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Before You Tie the Knot: Impacts, Outcomes, and Lessons Learned from a Federally-Funded Premarital Education Case Study

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ABSTRACT

Human services educators continually seek ways to make outreach programming more engaging and effective. This study evaluated an ongoing relationship education program funded by the United States Department of Health and Human Services (Administration of Children and Families) to determine the effectiveness of the *Before You Tie the Knot* (*BYTK*) premarital education program. A self-reported, quantitative, retrospective-pretest-then-post-test evaluation was utilized to assess key objectives in the sample ($n = 1285$). Clearly- evident effect sizes were found for perceived behavior changes in the participants' implementation of skills related to relationship quality (*i.e.*, positive interaction, negative interaction, positive bonds, happiness/satisfaction, commitment, and not feeling trapped) covered in the training over a five-week period. Implications for how the *BYTK* program can facilitate change and learning in educational settings, as well as inform relationship education outreach programming, are discussed.

KEYWORDS

Before You Tie the Knot; premarital preparation; premarital counseling; relationship quality; SMART couples

Introduction

It is estimated that only 30%–40% of engaged couples seek and actively participate in premarital education programs (Hawkins, 2017). The lack of premarital education availability is one of multiple barriers that helps to explain this dearth in participation (Doss et al., 2009). The good news is that premarital training has become more widely accessible over the last decade, largely due to the development of online educational, counseling, and religion-based relationship programs available for singles and couples (Hawkins, 2017; Stanley et al., 2006).

There is an abundance of evidence that premarital education and skills training results in improved relationship quality and satisfaction. Premarital education programs have been shown, for example, to be

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positively related to higher levels of dyadic couple relationship quality and satisfaction, lower levels of between-partner conflict, and lower rates of relationship dissolution (Fawcett et al., 2010; Rogge et al., 2013; Stanley et al., 2006). Specific programmatic examples include one study which assessed the effectiveness of the *Premarital Interpersonal Choices and Knowledge* (P.I.C.K) program for young adults. Researchers found the program improved participant knowledge on healthy relationships, trust, commitment, and other aspects of relationship development (Bradford et al., 2016). Additionally, Conradi et al. (2018), found the *Hold Me Tight* (HMT) program significantly improved self-referred couples' relationship satisfaction, security of partner-bond, and forgiveness.

Fawcett et al. (2010) questioned the results of some of this body of research, however. In a meta-analysis of forty-seven studies, these authors found that premarital training is not significantly related to dyadic couple relationship quality and satisfaction when both the published and unpublished research reports are included (i.e., doctoral dissertations) and found no evidence supporting a significant positive relationship between premarital education and relationship quality over the time-period typically addressed by these studies. Furthermore, due to the short-term nature of pre-marital programs, there are mixed results on the positive effects of the interventions. In sum, further research testing of the effects of premarital programs is needed (Green & Miller, 2013).

The mixed findings of educational programming on subsequent dyadic couple relationship quality and satisfaction indicate a need for improvement, particularly through the development and inclusion of pedagogical, andragogical, programmatic, and evaluation methodologies whereby couples incorporate communication and conflict resolution skills into their day-to-day living (Fawcett et al., 2010; Harris et al., 2012). Fawcett et al. (2010) suggest that social scientists must "critically examine and reconsider the content, intensity, methods, settings, delivery mechanisms, and target populations of premarital education" (p. 236). Despite the mixed findings, premarital programs represent a promising intervention tool, especially for couples who actively seek out the programs and retain the skills and knowledge long-term.

The current study addressed these mixed findings in premarital training outcomes by offering multiple and repeated 5-week sessions ($N = 125$) of the *Before You Tie the Knot* premarital education program delivered over a 5-year period to assess the consistency and validity of the outcomes across sessions and target populations. Supported by a 5.8 million-dollar federal Healthy Marriage and Responsible Fatherhood grant, the content, intensity, methods, settings, delivery mechanisms, and target populations of this premarital training program were professionally scrutinized and

highly controlled (Nesbit et al., 2023) in order to assess and increase confidence in the specific relationship quality findings and outcomes.

Relationship Quality

In the current study, relationship quality is a latent variable defined as the ongoing subjective self-evaluation of levels of positive and negative interaction, positive bonds, happiness and satisfaction, commitment, and feeling trapped in association with the functioning of one's relationship (Harris et al., 2012; Larson & Holman, 1994; Schramm & Harris, 2011). This subjective self-evaluation informs a social exchange system of monitoring, weighting, and comparing the costs and benefits of the relationship (Gottman, 1994a; Schoen et al., 2002; Shackelford & Buss, 2000) which in turn impact overall levels of happiness and well-being. More specifically, Wallerstein (1996) asserted that marital and relationship happiness can be achieved through the perceived goodness of fit between individual and couple needs, wishes, and expectations which vary across gender, racial/ethnic, cultural and socioeconomic lines.

Positive and Negative Interaction

Positive or negative interaction was defined in this study as the nature of perceptions and evaluations regarding the ways in which intimate partners relate to and reciprocally influence one another (Schramm et al., 2003). Research has consistently shown interactional patterns to be critical to the success of dyadic relationships (Fincham & Beach, 2010; Gottman & Notarius, 2000; Karney & Bradbury, 2020). Positive interaction is related to relationship stability and happiness and is defined in this study as subjective perceptions and evaluations regarding the ways in which intimate partners positively relate to and reciprocally influence one another through communication (Boerner et al., 2014; Schramm et al., 2003). Specifically, positive interactions between partners are found to promote relationship intimacy and quality (Gottman, 1994a). Rauer et al. (2014) also identified that an increase in positive interactions significantly predicted the positive changes in overall relationship quality. In contrast, research has shown that negative interaction is predictive of relationship dissolution (Schramm & Harris, 2011; Walsh, 2012). Likewise, a decrease in negative interactions significantly predicted an increase in relationship quality (Rauer et al., 2014).

Indicators of positive interaction addressed in the current study include behaviors such as maintaining a calm demeanor, engaging in mutual activities, and using communication styles that promote understanding and address conflict non-defensively. Indicators of negative interaction include behaviors such as escalating negativity, criticism, negative

interpretation, and withdrawal (Gottman, 1994a; Julien et al., 1989; Karney & Bradbury, 2020; Notarius & Markman, 1989).

Positive Bonding

Mosko and Pistole (2010) suggested that dyadic couple bonding facilitates and is facilitated by maintenance of physical and emotional proximity with one's partner. Positive bonding is defined in the current study as the level of positive perceptions regarding the ways in which intimate partners evaluate the impact of time spent together on their emotional closeness, intimacy, and a sense of connectedness (Schramm & Harris, 2011). Both quality and quantity of time spent together is important to dyadic relationship quality and satisfaction (Doherty, 2001). Furthermore, Doohan et al. (2009) found that dyadic bonding was positively related to intimate partner consensus, which has been shown to be integral to relationship quality (Doane, 2016). In sum, positive bonding reflects the perceived health of the couple's friendship (Gottman, 1994a).

Relationship Happiness/Satisfaction

Relationship happiness and satisfaction is defined in the current study as subjective perceptions regarding how partners in a dyadic relationship evaluate the goodness-of-fit between meeting individual needs and the needs of the relationship (Larson & Holman, 1994; Schramm & Harris, 2011; Wallerstein, 1996). Evidence suggests that happy individuals are more likely to experience happy marriages and relationships (Stutzer & Frey, 2006) suggesting that those in happy marriages have learned how to successfully meet their own individual needs and can therefore more fully contribute to helping their partner learn how to meet their own needs. Yizengaw et al. (2014) also found that happiness and satisfaction with oneself and with one's relationship were related to relationship stability, which is closely interrelated with relationship quality (Brown et al., 2015).

Commitment

Markman et al. (2001) defined couple commitment as the level of a partner's motivation to perpetuate and improve the quality of their dyadic couple relationship to the benefit of both partners, and to stay in the relationship, even when the relationship may not, at times, be satisfying. Commitment has been shown to be positively correlated to relationship stability and negatively related to relationship problems (Harris et al., 2012). Amato (2006) suggested that commitment contributed to relationship quality and satisfaction *via* consensus maintenance behaviors (i.e., a willingness to make sacrifices for the relationship and an unwillingness to consider its dissolution as an option) (see also Harris et al., 2008).

Feeling Trapped

Feeling trapped is defined in this study as an ongoing subjective evaluation of feeling stuck in one's relationship (Johnson et al., 2002; Schramm et al., 2003). Research shows that feeling trapped is detrimental to relationship quality and is inversely related to positive bonding and commitment, suggesting that partners who feel trapped experience lower levels of commitment and relationship quality (Harris et al., 2012; Lavner & Bradbury, 2012; Stanley, 2007).

Premarital Preparation Requirements in State Laws

In many states where premarital programming is offered, explicit statutes require premarital programs to meet specific content requirements and to demonstrate program effectiveness, such as in Georgia, Maryland, Minnesota, Oklahoma, Tennessee, Texas, and Florida (Harrison, 2011). For example, one part of Florida Statute 741.0305 (Online Sunshine: The Official Internet Site for the Florida Legislature, 2016) requires the following in order for premarital couples to receive a fee reduction on their marriage licenses:

> The premarital preparation course may include instruction regarding: (a) Conflict management. (b) Communication skills. (c) Financial responsibilities. (d) Children and parenting responsibilities. (e) Data compiled from available information relating to problems reported by married couples who seek marital or individual counseling. (para. 2)

These topics represent key components of successful relationships. Fee reductions are based not only upon the content requirements but also the stipulations for qualified instructors, particularly as marriage counselors or therapists.

Before You Tie the Knot (BYTK) Premarital Preparation Program

Before You Tie the Knot is a research-based University of Florida Institute of Food and Agricultural Sciences (UF IFAS) Extension program that has met the requirements of Florida Statute 741.0305 and qualifies couples who complete the program for a reduction of the marriage license fee in designated counties. It is designed using the Attention, Interact, Apply, Invite—Fact, Think Feel, Do (AIAI—FTFD) instructional model to assist premarital couples to achieve relationship satisfaction and quality in their relationships by helping them to recognize their own and their partners' needs, parent positively, negotiate conflict successfully, communicate effectively, manage money skillfully, and develop and maintain healthy lifestyles (Harris et al., 2014; SMARTcouples.org, 2016). It is one of four relationship education programs currently being delivered by UF IFAS in Florida and

was previously funded by the United States Department of Health and Human Services (Administration for Children and Families, Grant #90FM0079-01-00). It is currently being offered online at www.smartcouples.org.

Meeting Personal and Partner Needs

Wallerstein (1996) asserted that marital happiness can be achieved through the perceived goodness-of-fit between individual and couple needs, wishes, and expectations. "Needs" are the requirements both individuals, families, and intimate partners have "that must be met at some level if they are to survive and engage in adaptive behavior" (Bubolz & Sontag, 1993, p. 435). These include physiological, social, emotional, and behavioral needs, all of which are influenced by social, cultural, and physical environmental ecosystems. Coplen and MacArthur (1982) identified at least eight categories of these needs that shape individuals, intimate partners, and their environments: 1) to feel safe; 2) to feel as though we belong; 3) to develop a positive sense of personal identity (i.e., self-concept); 4) to experience close real-love relationships; 5) to receive respect; 6) to feel worthwhile and valued (i.e., self-esteem); 7) to feel capable (competent); and 8) to experience growth. Central to meeting each of these needs is the ability to feel *lovable* and *capable*.

The first module of the *Before You Tie the Knot* premarital preparation program assists participants in identifying these needs and helps them address their own and their partners' needs in each of these eight categories, along with their accompanying subcategories. The AIAI—FTFD instructional model (Harris et al., 2017) provides the methodology to help individuals and couples address these needs through practice activities and provides a tracking chart for them to continue to practice meeting their own and their partners' needs outside of the classroom setting—a best practice in maximizing knowledge and skill development.

Children and Parenting Responsibilities

Responsible and positive parenting are associated with couple relationship satisfaction and stability (Gottman & Notarius, 2000; Harris, 2010; Harris et al., 2013). Parental warmth, connectedness, and monitoring skills have been found to be effective in influencing short-term child outcomes of secure attachment, playful exploration and motivation, and effective communication, as well as long-term child outcomes of healthy social-emotional, cognitive, and language ability development (Roggman et al., 2008).

The second module of the *Before You Tie the Knot* premarital preparation program helps couples to identify and practice parental warmth, connectedness, and monitoring skills using Latham's (1994) *Positive*

Parenting and Cline and Fay's (2006) *Love and Logic* principles. Tips for stepparents and co-parents are also included in this module (Allgood et al., 2007a, 2007b). An invitation and a tracking chart introducing how to continue to practice the parenting skills learned is provided as part of the andragogy of the AIAI—FTFD model (Harris et al., 2017).

Conflict Management and Communication

Larson and Holman (1994) identified *interactional processes* (i.e., conflict management and communication) as the most predictive factors that influence relationship satisfaction and quality when compared with *individual traits* and *contexts* (see also Larson, 2003). Gottman et al. (1998) identified gentleness, soothing behaviors, and de-escalation of negativity as the key factors in positive interaction. According to Gottman (1994b), the optimal ratio of positive to negative interactions, particularly during conflict, is at least 5:1 or higher. Gottman (1994b) has also specifically identified four negative behaviors that act as a deterrent to positive communication: *criticism*, *defensiveness*, *contempt*, and *stonewalling*. Five healthy communication and conflict resolution behaviors that promote positive interaction have also been identified: *calming down*, *using I-messages*, *speaking non-defensively*, *validating*, and *overlearning* the other eight skills (Gottman, 1994a)

The *Before You Tie the Knot* premarital preparation program introduces the *9 Skills of Communication (9 Skills)* (Gottman (1994a, 1994b) to couples along with *10 Rules for Constructive Conflict (10 Rules)* (Harris, 2012a) in the third and fourth modules of six modules. Couples practice the *9 Skills* and *10 Rules* during the sessions and are provided with tracking charts so they can continue to practice these skills at home.

Financial Management Responsibilities

Finances are highly associated with relationship satisfaction and stability (Amato et al., 2003; Dew, 2008; Harris, 2014). In fact, debt and financial strain constitute some of the biggest issues faced by newlyweds (Schramm et al., 2005) and couples in general (Harris et al., 2012). Therefore, learning to manage finances in responsible ways is critical to relationship success.

In the fifth module of the *Before You Tie the Knot* curriculum, *Understanding Money*, setting SMART (Specific, Measurable, Achievable, Relevant, Time-Bound) financial goals, defining roles and responsibilities, putting together a plan for managing finances, and learning about the legalities of marriage in the financial world are addressed.

Healthy Lifestyles

Healthy lifestyles are the topic of *Before You Tie the Knot's* sixth module. It covers understanding couples' emotional, psychological, and physical health,

the positive and negative impacts of relationships on health and vice versa, and learning ways to practice healthy lifestyles individually and as a couple.

Getting married should not necessarily predict weight gain, for example, but this is a reality for many couples in America (Hitti, 2007; The & Gordon-Larsen, 2009). Generally, however, marriage tends to positively influence men's health biologically, behaviorally, and psychologically (Harvard Medical School, 2019; Markey et al., 2007). Marriage-related health benefits are not unique to men. Women's health also benefits from marriage, but interestingly, according to a study by DeNoon (2003), only when they are in a satisfying marriage.

Purpose

The purpose of the proposed study was to evaluate an ongoing premarital education program, *Before You Tie the Knot*, and its effectiveness as a human services educational program over a five-year period.[11] The research question that drove this exploratory study was, "What are the relationship quality outcomes (i.e., positive and negative interaction, positive bonds, happiness and satisfaction, commitment, and feeling trapped) associated with delivering and evaluating the *Before You Tie the Knot* (*BYTK*) program in a relationship education learning environment?"

Before You Tie the Knot (*BYTK*) Program Objectives

The objectives of the *BYTK* program are as follows:

Objective 1. Participants will increase their levels of understanding (knowledge) about the factors associated with meeting their own and their partners' needs, parenting effectively, healthy communication and conflict resolution patterns, managing money well, and practicing healthy lifestyles.

Objective 2. Participants will demonstrate increased levels of confidence (attitudes) about their abilities to meet their own and their partners' needs, parent effectively, communicate and resolve conflict in healthy ways, managing money well, and practice healthy lifestyles.

Objective 3. Participants will report increased knowledge and use of positive skills (behaviors) to elevate positive interaction, positive bonds, happiness/satisfaction, commitment, and not feeling trapped in their relationship; six primary indicators of healthy relationship stability and success (Harris, 2014; Harris et al., 2012).

Previous Findings

Results of the implementation and evaluation of the *Before You Tie the Knot* program in a previous pilot study (Harris et al., 2019) indicated that

all three objectives of the program were met with clearly-evident standardized mean changes in scores from before to after the *BYTK* intervention specific to each variable studied. Regarding Objective 1, large standardized mean changes were reported by participants in their understanding of how to meet their own and their partners' needs, parent effectively, resolve conflict in healthy ways, use positive communication strategies while avoiding negative patterns, manage money well, and practice healthy lifestyles. Overall, a large, clearly-evident effect size was reported by participants for perceived knowledge gain from before to after their participation in the *BYTK* program.

Regarding Objectives 2 and 3, clearly-evident standardized mean changes were also reported by participants in their confidence and behavior change from before to after the *BYTK* program for all of the variables studied. Overall, participants reported large standardized mean changes for confidence in their ability to use the *BYTK* skills successfully in their romantic relationships. Perhaps most importantly, the data revealed large effect size changes from before to after the *BYTK* intervention for decreasing negative interaction and increasing positive bonds, positive interaction, and well-being.

Meeting personal needs, managing money, resolving conflicts in constructive ways, avoiding using negative communication strategies, and parenting effectively were all behavioral skills reported by participants in this pilot study that revealed over 30% improvement from before to after the *BYTK* programming intervention was administered. Practicing and understanding healthy living strategies showed the least improvement from before to after programming, although it should be noted that participants reported large standardized mean changes, reflecting improvement for these strategies as well.

Methods

The current study was commissioned through the SMART Couples Project, a five-million-dollar federal grant project funded by the United States Department of Health and Human Services (Administration of Children and Families, Grant 90FM0079) and was supported by the University of Florida's Institute of Food and Agricultural Systems and the Department of Family, Youth, and Community Sciences. The goal of the SMART Couples Project is to strengthen participants' relationships, marriages, and families across varying demographics. The project offers referral resources to individuals interested in improving their relationships. These resources include relationship workshops, online relationship education classes, and access to mental health, marital therapy, substance abuse, job services, and other service providers along with research-based information on various types of relationships (www.smartcouples.org).

Sample

The sample in this study was non-randomized and was drawn from all individual participants in the SMART Couples *BYTK* program ($n = 1285$). Demographic characteristics of the study participants, including missing information, are shown in Table 1. A majority (50.2%) of the subjects who participated in this study were White ($n = 668$). There was strong participation in the *BYTK* program from the Black community (31.4%; $n = 403$), as well as the Hispanic/Latino community (15.7%; $n = 207$), and less participation from the Asian/Pacific Islander community (4.1%; $n = 53$) and those who marked "Other" (6.8%; $n = 88$) with regard to their self-identified race/ethnicity. In addition, 42.2% of the *BYTK* program participants were between the ages of 24-34 ($n = 542$).

Participants were not required to be in a romantic relationship to participate in the program. Among the sample, 27.9% of participants were engaged ($n = 359$), allowing the study authors to assess the impact of the *BYTK* program on participants who plan to marry. Additionally, the fact that a majority of the sample was female (60.2%) suggests greater general

Table 1. Demographic description of BYTK Participants ($n = 1285$)

Variable	n	%	Variable	n	%
Gender			Income (past 30 days)		
Female	774	60.2	< $500	352	27.5
Male	496	38.6	$500-$1,000	135	10.5
No answer	15	1.2	$1,001-$2,000	231	18.0
			$2,001-$3,000	198	15.4
Age			$3,001-$4,000	135	10.5
Under 18	3	0.2	$4,001-$5,000	64	5.0
18-20	89	6.9	> $5,000	74	5.8
21-24	204	15.9	No answer	93	7.3
25-34	542	42.2			
35-44	233	18.1			
45-54	114	8.9			
55-64	50	3.9			
65+	35	2.7			
No answer	15	1.2	Education Level		
			Some high school	57	4.5
Marital Status			GED	71	5.6
Married	88	6.8	H.S. Diploma	111	8.8
Engaged	359	27.9	Vocational/Tech cert.	50	4.0
Separated	40	3.1	Some college	153	12.2
Divorced	167	13	Associate's degree	83	6.6
Widowed	24	1.9	Bachelor's degree	203	16.1
Never Married	562	43.7	Master's/Advanced	177	14.1
No answer	45	3.5	No answer	352	28.0
Race/Ethnicity					
White	668	52.0			
Black	403	31.4			
Hispanic/Latino	202	15.7			
Asian/Pacific Islander	53	4.1			
Native Amer./Alaskan	2	0.2			
Other	88	6.8			
Mixed Race	54	4.2			
None Selected	17	1.3			

interest in premarital education among females than among males, at least for this sample.

Data Collection and Analysis

A one-time retrospective pretest-then-posttest online survey Qualtrics instrument was administered to assess participants' knowledge and behavior change at the end of the *BYTK* program. All data collected was individual data, not dyadic given the outlined parameters of the program. Longitudinal data (e.g., 12-month follow-up) are not included or reported in the current study given its purposes and parameters. The instrument was reviewed by a panel of program evaluation experts to determine potential validity and reliability issues specific to the target skills identified in this study and adjusted to ensure content and construct validity. A five-point Likert-type scale providing a range of responses (strongly agree, disagree, neither agree nor disagree, agree, and strongly disagree) was used to assess reported knowledge and behavior change for the relationship quality variables (i.e., positive interaction, negative interaction, positive bonds, happiness/satisfaction, commitment, not feeling trapped) studied. With the exception of negative interaction, data for each of these scales was initially collected using a seven-point Likert-type scale. In order to standardize mean changes, responses were recoded to a five-point Likert-type scale by collapsing *very strongly disagree* with *strongly disagree*, and *very strongly agree* with *strongly agree*.

Behavior change was also assessed using statement items targeting change in negative interactions ($n = 4$), positive interactions ($n = 5$), commitment ($n = 2$), positive bonds ($n = 2$), and satisfaction and happiness ($n = 3$), for a total of sixteen items (see Figure 1). The scales were created, adapted, and/or validated by the authors and colleagues and have been used in multiple statewide, regional, and national studies (Johnson et al., 2002; Schramm et al., 2003; Harris et al., 2012; Harris et al., 2019). A retrospective pre-then-post survey instrument design was deemed a good fit for the *BYTK* programming in order to evaluate learning outcomes both before and after the program for several reasons (see Marshall et al., 2007; Moore & Tananis, 2009) which are summarized and justified below. Because this was an IRB-approved study, participants received a document informing them that participation in the program was strictly voluntary and that they could answer or skip items at their own discretion. In several cases, missing data was replaced with the group mean. Specifically, the researchers replaced missing data with the mean response in select cases when some data points were missing and the individual data appeared to follow the trend of responses for other variables.

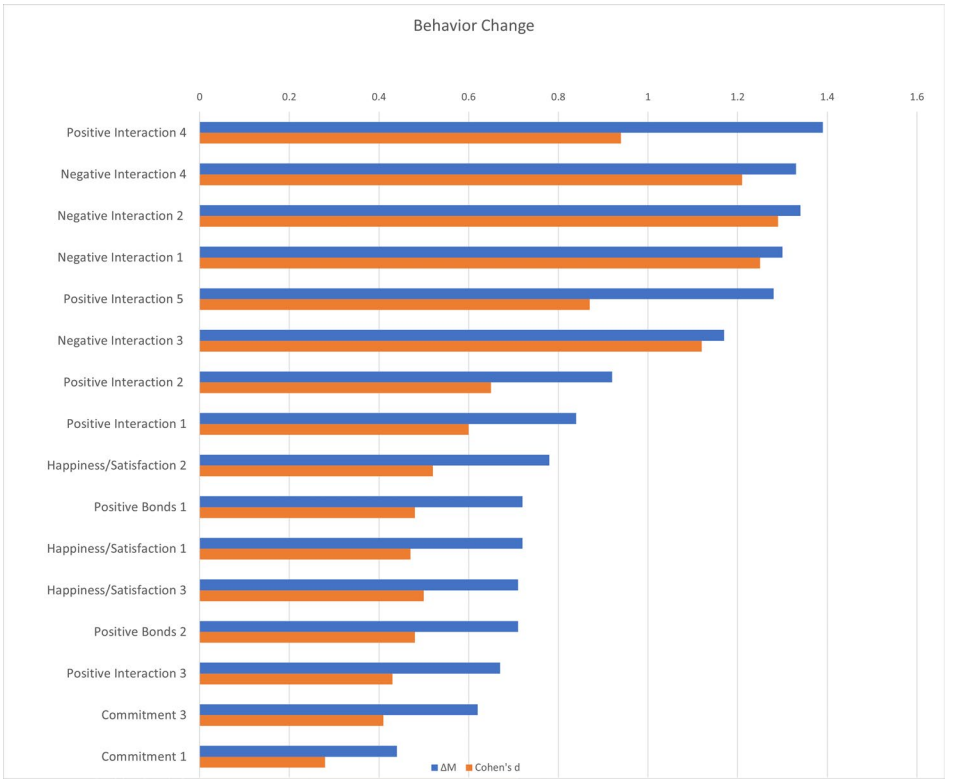

Figure 1. Reported Standardized Mean Knowledge and Behavior Change from Pretest-to-Posttest.

Note:

Positive Interaction 1- We do well in our home at being positive with each other.
Positive Interaction 2- We do well in our home at really listening to each other.
Positive Interaction 3- We often engage in outside interests together.
Positive Interaction 4- We tend to calm down and use "I-Messages" such as "This is how I feel…" when we bring up a specific complaint that we would like to address.
Positive Interaction 5- We speak non-defensively and try to validate each other's opinion and views.
Negative Interaction 1- I avoid criticizing my partner.
Negative Interaction 2- I avoid becoming defensive when communicating with my partner (e.g., I accept responsibility for my behavior and I don't make excuses).
Negative Interaction 3- I avoid using contempt against my partner (e.g., I don't mock, call names, or roll my eyes).
Negative Interaction 4- I do not stonewall my partner when they attempt to communicate (e.g., I don't make myself unavailable to talk or use the 'silent treatment').
Positive Bonds 1- We spend both quality and quantity time together in our home.
Positive Bonds 2- We regularly have great conversations in our home where we just talk as good friends.
Happiness/Satisfaction 1- I am very satisfied with my relationships in my home.
Happiness/Satisfaction 2- I am very satisfied with who I am (my relationship with myself).
Happiness/Satisfaction 3- I am very satisfied with my relationship with my partner/spouse.
Commitment 1- My relationship with my partner/spouse is more important to me than almost anything else in my life.
Commitment 3- I like to think of my partner/spouse and me in terms of "us" and "we" rather than "me" and "him/her."

Justification for Use of the Retrospective Pretest-then-Posttest Design

In order to justify the use of the retrospective pretest-then-posttest design, it is important to briefly explain the traditional experimental pretest-posttest design in social science research and some of its strengths and limitations for use in studying and evaluating the effects of community-based

educational programs. The experimental pretest-posttest design using a control or comparison group is considered a well-established method for measuring change in individuals (Campbell & Stanley, 1966; Kaplan, 2004). This design is highly regarded because of its control over internal validity concerns and its ability to compare results from the same people or groups of people at multiple time points.

While there are advantages to the traditional experimental pretest-posttest method, there are limitations to it as well. One is finding an adequate comparison group, which can often be difficult. In social science research, a traditional experimental pretest-posttest design can also be challenging due to a lack of resources and time available for community-based programs to complete comprehensive comparisons (Brooks & Gersh, 1998). Additionally, in order for the pretest-posttest comparisons to be meaningful, participants must attend the entire program, from start to finish (Pratt et al., 2000). Due to the nature of community education programs, attrition and sporadic attendance are common issues (Pratt et al., 2000).

While the pretest-posttest information must be complete for comparisons to be made, it may also be challenging for researchers to see the actual changes in attitudes, behaviors, or skills if the participants overstate their original responses in the pretest (Howard & Dailey, 1979; Moore & Tananis, 2009). This overestimation may occur when the participants do not have a clear initial understanding of the variables that the program is targeting (Pratt et al., 2000). A lack of knowledge about these variables is often the impetus for a programmed intervention which may result in participants overestimating their understanding at pretest. Thus, researchers must be aware of the potentially misleading information from pretest-posttest comparisons due to the participants' change in perspective (Howard & Dailey, 1979). *Response shift bias*, described first by Howard and Dailey (1979), explains this "program-produced change in the participants' understanding of the construct being measured" (Pratt et al., 2000, p. 342). Along with the issues noted previously, the potential for response shift bias should be carefully considered when reviewing pretest-posttest comparisons.

In sum, while the retrospective pretest-then-posttest design is subject to multiple internal validity threats, this design can address many of the issues surrounding the use of the traditional experimental pretest-posttest design discussed above. While admittedly subjective in nature, a retrospective pretest-then-posttest design allows participants to more adequately assess changes in the attitudes, behaviors, or skills learned during the program by comparing each specific variable side-by-side at the end of the program intervention.

Data Analysis and Effect Size

The data were analyzed using SPSS version 24.0 (IBM Corp., 2016), a statistical software package. Stepwise multiple regression analyses were

conducted to assess the relationships between predictors and outcomes (see Table 2), while paired sample *t*-tests were used to measure changes in retrospective pre-and posttest responses and their effect sizes (see Table A1). Effect sizes were calculated using SPSS to evaluate the standardized mean differences before and after the program intervention for each variable being studied. Focusing on effect size rather than statistical significance helps researchers determine the magnitude of standardized mean changes for a given sample and for specific identified variables (Howell, 2002).

Table 2. Stepwise Linear Regression Results of Measured Constructs (Happiness/Satisfaction, Positive Interaction, Positive Bonds, Commitment, and Negative Interaction)

DV	IV	*B*	*SE B*	*t*	*Adj. R*^{2}
	(Constant)	.26	.080		.620
	Pos. Bonds	1.18	.043	27.84	
Happiness/Satisfaction	(Constant)	−0.10	.086		.668
	Pos. Bonds	.87	.055	15.90	
	Pos. Int.	.17	.020	8.38	
	(Constant)	−0.12	.082		.699
	Pos. Bonds	.78	.054	14.42	
	Pos. Int.	.15	.019	7.92	
	Commitment	.26	.037	7.05	
	(Constant)	2.18	.165		.493
	Mar. Sat.	1.27	.059	21.47	
Positive Interaction	(Constant)	.79	.227		.556
	Mar. Sat.	1.05	.061	17.13	
	Neg. Int.	−0.34	.040	−8.33	
	(Constant)	.68	.218		.593
	Mar. Sat.	.61	.088	6.99	
	Neg. Int.	−0.31	.039	−8.03	
	Pos. Bonds	.86	.130	6.63	
	(Constant)	.71	.216		.599
	Mar. Sat.	.60	.087	6.85	
	Neg. Int.	−0.31	.039	−7.94	
	Pos. Bonds	.88	.129	6.84	
	Feel. Trap.	−0.22	.078	−2.83	
	(Constant)	.25	.052		.620
	Mar. Sat.	.52	.019	27.84	
Positive Bonds	(Constant)	.04	.059		.654
	Mar. Sat.	.40	.025	15.90	
	Pos. Int.	.10	.014	6.97	
	(Constant)	.03	.059		.657
	Mar. Sat.	.40	.025	15.83	
	Pos. Int.	.10	.014	7.19	
	Feel. Trap.	.06	.027	2.12	
	(Constant)	.14	.083		.264
	Mar. Sat.	.39	.030	13.04	
Commitment	(Constant)	.15	.082		.283
	Mar. Sat.	.38	.030	13.02	
	Feel. Trap.	−0.15	.044	−3.50	
Negative Interaction	(Constant)	−3.27	.192		.282
	Pos. Int.	−0.45	.033	−13.69	
	(Constant)	−3.29	.191		.290
	Pos. Int.	−0.38	.046	−8.33	
	Mar. Sat.	−0.17	.082	−2.08	
Feeling Trapped	(Constant)	.12	.078		.026
	Commitment	−0.14	.040	−3.53	

Note. All *p*value were smaller than .001 except for *Feeling Trapped* as predictor of *Positive Bonds* ($p = .035$), *Feeling Trapped* as predictor of *Positive Interaction* ($p = .005$), *Happiness/satisfaction* as predictor of *Negative Interaction* ($p = .038$), *Feeling Trapped* as predictor of *Commitment* ($p = .001$). Pos. Int. = Positive interaction, Pos. Bonds = Positive bonds, Mar. Sat. = Marital satisfaction, and Feel. Trap. = Feeling trapped.

Cohen (1988) loosely characterized effect sizes as *d* (.20) = small, *d* (.50) = medium, and *d* (.80) = large. Further, Cohen identified a small effect size as a meaningful mean difference, a medium effect size as a noticeable mean difference, and a large effect size as a clearly-evident mean difference (Howell, 2002). Cohen's simplified characterizations were used to report effect size in the current study, but the reader will want to note that Sawilowsky (2009) proposed the following revised rules of thumb for reporting effect sizes: *d* (.01) = very small, *d* (.2) = small, *d* (.5) = medium, *d* (.8) = large, *d* (1.2) = very large, and *d* (2.0) = huge. The reader should also note that Eta squared (η^2), another measure of effect sizes, are characterized as follows: η^2 (.01) = small, η^2 (.06) = medium, and η^2 (.14) = large (Cohen, 1988). In addition, Omega squared effect sizes are calculated as follows: ω^2 (.01) = small, ω^2 (.06) = medium, and ω^2 (.14) = large (Field, 2013).

$$Cohen's\, d = \frac{\overline{x_1} - \overline{x_2}}{s_{pooled}} \; where \; S_{pooled} = \sqrt{\frac{s_1^2 + s_2^2}{2}}$$

$$\eta^2 = \frac{SS_{effect}}{SS_{total}}$$

$$r^2 = \frac{t^2}{t^2 + df}$$

Results

Paired samples t-tests (Cohen's *d*) and multiple regression analysis were conducted to compare six relationship quality variables in pretest and posttest conditions across six counties in Florida where the *BTYK* program intervention was delivered: Santa Rosa, Duval, Alachua, Manatee, West Palm Beach, and Citrus. These counties were chosen for SMART Couples programming because of their diversity, which included participants from urban and rural populations.

Multiple Regression Analysis Results

The mean change of reported retrospective pre-to-post-test responses ($n = 476$) reflected overall improvements in the per-item mean scores of happiness/satisfaction ($\Delta M = 0.49$, $SD = 0.79$), positive interaction ($\Delta M = 0.81$, $SD = 0.86$), negative interaction ($\Delta M = -1.27$, $SD = 0.90$), positive bonds ($\Delta M = 0.51$, $SD = 0.79$), and commitment ($\Delta M = 0.24$, $SD = 0.60$). Feeling trapped reflected a non-significant change in the mean scores from before to after the *BYTK* program intervention. Results are shown in Table 2.

Because healthy relationships are impacted by a combination of factors, the authors went beyond showing that the *BYTK* program intervention was effective for the six individual relationship quality variables (see Paired Samples t-test Results below) in order to determine the combination of factors that best help to explain the variance for these relationship quality variables due to the *BYTK* program intervention. The collinearity test results showed that there was no significant collinearity concern in the current regression models (VIFs = < 2.8; Tolerances = > .4).

Happiness/Satisfaction

A stepwise linear regression was conducted to determine whether retrospective pre- to post-test score changes in positive interaction, negative interaction, positive bonds, commitment, and feeling trapped could significantly predict retrospective pre- to post-test score changes in relationship happiness and satisfaction. Changes in retrospective pre-and post-test scores in positive bonds (B = .775, p < .001), positive interaction (B = .153, p < .001), and commitment (B = .260, p < .001) were significant predictors of retrospective pre-and post-test score changes in happiness/satisfaction while changes in retrospective pre-and post-test scores in negative interaction and feeling trapped were not (p > .05). The result of the regression indicated that the model explained 69.9% of the variance and the model was a significant predictor of retrospective pre-and post-test score changes in happiness/satisfaction, $F(3, 472) = 369.01$, p < .001.

Positive Interaction

A stepwise linear regression was conducted to examine whether retrospective pre-and post-test score changes in happiness/satisfaction, negative interaction, positive bonds, commitment, and feeling trapped could significantly predict retrospective pre-and post-test score change in positive interaction. While retrospective pre-and post-test score changes in happiness and satisfaction (B = .599, p < .001), negative interaction (B = −0.307, p < .001), positive bonds (B = .882, p < .001), and feeling trapped (B = −0.221, p < .01) significantly predicted retrospective pre-and post-test score changes in positive interaction, retrospective pre-and post-test score changes in commitment did not (p > .05). The result of the regression indicated that the model explained 60.2% of the variance and that the model was a significant predictor of retrospective pre-and post-test score changes in positive interaction, $F(4, 471) = 178.32$, p < .001.

Positive Bonds

A stepwise linear regression was carried out to investigate whether retrospective pre-and post-test score changes in positive interaction, negative

interaction, happiness/satisfaction, commitment, and feeling trapped could significantly predict retrospective pre-and post-test score changes in positive bonds. While retrospective pre- and post-test score changes in happiness/satisfaction (B = .398, p < .001), positive interaction (B = .101, p < .001), and feeling trapped (B = .056, p < .05) were significant predictors of retrospective pre-and post-test score changes in positive bonds, retrospective pre- and post-test score changes in negative interaction and commitment were not (p > .05). The regression analysis indicated that the model explained 65.7% of the variance and that the model was a significant predictor of retrospective pre-and post-test score changes in positive bonds, $F(3, 472) = 259.41$, p < .001.

Commitment

A stepwise linear regression was carried out to examine whether retrospective pre-and post-test score changes in positive interaction, negative interaction, positive bonds, happiness/satisfaction, and feeling trapped could significantly predict retrospective pre-and post-test score changes in commitment. While retrospective pre-and post-test score changes in happiness/satisfaction (B = .384, p < .001) and feeling trapped (B = −0.153, p < .01) were significant predictors of retrospective pre-and post-test score changes in commitment, retrospective pre-and post-test score changes in positive interaction, negative interaction, and positive bonds were not (p > .05). The regression analysis indicated that the model explained 28.3% of the variance and that the model was a significant predictor of retrospective pre-and post-test score changes in commitment, $F(2, 473) = 216.25$, p < .001.

Negative Interaction

A stepwise linear regression was conducted to examine whether retrospective pre-and post-test score changes in positive interaction, positive bonds, happiness/satisfaction, commitment, and feeling trapped could significantly predict retrospective pre-and post-test score changes in negative interaction. While retrospective pre-and post-test score changes in positive interaction (B = −0.379, p < .001) and happiness/satisfaction (B = −0.171, p < .05) were significant predictors of retrospective pre-and post-test score changes in negative interaction, retrospective pre-and post-test score change in positive bonds, commitment, and feeling trapped were not (p > .05). The regression analysis indicated that the model explained 29.0% of the variance and that the model was a significant predictor of retrospective pre-and post-test score changes in negative interaction, $F(2, 473) = 96.57$, p < .001.

Feeling Trapped

A stepwise linear regression was carried out to investigate whether retrospective pre-and post-test score changes in positive interaction, negative interaction, positive bonds, happiness and satisfaction, and commitment could significantly predict retrospective pre-and post-test score changes in "feeling trapped." While retrospective pre-and post-test score changes in commitment was a significant predictor of retrospective pre-and post-test score changes in feeling trapped (B= −0.143, $p < .001$), retrospective pre-and post-test score changes in positive interaction, negative interaction, positive bonds, and happiness/satisfaction was not ($p > .05$). The regression results indicated that the model explained only 2.6% of the variance, but was a significant predictor of retrospective pre-and post-test score changes in feeling trapped, F (1, 474) = 12.49, $p < .001$.

Paired Samples t-test Result

Positive Interaction

A paired samples *t*-test was conducted to compare the variable of positive interaction in pretest and posttest conditions. There was a significant difference in the summed scores of the positive interaction scale for the pretest ($M = 17.87$, $SD = 5.54$) and posttest ($M = 21.86$, $SD = 4.30$); t (678) = −23.25, $p < .001$, d = .80. Furthermore, Cohen's d effect size scores indicated large standardized mean effect size showing increases in positive interaction from before to after the *BYTK* program intervention for the sample studied (Table A1).

Negative Interaction

The result of a paired samples t-test revealed that negative interaction scores in this sample were significantly different between the pretest ($M = 11.44$, $SD = 4.06$) and posttest ($M = 6.29$, $SD = 2.54$); t (521) = 32.21, $p < .001$, $d = 1.52$. The Cohen's effect size coefficient suggested a very large standardized mean effect size showing decreases in negative interaction from before to after the *BYTK* program intervention for the sample studied (Table A1).

Positive Bonds

The paired samples t-test result indicated that scores of positive bonds were significantly different between the pretest ($M = 7.82$, $SD = 2.30$) and posttest ($M = 8.89$, $SD = 1.85$); t (691) = −16.72, $p < .001$, d = .51. The Cohen's d coefficient reflected a moderate standardized mean effect size showing an increase in positive bonds from before to after the *BYTK* program intervention for the sample studied (Table A1).

Happiness/Satisfaction

The results of a paired samples t-test revealed that relationship happiness and satisfaction scores in this sample were significantly different between the pretest ($M = 12.22$, $SD = 3.25$) and the posttest ($M = 13.68$, $SD = 2.42$); t (519) = −17.95, $p < .001$, d = .51. Cohen's coefficient reflected a moderate standardized mean effect size showing an increase in relationship happiness/satisfaction from before to after the *BYTK* program for the sample studied (Table A1).

Commitment

A paired samples t-test revealed a significant difference in the commitment scores for the pretest ($M = 12.18$, $SD = 2.72$) and posttest ($M = 12.90$, $SD = 2.42$); t (535) = −9.23, $p < .001$, d = .28. The Cohen's effect size value suggested a small standardized mean effect size showing an increase in commitment scores from before to after the *BYTK* program intervention for the sample studied (Table A1,).

Knowledge and Behavioral Skills Change by Variable

Figure 1 reflects the amount of standardized mean behavioral change from the most to least amount of reported change for each variable studied. It is instructive to note the general level of change for each variable from largest to smallest standardized mean change from pretest to posttest following the completion of the program as follows: 1) positive and negative interaction change; 2) positive bonds and happiness/satisfaction change, and 3) commitment change.

Attitude change was specifically reflected in the happiness/satisfaction and commitment questions, while behavior change was primarily reflected in the reported positive and negative interaction questions. Attitude is defined herein as a "settled way of thinking and feeling about someone or something, typically one that is reflected in a person's behavior" (Bing Dictionary, 2022). Because thoughts and feelings of happiness/satisfaction and commitment are typically reflected in a person's behavior, they were included here as "behavior change" for ease of reporting. However, the distinctions between attitude and behavior change are important to note, particularly from a developmental perspective. Demographic findings were negligible in this study. As a result, any relevant findings are noted in the discussion section.

Discussion

Exploring the magnitude of the standardized mean changes in relationship quality outcomes associated with delivering and evaluating the *Before You*

Tie the Knot (*BYTK*) program was the purpose of this study. Because it is difficult to implement true experimental or quasi-experimental designs in an educational setting, a retrospective pretest-then-post-test design was a practical option for program evaluation, given the associated challenges (Marshall et al., 2007).

Marshall (Harris, 2010) identified ignorance (lack of appropriate knowledge), incompetence (lack of appropriate skills), and resistance to conscience (an unwillingness to use appropriate knowledge and skills) as three primary impediments to change. With these three impediments to change in mind, the results of this study revealed increases in the relationship quality (i.e., positive interaction, positive bonds, happiness/satisfaction, and commitment) and decreases in the negative interaction and feeling trapped knowledge and skills from before to after the *BYTK* program intervention for the sample participants. Additional noteworthy findings and their importance to premarital relationship education programming and the body of knowledge regarding relationship education, in general, are discussed below.

Positive Interaction

Participants who completed the five-week dosage of the *BYTK* program reported moderate (approaching large) standardized mean increases in positive interaction scores (d = .76) from before to after the relationship program intervention. Positive interaction with at least a 5-to-1 positive negative interaction ratio has been found to be critical to relationship stability and happiness/satisfaction (Gottman, 1994a, 1994b).

It is interesting to note in the multiple regression analysis that the combined factors of happiness/satisfaction, negative interaction, positive bonds, and feeling trapped significantly predicted retrospective pre- and post-test score change in positive interaction explaining 60% of the variance, while commitment did not. Lower levels of negative interaction and feeling trapped and higher levels of happiness/satisfaction and positive bonds in the relationship make sense in predicting increased levels of positive interaction.

It is curious, however, why commitment was not a significant predictor of the variance. Because commitment is a socialized phenomenon highly associated with relationship stability (Stanley & Markman, 1992), it may be that it is associated with different individual, couple, and contextual mechanisms to influence relationship quality (Harris et al., 2008).

As expected, participants who were married, engaged, or in a steady romantic relationship reported larger increases in positive interaction scores in their relationships from before to after the *BYTK* program than those who were currently unpartnered or who had never married. This finding

does not negate, however, the importance of inviting singles to relationship education programming who can still practice the skills in their other relationships, romantic or otherwise.

Clearly, providing relationship education that promotes positive interaction knowledge and skills is critical to increasing overall relationship quality for participants. However, the findings in the current study indicate that increasing positive interaction knowledge and skills doesn't occur in a vacuum but is highly associated with programming that also promotes increasing positive bonds and happiness/satisfaction and decreasing negative interaction and feeling trapped through conflict management interventions and practices. The findings in this study across 125 series of five-week sessions showed reliable, valid, and consistent evidence that the *BYTK* programmatic intervention increased overall levels of positive interaction, and thus positively influenced overall relationship quality.

Negative Interaction

Participants who completed the five-week dosage of the *BYTK* program reported very large standardized mean decreases in negative interaction scores ($d = 1.52$) from before to after the relationship program intervention, which was the largest effect size observed for a scale. Negative interaction has been found to be highly predictive of relationship dissolution (Gottman, 1994a, 1994b, Rauer et al., 2014; Schramm & Harris, 2011).

Multiple regression analysis indicated that positive interaction and happiness/satisfaction were significant predictors of retrospective pre-and post-test score changes in negative interaction explaining 29% of the variance, thus revealing the impact both have on reducing negativity over time. Interestingly, positive bonds, commitment, and feeling trapped did not significantly predict reductions in negativity from before to after the *BYTK* intervention in the model, suggesting the priority of positive interactions and perceptions of happiness/satisfaction over these other three relationship quality variables when it comes to reducing negativity.

Reductions in negative interaction styles are the most predictive *couple trait* when compared to *individual traits* and *contexts* that influence relationship stability and satisfaction (Larson, 2003; Larson & Holman, 1994). Mean changes between pre- and post-test measurements for the four variables in the Negative Interaction scale (Table A1) in the current study were among the largest standardized mean changes measured across all sixteen variables, indicating self-reported negative interaction scores were very strongly affected by the *BYTK* program intervention. This finding provides strong evidence that the *BYTK* program intervention is generally meeting its targeted objectives.

It should also be noted that the positive interaction and negative interaction scales measure different variables but showed a strong negative correlation ($r = -0.522$, $p < .01$). This makes sense in that it is unusual for responses on both scales to be simultaneously high or low for a given respondent, as when more of one type of interaction is occurring, the fewer opportunities there are for the other to occur. While changes in negative interaction did not significantly predict changes in happiness and satisfaction, greater satisfaction did predict less negative interaction. This may suggest that negative interaction is less mutable than relationship quality and satisfaction, and therefore evidences a greater risk for becoming an entrenched pattern for participants in this sample without adequate intervention or remedial resources in place.

Positive Bonds

Participants who completed the five-week dosage of the *BYTK* program reported a moderate standardized mean change in positive bonds scores ($d = .49$) from before to after the relationship program intervention. Gottman (1994a, 1994b) found that couple friendship was critical to the stability and longevity of the relationship (see also Gottman & Notarius, 2000). In fact, it underlies every facet of what Gottman (1999) called the Sound Marital [Relationship] House—a system that includes relational processes such as creating shared meaning, accepting influence, and developing love maps, fondness and admiration, among others.

Multiple regression scores showed a unique combination of happiness/satisfaction, positive interaction, and not feeling trapped as significant predictors of retrospective pre-and post-test score changes in positive bonds among the *BYTK* program participants, explaining almost 66% of the variance. Clearly, these findings reveal that positive interactions are interdependent with perceptions of not feeling oppressed or trapped and happiness/satisfaction, all of which are important foundations for building positive bonds and strong friendships. As noted previously, high levels of positive interaction are highly correlated with low levels of negative interaction suggesting that positivity may be just as fortifying and constructive as negativity is corrosive and destructive to relationships over time (Harris et al., 2012a, 2012b).

Some demographic findings with regard to positive bonds are also noteworthy. For example, participants who reported excellent and very good health status reported significantly greater posttest positive bonds scores than those who reported fair health (Note: this was also true for positive interaction). Maslow's hierarchy (Huitt, 2007) of physiological, safety, belongingness, love, esteem, and self-actualization needs can help to explain why health status is critical to the formation and maintenance

of positive friendship bonds. If physiological and safety needs are not being met, it can be difficult to focus on meeting higher order belongingness, love, esteem, and self-actualization needs. Lack of relationship quality can also negatively affect physical, social, emotional, behavioral, or spiritual health (American Psychological Association, 2018; Institute for American Values, 2002; Martins et al., 2010).

It follows that those who are in a steady relationship, including those who are engaged and married (when compared to those who were not in a steady relationship, were never married, or were divorced) would generally report higher positive bonds scores. Again, according to Maslow, meeting belongingness, love, esteem, and self-actualization needs are typical effects of being involved in stable relationships, particularly if they are healthy. The fact that a majority of participants reported that their positive bonds had increased from before to after the *BYTK* programming intervention suggests movement toward increased relationship stability and health for participants in this sample.

Happiness/Satisfaction

Participants who completed the five-week dosage of the *BYTK* program reported moderate standardized mean change in happiness and satisfaction scores (d = .51) from before to after the relationship program intervention. This is significant because a primary goal of relationship education is to increase positive interaction and bonds and decrease negative interaction and feeling trapped in order to increase perceived overall happiness, satisfaction, and well-being.

Multiple regression analysis showed that increases in positive interaction, bonds, and commitment were significant predictors of retrospective pre- and post-test score changes in happiness and satisfaction explaining almost 70% of the variance while changes in retrospective pre-and post-test scores in negative interaction and feeling trapped did not significantly contribute to these changes in the model. This unique combination of relationship quality variables marks a significant contribution to the body of knowledge, particularly for practitioners who are offering relationship education courses.

Targeting positive interaction, bonds, and commitment exercises as an intervention to help participants develop real skillsets and competencies in these areas is critical to successful, happy, satisfying relationships. This is why choosing curricula that reinforce these skillsets and competencies is essential. Knowing what to look for when reviewing curricula, including the pedagogy and andragogy used and a strong research and evidence base, is vital to promoting participant success.

Demographically, those who were partnered in a steady romantic relationship reported higher levels of happiness/satisfaction than those who were unpartnered or were not in a steady relationship which makes sense, as noted previously. Health status was again significant, in that participants who reported very good health tended to report higher levels of happiness and satisfaction in their relationships.

As with positive interaction, lower income levels were associated with lower levels of happiness/satisfaction. Being engaged or married were also significantly associated with higher levels of happiness/satisfaction when compared to those who were separated, divorced, widowed, or never married. Participant housing status, such as owning a home or renting, also showed higher happiness/satisfaction levels than those in other housing situations. Each of these findings is intuitive.

Commitment

The fact that overall relationship commitment scores increased from before to after the *BYTK* programming suggests that while commitment levels are primarily socialized, relationship programming can also help strengthen commitment levels. There are multiple factors that influence individual and couple levels of relationship commitment. The research on commitment reveals that *dedication* and *constraint* commitment are important to the stability and quality of marriage. Dedication commitment, according to Markman et al. (2001), "refers to the desire to maintain or improve the quality of the relationship for the mutual benefit of both partners" while constraint commitment "refers to the forces that keep individuals in relationships whether or not they're dedicated" (pp. 325-326). Dedication commitment is more highly correlated with relationship satisfaction than is constraint commitment (Stanley & Markman, 1992).

Johnson et al. (1999) cited three components of commitment—personal, moral, and structural—in their study about why couples stay married. Personal commitment includes the perceptions of wanting to stay married because of the attraction to the partner, to the relationship, and to the couple's sense of identity. Moral commitment to staying married involves value judgments about whether or not it is all right to dissolve certain kinds of relationships, personal moral obligations to another person, and what the authors call "general consistency values" (i.e., value judgments about how we try to maintain consistency in how we think, feel, and act). Structural reasons to stay married include all of the perceived barriers to leaving a marriage and would be akin to Stanley and Markman (1992) constraint commitment.

At a personal level, those reporting greater commitment value its importance, tend to be willing to sacrifice for their relationships, and are

adaptable, flexible, and resilient. Individuals and couples learn commitment from parents, other significant relationships, their children, religion, and culture (Harris, 2012a, 2012b; Harris et al., 2016).

While the authors did not parse out the unique variations in commitment discussed above in the current study, multiple regression analysis revealed that increases in happiness/satisfaction and decreases in feeling trapped were significant predictors of increases in commitment explaining 28% of the variability, while the combination of positive interaction, negative interaction, and positive bonds did not significantly predict commitment levels. This is a unique finding tying commitment directly to perceptions of feeling free, unoppressed, happy, and satisfied in the relationship separate from the type of interactions or levels of friendship bonds.

Feeling Trapped

Participants in this study generally reported lower overall levels of feeling trapped in their relationships from before to after the *BYTK* programming. One specific finding is relevant: those who reported being involved in a romantic relationship with someone on a steady basis reported significantly lower posttest "feeling trapped" scores than those involved in an unsteady romantic relationship. Feeling trapped in a relationship because of extreme neediness, barrier commitment, or an inability to escape abuse represent three challenging reasons for why some people stay in unstable, unhealthy, or unhappy relationships (Harris, 2010).

Summary

The BYTK premarital relationship education program was generally perceived by participants to significantly influence meaningful change in the relationship quality variables studied. Unique to this study are the combinations of relationship quality variables which predicted increases or decreases in individual variables suggesting that researchers, educators, and practitioners might want to look for curricula, methods, and therapeutic practices which reinforce these important combinations in order to maximize potential impacts and outcomes.

Limitations and Implications

The current study's authors used a retrospective pretest-then-posttest design to assess the effectiveness of the *BYTK* training intervention and how it may have influenced the outcomes reported by participants specific to six relationship quality variables studied. While this type of self-reporting

design can be particularly vulnerable to internal validity threats such as social desirability bias (e.g., overestimating responses to appear more positive, providing socially acceptable responses to make the instructor happy), Moore and Tananis (2009) articulated that when "used with the cautions identified in the literature, the retrospective pre–posttest design seems a promising alternative to the typical pre–posttest design in settings where perception of knowledge (both pre and post) serves to evaluate program effectiveness" (p. 200).

In addition, this design can ameliorate some of the issues associated with the use of the traditional experimental pretest-posttest design, such as response shift bias. While admittedly subjective in nature, using a retrospective pretest-then-posttest design as noted above allows participants to more adequately assess changes in the attitudes, behaviors, or skills learned during the program by comparing each specific variable side-by-side at the end of the program intervention (i.e., NOW/AFTER the intervention, THEN/BEFORE the intervention using the same or similar version of the question) (Little et al. (2020).

Using a pretest at program intake, a pretest-then-posttest at program exit, and then comparing true pretests and retrospective pretests is one way to assess for response shift bias while mitigating the threat of social desirability bias when interpreting posttest responses as compared to either set of pretest responses. The authors are currently working on two studies with large sample sizes, for example, which have shown more than 60 of the 100 variables studied to be affected by response-shift-bias (forthcoming).

In summary, the rationale discussed above guided the use of the design in the current study, noting that multiple factors may affect learning outcomes and that further study is needed using randomized longitudinal and comparative designs (Marshall et al., 2007; Nimon et al., 2011). Correspondingly, the present study's authors are aware that, without a comparison group showing statistically significant differences in program intervention outcomes between control and experimental groups, the findings must be interpreted with caution. The findings in the current study, however, add support to the growing body of evidence that meaningful standardized mean change did occur on some level among sample participants for each of the five relationship quality variables studied. It should also be mentioned that some sensitivity on some response scales may have been lost in the conversion from a seven-point to a five-point Likert scale.

As noted previously, a major limitation of this study is the self-report nature of the survey instrument. Self-report can provide both advantages and disadvantages in conducting research. Advantages include the ease and lack of expense associated with conducting research as well as the ability to assess individual perceptions about certain constructs and variables. Disadvantages include multiple cognitive and situational internal

validity issues such as history and response bias. Additionally, external validity issues also exist, such as population, environmental, and temporal generalization. Therefore, once again the results in this study, as with most exploratory studies, must be interpreted with caution. Similarly, because the sample was selected using a non-randomized methodology and only included participants who completed the *BYTK* training and evaluation, the results of this study are limited to the present sample and may not be generalized to other populations. To address these and other validity issues, further studies should include random sampling of participants, comparison group designs (e.g., quasi-experimental), and diverse samples to account for demographic selection bias and other threats to validity.

Finally, all of the variables in this study are relational but were measured by individuals. Having only one partner's perception can be potentially biased. Therefore, future researchers are encouraged to use dyadic data to examine *BYTK* and other premarital program respondents' partners' perceptions and make comparisons. Finally, longitudinal data were not included in the study given its purposes and parameters. Future studies will need to include robust longitudinal data in order to show longevity in programmatic outcomes.

Conclusions

This study represents an ongoing attempt to explore how the *Before You Tie the Knot* premarital relationship education curriculum can be used to facilitate change in instructional and programmatic settings. Results of this study indicate that the *BYTK* program facilitated meaningful change in cognitive, emotional, and behavioral learning outcomes among participants in six relationship quality areas.

Note

1. Certified Family Life Educators (CFLEs) (see NCFR.org), therapists, and counselors typically provide human services relationship education programming.

Disclosure statement

No potential conflict of interest was reported by the author(s)

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References

Allgood, S., Higgenbotham, B., Crook, R., & Skogrand, L. (2007a). *Creating rituals in stepfamilies*. Utah State University Extension.

Allgood, S., Higgenbotham, B., & Skogrand, L. (2007b). *Helpful strategies to deal with ex-partners in remarriages*. Utah State University Extension.

Amato, P. R. (2006). Studying marital interaction and commitment with survey data. In S. Hofferth & L. Casper (Eds.), *Handbook of measurement issues in family research*. Erlbaum.

Amato, P. R., Johnson, D. R., Booth, A., & Rogers, S. L. (2003). Continuity and change in marital quality between 1980 and 2000. *Journal of Marriage and Family*, *65*(1), 1–22. https://doi.org/10.1111/j.1741-3737.2003.00001.x

American Psychological Association. (2018). Life-saving relationships. Retrieved from https://www.apa.org/monitor/2018/03/life-saving-relationships

Bing Dictionary. (2022). attitude. Retrieved from *attitude - Search (bing.com)*

Boerner, K., Jopp, D. S., Carr, D., Sosinsky, L., & Kim, S. K. (2014). "His" and "her" marriage? The role of positive and negative marital characteristics in global marital satisfaction among older adults. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *69*(4), 579–589. https://doi.org/10.1093/geronb/gbu032

Bradford, K., Stewart, J. W., Pfister, R., & Higginbotham, B. J. (2016). Avoid falling for a jerk (ette): Effectiveness of the premarital interpersonal choices and knowledge program among emerging adults. *Journal of Marital and Family Therapy*, *42*(4), 630–644. https://doi.org/10.1111/jmft.12174

Brooks, L., & Gersh, T. L. (1998). Assessing the impact of diversity initiatives using the retrospective pretest design. *Journal of College Student Development*, *34*, 383–386.

Brown, S., Manning, W. D., & Payne, K. K. (2015). Relationship quality among cohabiting versus married couples. *Journal of Family Issues*, *38*(12), 1730–1753. 0192513X15622236. https://doi.org/10.1177/0192513X15622236

Bubolz, M. M., & Sontag, S. M. (1993). Human ecology theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach*. (pp. 419–448). Plenum.

Campbell, D. T., & Stanley, J. C. (1966). *Experimental and quasi-experimental designs for research*. Rand McNally.

Cline, F., & Fay, J. (2006). *Parenting with love and logic*. NavPress.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* (2nd ed.). Ealbaum Associates.

Conradi, H. J., Dingemanse, P., Noordhof, A., Finkenauer, C., & Kamphuis, J. H. (2018). Effectiveness of the 'Hold me Tight' relationship enhancement program in a self-referred and a clinician-referred sample: An emotionally focused couples therapy-based approach. *Family Process*, *57*(3), 613–628. https://doi.org/10.1111/famp.12305

Coplen, R. D., & MacArthur, J. D. (1982). *Developing a healthy self-image*. Brigham Young University Press.

DeNoon, D. J. (2003). Marriage satisfaction key to women's health benefits. Retrieved from http://www.health.harvard.edu/newsletter_article/marriage-and-mens-health

Dew, J. (2008). Debt change and marital satisfaction change in recently married couples. *Family Relations*, *57*(1), 60–71. https://doi.org/10.1111/j.1741-3729.2007.00483.x

Doane, M. J. (2016). Cohesion, marital. In C. Shehan (Ed.), *Encyclopedia of Family Studies (Vol. 1*, pp. 1–3). Wiley Blackwell.

Doherty, W. J. (2001). *Take back your marriage: Sticking together in a world that pulls us apart*. Guilford Press.

Doohan, E. A. M., Carrère, S., Siler, C., & Beardslee, C. (2009). The link between the marital bond and future triadic family interactions. *Journal of Marriage and the Family*, *71*(4), 892–904. https://doi.org/10.1111/j.1741-3737.2009.00642.x

Doss, B. D., Rhoades, G. K., Stanley, S. M., Markman, H. J., & Johnson, C. A. (2009). Differential use of premarital education in first and second marriages. *Journal of Family Psychology: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *23*(2), 268–273. https://doi.org/10.1037/a0014356

Fawcett, E. B., Hawkins, A. J., Blanchard, V. L., & Carroll, J. S. (2010). Do premarital education programs really work? A meta-analytic study. *Family Relations*, *59*(3), 232–239. https://doi.org/10.1111/j.1741-3729.2010.00598.x

Fincham, F. D., & Beach, S. R. H. (2010). Marriage in the new millennium: A decade in review. *Journal of Marriage and Family*, *72*(3), 630–649. https://doi.org/10.1111/j.1741-3737.2010.00722.x

Gottman, J. M. (1994a). *What predicts divorce? The relationship between marital processes and marital outcomes*. Lawrence Erlbaum Associates.

Gottman, J. M. (1994b). *Why marriages succeed or fail*. Fireside.

Gottman, J. M. (1999). *The marriage clinic: A scientifically based marital therapy*. Norton & Company.

Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and the Family*, *60*(1), 5–22. https://doi.org/10.2307/353438

Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage and Family*, *62*(4), 927–947. https://doi.org/10.1111/j.1741-3737.2000.00927.x

Green, A. R., & Miller, L. D. (2013). A literature review of the strengths and limitations of premarital preparation: Implications for a Canadian context. *Canadian Journal of Counselling and Psychotherapy*, *47*(2), 256–271. https://cjc-rcc.ucalgary.ca/article/view/59863

Harris, V. W. (2010). *Marriage tips & traps: 10 secrets for nurturing your marital friendship*. Hayden-McNeil.

Harris, V. W. (2012a). Ten rules for constructive conflict [Publication #FCS2314]. http://edis.ifas.ufl.edu/fy1276 (Also available in Spanish: FCS2314-Span)

Harris, V. W. (2012b). Strong Latino marriages. In M. A. Laudi (Ed.). *The psychology of love (4 Volumes)*. Vol. *3*, pp. 43–56 Praeger.

Harris, V. W. (2014). *Tips for service providers: Healthy conflict management*. Fairfax, VA: National Resource Center for Healthy Marriage and Families. Retrieved from http://tinyurl.com/tips-for-providers-cm-p

Harris, V. W., Bedard, K., Moen, D., & Álvarez-Pérez, P. (2016). The role of friendship, trust, and love in happy German marriages. *Marriage & Family Review*, *52*(3), 262–304. https://doi.org/10.1080/01494929.2015.1095268

Harris, V. W., Johnson, A., & Olsen, K. (2013). *Balancing work and family in the real world*. (2nd ed.). Hayden-McNeil.

Harris, V. W., Schmeer, A., & Speegle, K. (2017). Mapping pedagogy, learning outcomes, and effect size in relationship education. *Journal of Human Sciences and Extension*, *5*(1), 1–19. https://doi.org/10.54718/NLPS7109

Harris, V. W., Schramm, D. G., Marshall, J., & Lee, T. R. (2012). Marital quality, context, and interaction: A comparison of those currently receiving government assistance with those who are not. *Marriage & Family Review*, *48*(4), 386–414. https://doi.org/10.1080/01494929.2012.674792

Harris, V. W., Skogrand, L., & Hatch, D. (2008). December) The role of friendship, trust, and love in strong Latino marriages. *Marriage & Family Review*, *44*(4), 455–488. https://doi.org/10.1080/01494920802454041

Harris, V. W., Visconti, B., Sewell, C. B., Cantrell, R., Anderson, J., & Davison, E. M. (2019). Southern romance: Relationship quality, consensus, and context among cohabiting couples in the Gulf States. *Marriage & Family Review*, *56*(2), 109–143. https://doi.org/10.1080/01494929.2019.1655518

Harrison, C. (2011). Premarital preparation requirements in state law. *National Healthy Marriage Resource Center*. Retrieved from http://www.healthymarriageinfo.org/wp-content/uploads/2017/12//stmarriagelicfs.pdf

Harvard Medical School. (2019). Marriage and men's health. *Harvard Men's Health Watch. Boston: Harvard Health Publications*. Retrieved from http://www.health.harvard.edu/newsletters/Harvard_Mens_Health_Watch/2010/July/marriage-and-mens-health

Hawkins, A. J. (2017). Shifting the relationship education field to prioritize youth relationship education. *Journal of Couple & Relationship Therapy*, *17*(3), 165–180. https://doi.org/10.1080/15332691.2017.1341355

Hitti, M. (2007). *Get married, gain weight*. http://www.webmd.com/diet/news/20071024/get-married-gain-weight

Howard, G. S., & Dailey, P. R. (1979). Response-shift bias: A source of contamination of self-report measures. *Journal of Applied Psychology*, *64*(2), 144–150. https://doi.org/10.1037/0021-9010.64.2.144

Howell, D. C. (2002). *Statistical methods for psychology.* (5th ed.). Duxbury/Thomson Learning.

Huitt, W. (2007). Maslow's hierarchy of needs. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. http://www.edpsycinteractive.org/topics/conation/maslow.html

IBM Corp. (2016). *IBM SPSS statistics for windows, Version 24.0*.

Institute for American Values. (2002). *Why marriage matters*.

Johnson, M. P., Caughlin, J. P., & Huston, T. L. (1999). The tripartite nature of marital commitment: Personal, moral, and structural reasons to stay married. *Journal of Marriage and the Family*, *61*(1), 160–177. https://doi.org/10.2307/353891

Johnson, C. A., Stanley, S. M., Glenn, N. D., Amato, P. A., Nock, S. L., Markman, H. J., & Dion, M. R. (2002). *Marriage in Oklahoma: 2001 baseline statewide survey on marriage and divorce (S02096OKDHS)*. Oklahoma Department of Human Services.

Julien, D., Markman, H. J., & Lindahl, K. M. (1989). A comparison of a global and microanalytic coding system: Implications for future trends in studying interactions. *Behavioral Assessment*, *11*, 81–100.

Kaplan, D. (Ed.). (2004). *The Sage handbook of quantitative methodology for the social sciences*. Sage.

Karney, B. R., & Bradbury, T. N. (2020). Research on marital satisfaction and stability in the 2010s: Challenging conventional wisdom. *Journal of Marriage and the Family*, *82*(1), 100–116. https://doi.org/10.1111/jomf.12635

Larson, J. H. (2003). *The great marriage tune-up book: A proven program for evaluating and renewing your relationship*. Jossey-Bass.

Larson, J. H., & Holman, T. B. (1994). Predictors of marital quality and stability. *Family Relations*, *43*(2), 228–237. https://doi.org/10.2307/585327

Latham, G. I. (1994). *The power of positive parenting*. P & T Ink.

Lavner, J. A., & Bradbury, T. N. (2012). Why do even satisfied newlyweds eventually go on to divorce? *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *26*(1), 1–10. https://doi.org/10.1037/a0025966

Little, T. D., Chang, R., Gorrall, B. K., Waggenspack, W., Fukuda, E., Allen, P. J., & Noam, G. G. (2020). The retrospective pretest-posttest design redux: On its validity as an alternative to traditional pretest-posttest measurement. *International Journal of Behavioral Development*, *44*(2), 175–183. https://doi.org/10.1177/0165025419877973

Markey, C. N., Markey, P. M., & Gray, H. F. (2007). Romantic relationships and health: An examination of individuals' perceptions of their romantic partners' influences on their health. *Sex Roles*, *57*(5-6), 435–445. https://doi.org/10.1007/s11199-007-9266-5

Markman, H. J., Stanley, S. M., & Blumberg, S. L. (2001). *Fighting for your marriage*. Jossey-Bass.

Marshall, J. P., Higginbotham, B. J., Harris, V. W., & Lee, T. R. (2007). Assessing program outcomes: Rationale and benefits of posttest-then-retrospective-pretest designs. *Journal of Youth Development*, *2*(1), 118–123. Article 0701RS001 https://doi.org/10.5195/jyd.2007.366

Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, *49*(6), 554–564. https://doi.org/10.1016/j.paid.2010.05.029

Moore, D., & Tananis, C. A. (2009). Measuring change in a short-term educational program using a retrospective pretest design. *American Journal of Evaluation*, *30*(2), 189–202. https://doi.org/10.1177/1098214009334506

Mosko, J. E., & Pistole, M. C. (2010). Attachment and religiousness: Contributions to young adult marital attitudes and readiness. *The Family Journal*, *18*(2), 127–135. https://doi.org/10.1177/1066480710364132

Nesbit, T. S., Harris, V. W., Visconti, B., Sewell, C. B., Fogarty, K., Duncan, J. C., LaMontagne, L., & Nelson, N. (2023). Lessons from the field. Continuous quality improvement: A multiyear HMRF year case study of best practices in outreach program excellence. *Family Relations*, *72*(5), 2627–2646. https://doi.org/10.1111/fare.12826

Nimon, K., Zigarmi, D., & Allen, J. (2011). Measures of program effectiveness based on retrospective pretest data: Are all created equal? *American Journal of Evaluation*, *32*(1), 8–28. https://doi.org/10.1177/1098214010378354

Notarius, C. I., & Markman, H. J. (1989). Coding marital interaction: A sampling and discussion of current issues. *Behavioral Assessment*, *11*, 1–11.

Online Sunshine: Official Internet Site of the Florida Legislature. (2016). *The 2016 Florida Statutes: Chapter 741: Marriage and domestic violence*. http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0700-0799/0741/Sections/0741.0305.html

Pratt, C. C., McGuigan, W. M., & Katzev, A. R. (2000). Measuring program outcomes: Using retrospective pretest methodology. *American Journal of Evaluation*, *21*(3), 341–349. https://doi.org/10.1016/S1098-2140(00)00089-8

Rauer, A. J., Adler-Baeder, F., Lucier-Greer, M., Skuban, E., Ketring, S. A., & Smith, T. (2014). Exploring processes of change in couple relationship education: Predictors of change in relationship quality. *Journal of Family Psychology: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *28*(1), 65–76. https://doi.org/10.1037/a0035502

Rogge, R. D., Cobb, R. J., Lawrence, E., Johnson, M. D., & Bradbury, T. N. (2013). Is skills training necessary for the primary prevention of marital distress and dissolution? A 3-year experimental study of three interventions. *Journal of Consulting and Clinical Psychology*, *81*(6), 949–961. https://doi.org/10.1037/a0034209

Roggman, L. A., Boyce, L. K., & Innocenti, M. S. (2008). *Developmental parenting: A guide for early childhood practitioners*. Brookes.

Sawilowsky, S. (2009). New effect size rules of thumb. *Journal of Modern Applied Statistical Methods*, *8*(2), 597–599. https://doi.org/10.22237/jmasm/1257035100

Schoen, R., Astone, N. M., Kim, Y. J., Rothert, K., & Standish, N. J. (2002). Women's employment, marital happiness, and divorce. *Social Forces*, *81*(2), 643–662. https://doi.org/10.1353/sof.2003.0019

Schramm, D. G., & Harris, V. W. (2011). Marital quality and income: An examination of the influence of government assistance. *Journal of Family and Economic Issues*, *32*(3), 437–448. https://doi.org/10.1007/s10834-010-9212-5

Schramm, D. G., Marshall, J. P., Harris, V. W., & George, A. (2003). *Marriage in Utah: 2003 baseline statewide survey on marriage and divorce*. Utah Department of Workforce Services.

Schramm, D. G., Marshall, J. P., Harris, V. W., & Lee, T. R. (2005). After "I do": The newlywed transition. *Marriage & Family Review*, *38*(1), 45–67. https://doi.org/10.1300/J002v38n01_05

Shackelford, T. K., & Buss, D. M. (2000). *Marital satisfaction and spousal cost-infliction*. *Personality and Individual Differences*, *28*(5), 917–928. https://doi.org/10.1016/S0191-8869(99)00150-6

SMARTcouples.org. (2016). *Before you tie the knot*. http://smartcouples.ifas.ufl.edu/classesevents-/class-description/before-you-tie-the-knot/

Stanley, S. M. (2007). Assessing couple and marital relationships: Beyond form and toward a deeper knowledge of function. In S. Hofferth & L. Casper (Eds.), *Handbook of Measurement Issues in Family Research*. (85–99). Lawrence Erlbaum Associations.

Stanley, S. M., Amato, P. R., Johnson, C. A., & Markman, H. J. (2006). Premarital education, marital quality, and marital stability: Findings from a large, random household survey. *Journal of Family Psychology: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *20*(1), 117–126. https://doi.org/10.1037/0893-3200.20.1.117

Stanley, S. M., & Markman, H. J. (1992). Assessing commitment in personal relationships. *Journal of Marriage and the Family*, *54*(3), 595–608. https://doi.org/10.2307/353245

Stutzer, A., & Frey, B. S. (2006). Does marriage make people happy, or do happy people get married? *The Journal of Socio-Economics*, *35*(2), 326–347. https://doi.org/10.1016/j.socec.2005.11.043

The, N. S., & Gordon-Larsen, P. (2009). Entry into romantic partnership is associated with obesity. *Obesity (Silver Spring, Md.)*, *17*(7), 1441–1447. https://doi.org/10.1038/oby.2009.97

Wallerstein, J. S. (1996). The psychological tasks of marriage: Part 2. *The American Journal of Orthopsychiatry*, *66*(2), 217–227. https://doi.org/10.1037/h0080173

Walsh, F. (Ed.). (2012). *Normal family processes: Growing diversity and complexity*. Guilford Press.

Yizengaw, S. S., Kibret, B. T., Gebersulis, A. G., & Sewasew, D. T. (2014). Marital adjustment among early, age-appropriate arranged and love-matched marriage, Motta, North West Ethiopia. *Innovare Journal of Social Sciences*, *2*(4), 65–73.

Appendix

Table A1. Result of BYTK retrospective pretest to posttest change: before and after programming ($N = 1285$)

Knowledge Change	Retro. Pretest Mean Score (SD)	α	Post-test Mean Score (SD)	α	Mean Chg. (SD Pool.)	*t*	*n*	*d*
Positive Interaction								
Pos. Int. 1	3.89 *(1.20)*	.83	4.51 *(0.87)*	.82	0.62 *(1.05)*	−17.35	698	0.59
Pos. Int. 2	3.78 *(1.22)*	.86	4.46 *(0.93)*	.85	0.68 *(1.08)*	−18.02	697	0.63
Pos. Int. 3	3.80 *(1.29)*	.74	4.28 *(1.09)*	.76	0.48 *(1.19)*	−13.65	691	0.40
Pos. Int. 4	3.14 *(1.32)*	.75	4.27 *(1.02)*	.82	1.13 *(1.18)*	−24.27	692	0.96
Pos. Int. 5	3.29 *(1.35)*	.78	4.32 *(0.99)*	.81	1.03 *(1.18)*	−22.55	692	0.87
Overall Positive Interaction	17.87 *(5.54)*	.92	21.86 *(4.30)*	.93	3.99 *(4.99)*	−23.25	679	0.80
Neg. Int. 1	2.87 *(1.14)*	.81	1.57 *(0.69)*	.81	−1.30 *(0.94)*	28.56	524	1.38
Neg. Int. 2	2.97 *(1.13)*	.77	1.64 *(0.73)*	.78	−1.33 *(0.95)*	29.55	525	1.40
Neg. Int. 3	2.69 *(1.18)*	.79	1.52 *(0.72)*	.79	−1.17 *(0.98)*	25.65	525	1.20
Neg. Int. 4	2.90 *(1.22)*	.69	1.57 *(0.76)*	.74	−1.33 *(1.02)*	27.67	525	1.31
Overall Negative Interaction	11.44 *(4.06)*	.89	6.29 *(2.54)*	.90	−5.15 *(3.39)*	32.21	522	1.52
Positive Bonds								
Pos. Bonds 1	3.88 *(1.22)*	.79	4.42 *(0.98)*	.81	0.54 *(1.11)*	−14.97	693	0.49
Pos. Bonds 2	3.94 *(1.21)*	.79	4.47 *(0.97)*	.81	0.53 *(1.10)*	−15.38	694	0.48
Overall Positive Bonds	7.82 *(2.30)*	.88	8.89 *(1.85)*	.89	1.07 *(2.09)*	−16.72	692	0.51
Marital Satisfaction								
Mar. Sat. 1	3.93 *(1.28)*	.83	4.44 *(1.01)*	.80	0.51 *(1.15)*	−14.11	695	0.44
Mar. Sat. 2	3.88 *(1.28)*	.67	4.46 *(0.97)*	.66	0.58 *(1.14)*	−15.82	693	0.51
Mar. Sat. 3	4.12 *(1.21)*	.81	4.60 *(0.87)*	.78	0.48 *(1.05)*	−11.99	524	0.46
Overall Marital Satisfaction	12.22 *(3.25)*	.88	13.68 *(2.42)*	.86	1.46 *(2.87)*	−14.03	520	0.51
Commitment								
Commit. 1	4.04 *(1.22)*	.46	4.33 *(1.13)*	.35	0.29 *(1.18)*	−7.24	544	0.25
Commit. 3	4.03 *(1.24)*	.43	4.47 *(0.99)*	.34	0.44 *(1.22)*	−10.47	545	0.39
Overall Commitment	12.18 *(2.72)*	.52	12.90 *(2.42)*	.39	0.72 *(2.57)*	−9.23	536	0.28
Feeling Trapped								
Overall Feeling Trapped	3.33 *(2.31)*	.88	3.31 *(2.52)*	.92	–	.371	544	–

Note: A *p*value for Overall Feeling Trapped was larger than .05 ($p > .05$). All other significance values were smaller than .001. Effect Size Change (*d*): .20 = small; .50 = medium; .80 or higher = large.

KEY:.

Pos. Int 1- We do well in our home at being positive with each other.

Pos. Int 2- We do well in our home at really listening to each other.

Pos. Int 3- We often engage in outside interests together.

Pos. Int. 4- We tend to calm down and use "I-Messages" such as "This is how I feel…" when we bring up a specific complaint that we would like to address.

Pos. Int. 5- We speak non-defensively and try to validate each other's opinion and views.

Neg. Int. 1- I avoid criticizing my partner.

Neg. Int. 2- I avoid becoming defensive when communicating with my partner (e.g., I accept responsibility for my behavior and I don't make excuses).

Neg. Int. 3- I avoid using contempt against my partner (e.g., I don't mock, call names, or roll my eyes).

Neg. Int. 4- I do not stonewall my partner when they attempt to communicate (e.g., I don't make myself unavailable to talk or use the 'silent treatment').

Pos. Bonds 1- We spend both quality and quantity time together in our home.

Pos. Bonds 2- We regularly have great conversations in our home where we just talk as good friends.

Mar. Sat. 1- I am very satisfied with my relationships in my home.

Mar. Sat. 2- I am very satisfied with who I am (my relationship with myself).

Mar. Sat. 3- I am very satisfied with my relationship with my partner/spouse.

Commit. 1- My relationship with my partner/spouse is more important to me than almost anything else in my life.

Commit. 3- I like to think of my partner/spouse and me in terms of "us" and "we" rather than "me" and "him/her.".