coaching they had received. Other criterion questions included: “Are you currently in a romantic relationship?” “If you are currently married or in a romantic relationship, how long has it lasted?” “On a scale of 1 to 10, where 10 is the highest, how satisfying has this relationship been for you?” “On average, how long have your romantic relationships lasted?” “On a scale of 1 to 10, where 10 is the highest, how satisfying have your romantic relationships been for you?”

The test itself included 70 items, 10 items for each of seven relationship competencies: communication, conflict resolution, knowledge of partner, life skills, self-management, sex and romance, and stress management (Table 1). The test items from all subscales were presented in a fixed, random order that was the same for each subject. All of the items were derived from studies demonstrating the value of these seven competency areas. One item of each group of 10 was not scored; it was a variant of one of the scored items used to measure consistency of responding. Each raw competency score was computed as the sum of scores on the nine scored items for that competency. The unscored variant—in effect, a dummy item—allows us to alert a subject who has just completed the test that he or she has been responding inconsistently and may wish to repeat the test. To do so, we calculate the correlation of answers given on each of the seven dummy pairs. We call this value the Internal Consistency Score (ICS; Epstein & Phan, 2012; Epstein, Schmidt, & Warfel, 2008). For the purpose of the present study, however, no subjects were eliminated using the ICS, and no one was required to retake the test; when people did choose to retake it, we used only their first scores for the purpose of the present analysis. (For further details about the test construction, see Epstein et al. [2013]).

Participants

Although participants were not actively recruited for this study, the survey instrument remained posted at MyLoveSkills.com and MyRelationshipSkills.com after the data had been collected for the Epstein et al. (2013) study in 2007. Over time, links to the test were also posted at other websites, and, as is typical in Internet research, we

had no control over that process. Data for the present study were collected between May 5, 2007, and July 30, 2015, during which 25,507 participants took the test.

Sixty-seven percent ($n = 17,090$) of the participants identified themselves as female, 32.9% ($n = 8,389$) as male, and 0.1% as “other” ($n = 28$). The mean age reported was 34.4 ($SD = 13.1$). In addition, 74.6% ($n = 19,020$) identified themselves as white, 5.6% ($n = 1,416$) as black, 5.6% ($n = 1,440$) as Hispanic, 8.4% ($n = 2,136$) as Asian, 0.5% ($n = 133$) as Native American, and 4.4% ($n = 1,121$) as “other,” with the remaining 0.9% ($n = 241$) providing no information about their race. Twenty-five percent ($n = 6,368$) of the participants indicated that they had completed high school, 8.6% ($n = 2,182$) that they had earned an associate’s degree, 39.9% ($n = 10,187$) that they had completed college, 18.4% ($n = 4,688$) that they had a master’s degree, 5.0% ($n = 1,285$) that they had completed doctoral work, and 2.7% that they had an education level of “none” ($n = 693$), with the remaining 0.4% providing no information about their education ($n = 104$). Also, 89.2% ($n = 22,747$) of participants indicated a sexual orientation of “straight,” 5.5% ($n = 1,403$) of “bisexual,” and 3.2% ($n = 811$) of “gay,” and 2.1% ($n = 546$) did not indicate a sexual orientation.

Also, 63.9% ($n = 16,294$) of the participants reported that they were currently in a relationship, 31.3% ($n = 7,978$) that they were currently married, and 53.3% ($n = 13,598$) that they had never been married. And 85.2% ($n = 21,731$) of our sample was from the United States or Canada and 6.5% ($n = 1,654$) was from 56 other countries, with 8.3% ($n = 2,122$) from unknown locations. On January 6, 2014, we also added a question regarding English fluency. For the 3,363 subjects who answered this question, the mean fluency level was 9.4 on a scale from 1 to 10 ($SD = 1.4$).

The current sample was somewhat younger, more racially diverse, and less educated than the sample in the Epstein et al. (2013) study, although the percentage of female participants increased slightly (from 65.0% to 67.0%). Of special note, only 23.3% of the participants in the new sample said they had had previous training in relationship skills, compared with 37.5% in the Epstein et al. (2013) study; this difference alone suggests that the new sample is probably more representative of the general population than the previous sample was, presumably because most of the participants in the previous study were referred by therapists and other relationship professionals.

Results

Reliability and Validity

Relatively high estimates of internal consistency reliability were obtained using Cronbach’s α (.90) and the Guttman split-half test (0.88). Internal consistency was also suggested by the mean of the ICS values for each individual ($M = 0.70$). Because our test was administered over the Internet and because the anonymity of subjects was preserved, we were not able to retest participants and thus could not calculate test–retest reliability.

As in the previous study, test validity was suggested by several measures. Perhaps of greatest importance, total test scores were fairly highly correlated with self-reported satisfaction in one's current relationship ($\rho = .38, P < .001$), and this value was substantially higher than in the previous study. (Nonparametric statistical tests such as Spearman's ρ , the Mann–Whitney U , and the Kruskal–Wallis χ^2 are used throughout this study because scores on the ELCI lie on an ordinal scale. Unless otherwise indicated, all test scores are reported as a percentage of total correct rather than as raw scores.)

As one might expect, total test scores also predicted average relationship satisfaction ($\rho = .24, P < .001$) but not as well they predicted current satisfaction (presumably because the test scores reflect current skill levels, not past skill levels). Total scores were also significantly correlated with the average length of romantic relationships subjects had had ($\rho = .07, P < .001$) and slightly negatively correlated with the average period of time that had passed since their last romantic relationship ($\rho = -.04, P < .05$).

Total scores were also higher for people who had received relationship skills training (Mann–Whitney $U = 61,688,301.0, P < .001, M_{\text{yes}} = 70.4 [SD = 11.9], M_{\text{no}} = 68.6 [SD = 11.9]$) and were correlated with the number of hours of couples counseling or coaching participants had received ($\rho = .11, P < .001$). In addition, the average number of training hours for people who were currently or had previously been married ($M = 39.5, SD = 77.0$) was substantially higher than the average number of training hours for people who had never married ($M = 20.4, SD = 60.0; U = 9,743,208.0, P < .001$).

Gender, Race, Age, Education, and Sexual Orientation

Gender differences reported by Epstein et al. (2013) were replicated in almost all respects in the present study (Table 3). The differences between the mean total scores of males and females was reduced from 0.9% to 0.1% but was not statistically significant in either study. Although males and females were even overall, male and female strengths differed substantially, with females outscoring males in four competency areas (communication, knowledge of partner, self-management, and sex and romance) and males outscoring females in three competency areas (conflict resolution, life skills, and stress management) (Table 3).

Effects were also found for educational level ($\rho = .12, P < .001$), race, and sexual orientation (Table 4). Bisexual respondents scored significantly lower than both gay/lesbian ($U = 514,498.0, P < .001$) and straight ($U = 14,929,821.5, P < .001$) respondents, but the difference between the mean total scores of gay/lesbian respondents and straight respondents was not significant ($P = .14$). No effect was found for age ($\rho = .01, P = .10$) or country of residence ($U = 17,878,698.0, P = .73; M_{\text{US\&Canada}} = 68.9 [SD = 11.9], M_{\text{Other}} = 69.1 [SD = 11.4]$).

Regressions and Factor Analysis

Linear regression was used to determine the predictive value of each of the seven competencies. As in the previous study, communication ($\beta = .28, P < .001$) and

Table 3. Total and subscale scores by gender, age, and training level.

	Men and women			Age		Training			
	All participants (n = 25,507) Mean (SD)	Men (n = 8,368) Mean (SD)	Women (n = 17,061) Mean (SD)	Mean difference	Age <35 yr (n = 14,594) Mean (SD)	Age ≥35 yr (n = 10,867) Mean (SD)	Training (n = 4,538) Mean (SD)	No training (n = 14,081) Mean (SD)	Mean difference
Total score	68.9 (11.9)	68.9 (12.0)	69.0 (11.9)	0.1	69.0 (11.6)	68.9 (12.3)	70.4 (11.9)	68.6 (11.9)	1.8***
Communication	76.0 (16.2)	74.4 (16.7)	76.8 (15.9)	2.4***	77.4 (15.5)	74.1 (16.9)	76.5 (16.2)	76.1 (16.1)	0.4
Conflict resolution	65.1 (14.9)	67.2 (13.8)	64.1 (15.3)	3.1***	64.0 (14.7)	66.5 (15.2)	66.0 (15.3)	64.9 (14.8)	1.1***
Knowledge of partner	76.6 (14.5)	74.1 (15.0)	77.9 (14.0)	3.8***	77.7 (14.3)	75.2 (14.5)	76.9 (13.8)	76.8 (14.5)	0.1
Life skills	65.7 (18.2)	67.9 (18.2)	64.6 (18.1)	3.3***	63.9 (18.0)	68.1 (18.2)	69.0 (17.7)	64.8 (18.2)	4.2***
Self-management	74.3 (15.3)	73.4 (15.6)	74.8 (15.2)	1.4***	74.0 (15.1)	74.8 (15.5)	77.1 (14.6)	73.6 (15.4)	3.5***
Sex and romance	66.8 (18.7)	66.3 (18.1)	67.1 (19.0)	0.8***	68.0 (17.9)	65.2 (19.5)	67.7 (18.9)	66.7 (18.6)	1.0***
Stress management	58.0 (15.6)	58.6 (15.4)	57.7 (15.8)	0.9***	57.9 (15.5)	58.2 (15.8)	59.7 (15.8)	57.5 (15.6)	2.2***

Notes: ** $P < .01$, *** $P < .001$. Mann–Whitney U tests were conducted to assess the significance of mean differences. Mean total scores are presented as percentages.

Table 4. Demographic differences in mean total score.

Category		Mean (SD)	Kruskal–Wallis χ^2
Race	American Indian	68.2 (15.2)	13.6*
	Asian	69.1 (11.6)	
	Black	69.5 (12.6)	
	Hispanic	69.6 (12.1)	
	Other	69.3 (12.3)	
	White	68.8 (11.9)	
Education	None	65.7 (13.8)	346.4***
	High school	67.1 (12.4)	
	Associates	68.9 (12.0)	
	Bachelor's	69.3 (11.6)	
	Master's	70.6 (11.4)	
	Doctoral	71.5 (11.3)	
Sexual orientation	Gay/lesbian	69.6 (11.6)	19.2***
	Bisexual	67.7 (12.0)	
	Straight	69.1 (11.9)	

Notes: * $P < .05$, *** $P < .001$. Mean total scores are presented as percentages.

knowledge of partner ($\beta = .20$, $P < .001$) proved to be the most predictive competencies for current relationship satisfaction. Life skills contributed marginally to current relationship satisfaction ($\beta = .03$, $P < .001$). Conflict resolution also contributed marginally to current relationship satisfaction ($\beta = .05$, $P < .001$) but did not contribute significantly to average relationship satisfaction ($P = .52$). The best predictors of average relationship satisfaction proved to be knowledge of partner ($\beta = .10$, $P < .001$) and life skills ($\beta = .09$, $P < .001$).

An exploratory principal components factor analysis was performed that included all of the 63 scored items. The appropriateness of our data for factor analysis was confirmed by a high Kaiser–Meyer–Olkin measure of sampling adequacy (0.95) and a significant Bartlett's test of sphericity ($P < .001$). Overall, the analysis yielded six distinct, interpretable, and statistically sound components (Table 5): (a) knowledge of partner and communication, (b) sex and romance, (c) stress and self-management, (d) responsibility management, (e) conflict resolution, and (f) life skills (mainly health and appearance). Components 3, 4, and 6 appeared to represent participants' personal skill sets (skills that generally do not involve interactions with other people), and components 1, 2, and 5 appeared to represent participants' interpersonal skill sets (skills that generally involve interactions with other people).

Changes Over Time

Because the data were collected over a period of more than 8 years, we also looked for changes over time. Mean total scores per year did change significantly over time, but so did important demographic characteristics of the sample (Table 6). Perhaps of greater importance, when we divided our data into two segments—those collected before and after May 1, 2011, which gave us two equal periods of data collection ($n = 12,321$ in the first period and $n = 13,186$ in the second period)—we found through regression analyses that the ranking of competencies during these two periods was

Table 5. Factor loadings for the 63 scored test items.

Item	Knowledge of partner and communication	Sex and romance	Stress and self-management	Responsibility management	Conflict resolution	Life skills (mainly health and appearance)
54	0.656					
66	0.623					
13	0.579					
30	0.574					
2	0.533					
26	0.499	0.416				
39	0.478					
32	0.456					
49	0.445					
53	0.442		0.430			
40	0.431					
44	0.426					
1	0.425					
8	0.415					
16						
15						
36		0.683				
42		0.645				
61		0.589				
47		0.585				
22		0.555				
34		0.540				
43		0.506				
4		0.496				
20		0.428				
58		0.425				
10						
24						
68			0.606			
57			0.592			
56			0.568			
64			0.477			
7			0.461			
14			0.458			
70			0.444			
3			0.441			
51			0.437			
60			0.434			
21			0.414			
6			0.409			
62			0.407			
25						
48				0.608		
19				0.603		
52				0.580		
35				0.530		
27				0.528		
23				0.485		
38				0.457		
18						
46					0.656	
29					0.569	
69					0.566	
5					0.467	
63					0.402	
28						
17						
31						
55						
12						0.609
9						0.554
59						0.535
37				0.419		0.484

Notes: Extraction method: principal component analysis. Rotation method: varimax with Kaiser normalization. Factor loadings under 0.40 are not shown.

Table 6. Differences in mean total score and demographics by year.

Category	2007	2008	2009	2010	2011	2012	2013	2014	2015	Significance Test (χ^2)
Total score [mean (SD)]	69.1 (12.7)	69.2 (11.7)	70.3 (12.1)	70.6 (11.7)	67.8 (11.7)	67.9 (11.8)	69.9 (11.3)	67.6 (12.0)	66.8 (13.0)	247.7***
Sexual orientation (straight)	91.3%	93.9%	89.6%	91.4%	93.3%	89.6%	92.2%	87.0%	79.7%	426.3***
Gender (female)	65.2%	69.3%	67.3%	67.0%	62.8%	67.6%	70.2%	68.9%	66.5%	261.9***
Education (bachelor's)	40.4%	44.0%	38.2%	39.8%	36.6%	39.2%	42.5%	41.6%	37.7%	1199.4***
Race (white)	73.6%	81.3%	73.3%	72.3%	77.6%	70.8%	72.7%	74.4%	70.9%	566.3***
Ever married (yes)	46.2%	41.8%	35.1%	39.1%	67.7%	43.8%	46.7%	34.8%	28.8%	1518.1***
Currently married (yes)	27.4%	24.0%	23.2%	24.2%	52.6%	28.8%	34.2%	23.4%	16.8%	1638.9***
Currently in a relationship (yes)	58.5%	56.6%	61.0%	59.7%	72.1%	59.2%	74.5%	71.2%	64.7%	530.8***
Received training (yes)	26.6%	23.9%	22.2%	25.4%	25.0%	23.9%	24.3%	20.7%	17.4%	64.0***

Notes: *** $P < .001$. A Kruskal–Wallis χ^2 test was used to assess the significance of differences in mean total scores by year, and Pearson χ^2 tests were used to assess the significance of differences in demographic characteristics by year. The largest demographic group is presented for sexual orientation, gender, education and race, and the affirmative response is presented for the remaining demographics. Mean total score is presented as a percentage.

virtually identical: The best predictors of current relationship satisfaction were communication and knowledge of partner, both before (communication: $\beta = .25$, $P < .001$; knowledge of partner: $\beta = .18$, $P < .001$) and after (communication: $\beta = .30$, $P < .001$; knowledge of partner: $\beta = .20$, $P < .001$) the midpoint, and the best predictors of average relationship satisfaction were knowledge of partner and life skills, both before (knowledge of partner: $\beta = .08$, $P < .001$; life skills: $\beta = .09$, $P < .001$) and after (knowledge of partner: $\beta = .11$, $P < .001$; life skills: $\beta = .08$, $P < .001$) the midpoint; only the β values were different. We comment further on this issue in the Discussion section.

Discussion

The most important finding in the present study is clear support for one of the major findings in the Epstein et al. (2013) study, namely, that after communication, the next most important contributor to satisfaction in current relationships (of the seven competencies evaluated in each study) is knowledge of partner. In the new study, knowledge of partner even proved to be the best predictor of average relationship satisfaction. It is notable that knowledge of partner was also the most highly rated competency in the small content validity study reported by Epstein et al. (2013) (Table 2). The present study also confirms the earlier study's finding that conflict resolution appears to contribute relatively little to current relationship satisfaction and perhaps nothing at all to average relationship satisfaction. Our results would seem to contradict both common sense and mainstream professional opinions regarding the value of conflict resolution skills, but we suggest that the findings of a study this large should at least be food for thought.

Could our findings regarding conflict resolution be invalid, perhaps because of the nature of our sample? Is it possible that people who are attracted to an online test of relationship skills are simply bad, on average, at resolving conflicts in ways that contribute to relationship satisfaction? We cannot rule out that possibility, but

we also have faith in Occam's razor. The simplest interpretation of our findings is that conflict resolution may not be as valuable a skill set as is commonly thought, at least when compared with other skill sets.

The other major finding in the present study replicates fairly closely the findings of the Epstein et al. (2013) study regarding gender differences. Our results support the view that, on average, males and females bring different skill sets to intimate relationships. In both studies, females outscored males in three competency areas (communication, knowledge of partner, and sex and romance), and males outscored females in three competency areas (conflict resolution, life skills, and stress management) (Table 3). In the new study, females also outscored males in the remaining competency area: self-management. There seems to be little doubt, at least using the survey methodology employed in the present study, that males and females bring somewhat different skills sets (on average) to relationships. This general finding is consistent with the findings of other research (e.g., Baptist et al., 2012; Barnett, Marshall, Raudenbush, & Brennan, 1993; Christensen & Shenk, 1991; Conger et al., 1990; Feeney, 1994; Heiman et al., 2011; Hojjat, 2000; Nomaguchi & Bianchi, 2004; Smith et al., 2011; Stevens, Bavetta, & Gist, 1993; Vinokur, Price, & Caplan, 1996). Why males and females differ in these ways is a matter of debate and discussion (e.g., see Brettell & Sargent, 2012; Kimmel & Holler, 2000; Mascia-Lees, 2010; Nanda, 2014), and our new findings shed no light.

In other respects, the new study yielded somewhat different results than the Epstein et al. (2013) study. In the previous study, for example, average relationship satisfaction was best predicted by sex and romance and, to a lesser extent, by communication; in the new study, it was best predicted by knowledge of partner and life skills. The previous study found a small effect for age; the current study found none, perhaps because of how the new sample differed from the old. Most of the subjects in the previous study were referred by therapists and other relationship professionals, and some of the subjects had presumably undergone some degree of relationship skills training over a period of months or years; that training might have produced a small age effect. The absence of an age effect in the new, more diverse sample suggests that there has been no overall improvement in relationship skills in the general population in recent years. (Bear in mind that this is a cross-sectional study, not a longitudinal one; we are not studying how people have changed over time but rather are looking at a diverse sample of people who were born in different years).

Implications of Results and Future Directions

The major findings in the present study have clear implications for relationship education and therapy. For one thing, the competency we call knowledge of partner should probably be emphasized; the good news here is that, compared with a competency such as stress management or conflict resolution, knowledge of partner is relatively easy to teach. Its predictive power is probably related to its simplicity. When your spouse forgets your birthday or anniversary or when he or she orders a pizza

with toppings you dislike, the effect can be devastating; such gaffes can be interpreted as signs that your partner does not care about you or even that he or she is inconsiderate or hostile, especially if they are frequent or repeated. Teaching people the importance of learning and remembering important facts about their partner—along with simple techniques for keeping track of such information—could save many relationships. Regarding gender differences, relationship educators and therapists have long recognized the different strengths and weaknesses that women and men bring to relationships; the present study may bring further clarity to this issue by providing additional evidence regarding the specific nature of these differences.

The present study also confirms another important finding of the Epstein et al. (2013) study, namely, that scores on the relationship skills test are positively correlated with the number of hours of relationship training people have had; this is consistent, as we noted earlier, with the findings of multiple studies that have demonstrated the effectiveness of various forms of relationship training and coaching. Our current findings suggest possible benefits of expanding the kinds of training that are currently provided, and they also suggest that training could be productively streamlined to match the specific needs of specific demographic groups. That said, we believe that the most important way in which our findings could be applied is at the level of the individual. The ELCI provides a quick and easy method of finding out where an individual's relationship skills are lacking. Using demographic characteristics to guess where an individual needs help is no substitute for direct measurement.

Although the sample in the present study is larger, more diverse, and probably more representative than the sample in the Epstein et al. (2013) study, it is still an Internet sample, which is problematic. An increasing body of research suggests that people who take anonymous Internet surveys or who participate in online experiments are probably more honest in their responses than people are in face-to-face research, especially when asked about socially sensitive issues (Gnambs & Kaspar, 2014; Robertson, Tran, & Epstein, submitted; Trau, Härtel, & Härtel, 2013). Moreover, large, diverse, international studies are probably more valid in general than small studies in which the entire sample is drawn from a pool of sophomores at a single university. Nevertheless, Internet samples are self-selected, which almost certainly distorts results.

The high variability we found in demographic characteristics from year to year (Table 6) was likely the result of frequent changes in where links to the online test were appearing—a variable over which we had no control. Because of the changing characteristics of the sample, we could not say with any degree of confidence that we had detected “trends.” We had no way of determining whether annual changes in key numbers (such as total score) were occurring because of genuine changes in society or because of changes occurring in our sample. This is one clear disadvantage of conducting long-term studies over the Internet. On the bright side, the changing links probably contributed overall to a more diverse and representative sample.

Our online test also probably attracted a disproportionately high number of participants who had concerns about their relationships, 23.3% of whom said they had

previously had some relationship skills training. This proportion, although smaller than in the Epstein et al. (2013) study, might still have inflated our test scores. It is not clear how the gender differences we found or the rankings we obtained from our regression analyses might have been systematically distorted by sampling bias, but we cannot rule out that possibility.

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