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Effectiveness, Facilitator Characteristics, and Predictors of the *Premarital Interpersonal Choices and Knowledge* (PICK) Program

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EFFECTIVENESS, FACILITATOR CHARACTERISTICS, AND PREDICTORS OF

THE *PREMARITAL INTERPERSONAL CHOICES AND KNOWLEDGE* (PICK)

PROGRAM

by

J. Wade Stewart

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ABSTRACT

Effectiveness, Facilitator Effects, and Predictors of the *Premarital Interpersonal Choices*

and Knowledge (PICK) Program

by

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Researchers involved in couple relationship education (CRE) have begun to

develop interventions to target individuals in the mate selection stage. But, overall there

are not many evaluative studies on these programs. One such program called the PICK a

Partner program has been taught in all fifty states to over 500,000 individuals. Although

many have attended PICK courses, there are currently only two published evaluations of

it. The purpose of the first study was to evaluate PICK using four outcome variables with

682 emerging adults from the community at large using a pre/post design. These

attendees' scores were compared with scores from a nonequivalent group of 462

emerging adults from a university who did not receive treatment. A retrospective pretest

was also administered to examine the potential for response shift bias. Mixed models

analyses showed that the treatment group increased from pre to post intervention on all

four outcomes and they experienced positive gains compared to the nonequivalent

comparison group. In the second study, we examined *how* (facilitator characteristics) and

for whom (predictor factors including demographic and life stage variables) PICK works using a sample of 2,448 participants from eight locations across a western state with four outcome variables. Facilitator characteristics were the strongest predictor of outcome scores, followed by gender, and level of religiosity. The strengths, limitations, and implications of the current research along with possibilities for future research are discussed.

(101 pages)

PUBLIC ABSTRACT

Effectiveness, Facilitator Effects, and Predictors of the *Premarital Interpersonal Choices and Knowledge* (PICK) Program

by

J. Wade Stewart, Doctorate of Philosophy

There are two studies in this dissertation. Both are about a program called "PICK a Partner." The first study looked at how the program went for 682 people from the community who were taught PICK. These people ranged in age from 18 to 25. Those in attendance were given questions at the beginning of the program about their thoughts, perceptions, and knowledge regarding dating relationships. They were given these same questions at the end of the program. The scores on the questions at the end of the program were compared with scores on the questions at the beginning of the program. Peoples' scores increased from before to after on all four questionnaires. These scores were also compared with scores from a group of students aged 18 to 25 from a university. Those that attended the program had higher scores; the scores of those from the university who did not attend the program stayed about the same. The second study examined how teachers influence scores and how individual characteristics of participants influence change in scores. The second study showed that teacher characteristics do matter somewhat in helping participants increase in knowledge. In addition, how religious a person is and whether they are a man or woman also matter, but only a little, in helping participants increase in knowledge. Future studies on PICK and the strengths and weaknesses of these studies are discussed.

ACKNOWLEDGMENTS

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Healthy marriage has been shown to be associated with positive outcomes for individuals and families (e.g., Proulx, Helms, & Buehler, 2007), and considerable effort has been made to support healthy marriage and healthy couple relationships in the United States. These efforts include state-level reforms (i.e., changing marriage and divorce laws to strengthen the institution of marriage), longer waiting periods for divorce when children are involved, premarital education incentives (i.e., waiving marriage license fees and eliminating waiting periods), offering a covenant marriage option, 1% solutions (i.e., where states set aside 1% of federal funds — Temporary Assistance for Needy Families to strengthen marriage), court policy changes, and federal-level reforms (i.e., funding of various activities to strengthen marriage; see Hawkins et al., 2009). Generally, couple relationship education (CRE) has also been offered to help individuals create healthy relationships. The main purpose of premarital programs is to support healthy relationships and prevent relationship dissolution through early intervention (Stanley, 2001).

Couple relationship education (CRE) has become increasingly common due in part to government funding. A meta-analysis of premarital education programs showed that couples benefit from taking it (Carroll & Doherty, 2003). However, to justify funding and continued use, untested programs should be evaluated. The National Healthy Resource Center (n.d.) outlined, "ongoing evaluation of your healthy marriage and relationship program will allow you to identify whether you are meeting your

program's overall goals and objectives. This information will significantly enhance your ability to effectively manage and grow your program." The two studies that comprise this dissertation evaluate a premarital education program designed to support individuals before they form intimate relationships. The *Premarital Interpersonal Choices and Knowledge* (PICK) program (Van Epp, 2010) was developed to provide individuals in the mate selection phase with research-based knowledge on (a) what to look for in a potential partner, and (b) how to effectively pace a romantic relationship.

The reach of the PICK program has expanded in recent years. For example, the instruction manual is currently in its fifth edition (Van Epp, 2010) and there are PICK certified instructors in all 50 states. Furthermore, the program has been taught to over 500,000 individuals (J. Van Epp, personal communication, January 13, 2014). Although the reach of the program has expanded, there is a paucity of studies examining its effectiveness; indeed, only two published studies and a few unpublished reports have examined the effectiveness of PICK (Brower et al., 2012; Van Epp, Futris, Van Epp, & Campbell, 2008). Thus, further evaluation of PICK is warranted.

This dissertation includes two studies that evaluate the PICK program. The purpose of the first study is to examine the effectiveness of PICK with a community sample of emerging adults using a pretest/posttest design with a nonequivalent comparison group from a university. More specifically, I have compared the two groups' four outcome variables and differences in various demographic factors and life stage events. There are two reasons to compare the emerging adults from the community sample with university emerging adults. My main rationale for including a group of university students in the first study is that I used this sample to serve as a (presumably)

less at-risk nonequivalent comparison group. This group offered a comparison point to

the emerging adults in the treatment group. To the extent that this university group was

less at-risk than the treatment group in terms of demographic variables such as income,

education, and prior divorce status, the potential gains among the (presumably more at-

risk) treatment emerging adults, as compared to the university emerging adults, may be

all the more meaningful. Another reason to use emerging adults from the university is

that programs used for individuals in the mate selection phase have largely been offered

in university settings. Therefore, understanding some of the differences in these

populations might help educators tailor the intervention to the group they are teaching.

The overall aim of the second study is to examine *how* and *for whom* PICK works

by examining which factors predict outcomes for attendees of PICK. The purposes of the

second study are to (a) test the change mechanism of facilitator characteristics in PICK,

and to (b) examine the effect of several demographic factors on the outcome variables.

These demographic predictor variables include age, gender, relationship status, number

of divorces, presence of children, income, ethnicity, religiosity level, and education level.

Organization and Formatting

Although I used Utah State publication guidelines, the multiple paper dissertation

is an option not many doctorate students use; therefore, I will outline briefly the format of

the current dissertation. This dissertation is comprised of four chapters which include: (a)

Chapter I, the introduction, which sets up two studies, (b) Chapter II, study 1, entitled the

Effectiveness of the *Premarital Interpersonal Choices and Knowledge* Program in

Emerging Adulthood, (c) Chapter III, study 2, entitled Facilitator Effects and Predictors

of *Premarital Interpersonal Choices and Knowledge*, and (d) Chapter IV, the discussion, which provides a synthesis of the two studies. The two studies will be in the American Psychological Association (APA) style (6th edition), the format required by most social science journals, and has included all the sections of an article including Introduction, Literature Review, Method, Results, Discussion, and References.

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CHAPTER II

EFFECTIVENESS OF THE *PREMARITAL INTERPERSONAL CHOICES AND*

***KNOWLEDGE* PROGRAM WITH EMERGING ADULTS**

Introduction

Relationship formation and mate selection in America has changed in the last sixty years from a stepwise progression to relationship "churning" which includes sliding into cohabiting relationships (Stanley, Rhoades, & Fincham, 2011), increases in serial cohabitation (Lichter, Turner, & Sassler, 2010), reconciliations and sex with exes (Halpern-Meekin, Manning, Giordano, & Longmore, 2013), and casual sex (Giordano, Manning, Longmore, & Flanigan, 2012). Two key factors that influence mate selection behaviors are the increasingly high median age at marriage, and the current divorce rate. Many individuals spend increased time before marriage and between marriages looking for intimate relationships (Sassler, 2010). These time gaps before marriage and between marriages allow for various types of intimate relationships including "hooking up," internet dating, visiting relationships, cohabitation, marriage following childbirth, and serial cohabitation (Sassler, 2010).

Although most Americans hope to marry (around 90% of emerging adults are planning and expecting to get married; Whitehead & Popenoe, 2001), relationship "churning" has been associated with lower levels of marriage stability and commitment (Busby, Carroll, & Willoughby, 2010; Vennum & Johnson, 2014; Willoughby, Carroll, & Busby, 2014) and, therefore, might not be conducive to some individuals' aspirations of lifelong marriage (Whitehead & Popenoe, 2000). Being in a healthy marriage has been

associated with better physical health, increased wellbeing, more financial stability, more satisfying sexual relations, and living longer when compared to other relationship types (Proulx, Helms, & Buehler, 2007; Waite & Gallagher, 2001). However, about half of all first marriages end in divorce (Amato, 2010).

Given these trends in relationship formation and relationship dissolution, premarital interventions have been developed for individuals in the mate selection phase – often targeted to emerging adults – to increase their odds at achieving healthy relationships. The purpose of this study is to examine the effectiveness of the *Premarital Interpersonal Choices and Knowledge* (PICK) program among emerging adults. PICK provides research-based knowledge regarding relationship formation and marriage preparation before individuals enter into intimate relationships. The curriculum is designed to help individuals make healthy, deliberate choices about whom and how they commit in relationships (Hawkins, Carroll, Doherty, & Willoughby, 2004). In the current study, we examined the effectiveness of PICK using prevention theory as a foundation (Coie et al., 1993). We used a pretest/posttest design with two groups of emerging adults: a treatment group drawn from the community, and a nonequivalent control group drawn from the university.

Literature Review

Prevention Theory

The principles of prevention theory are the heart of premarital intervention. Coie and colleagues (1993) outlined the essence of prevention science as an interplay between (a) risk factors — variables with high probability of onset that increase the occurrence,

duration, and intensity of dysfunction, and (b) protective factors — variables that increase resistance to risk factors and dysfunction (Coie et al., 1993). In prevention theory, risk factors should ideally be addressed early when they can be most influenced and have not yet developed into predictors of dysfunction. Additionally, individuals more likely to develop dysfunction should also be identified promptly and given skills to buffer the processes that contribute to eventual dysfunction. Coie and colleagues (1993) pointed out that those most at-risk are often the most difficult to reach and, therefore, often do not receive tools or resources.

**Premarital Relationship Education
in Emerging Adulthood**

With the rationale of reaching individuals early before dysfunction develops, programs are now targeting emerging adults in the mate selection phase — even before committed, intimate relationships occur (Cottle, Thompson, Burr, & Hubler, 2014). Fincham and colleagues (2011) argued that emerging adulthood is an ideal time for couple relationship education (CRE) because: (a) individuals often have not yet married, but often form committed, sexual relationships, (b) dating violence continues to be a widespread problem that may be addressed at least somewhat by CRE, (c) there are many negative consequences to risky sexual behaviors that CRE may address, and (d) healthy dating relationships have been associated with fewer mental health issues (Braithwaite, Delevi, & Fincham, 2010). In light of these arguments, Fincham and colleagues outlined a program called Project RELATE with content largely based on the *Within My Reach* (Pearson, Stanley, & Kline, 2005) curriculum taught to university students experiencing emerging adulthood.

Emerging adulthood occurs approximately during the ages of 18 and 25 and is characterized by (a) self-exploration, (b) instability, (c) self-focus, (d) feeling in between and (e) increased possibilities (Arnett, 2014). As Hamilton and Hamilton (2006) noted, emerging adulthood has many paths. Only a proportion of emerging adults in the U.S. attend universities; many attend two year colleges, work full-time, or work while attending a trade school or junior college. In a study of emerging adults who participated in individually based CRE at the university, Braithwaite, Lambert, Fincham, and Pasley (2010) noted the limited reach of that venue alone. They concluded that "future research is needed to examine the impact of this kind of intervention on individuals who do not pursue higher education" (p. 745). Currently only one published study (Antle et al., 2013) has evaluated this kind of intervention with a community sample. By offering programs outside the university, there is a potential to reach more emerging adults.

In general, because there is relatively little educational programming for individuals in the mate selection phase, there is a corresponding paucity of evaluative research on prepremarital programs. Markman and Rhoades (2012) reviewed CRE programs from 2002 to 2010, and of the 32 studies in the review, only two featured programs targeting individuals in the mate selection stage: *Within My Reach* (WMR)*, and PICK (Antle et al., 2013; Van Epp, Futris, Van Epp, & Campbell, 2008). To the authors' knowledge, there are currently only seven published, quantitatively evaluated programs offered to those in the mate selection phase: five in the university setting (Braithwaite, Lambert et al., 2010; Cottle et al., 2014; Fincham et al., 2011; Laner & Russell, 1995; Olmstead et al., 2011) one to individuals from low socioeconomic backgrounds in the community (Antle et al., 2013), and one to military personnel (Van Epp et al., 2008).

Current Studies on Effectiveness

The relatively few studies examining the effectiveness of programs targeting individuals in the mate selection phase provide a foundation from which to build, but they also have limitations. One of the main rationales for providing relationship education to singles is to offer support upstream before they enter relationships (Cottle et al., 2014). One strength of WMR is that it was designed to target not only singles, but those in less committed, intimate relationships — helping them to make decisions about leaving or staying in these relationships. That strength, however, may make evaluation difficult in terms of determining which population to focus on: those with partners versus those who are single. The current evaluations of WMR have largely focused on evaluating attendees in less committed, intimate relationships. In one study, over 70% of the 186 participants in the sample reported being in a relationship with over half the sample having a relationship of 2 years or longer (Cottle et al., 2014). Braithwaite and colleagues (2011) purposely focused on those in long-term relationships to study the behavioral outcome of extra-dyadic involvement outside the relationship. With a community sample, Antle et al. (2013) did not report on the relationship status of participants, but used relationship-based outcome measures including communication skills and conflict resolution, which suggests that many in the sample were already in relationships. As an exception, one book chapter did provide preliminary evidence for the efficacy of preintimate relationship CRE with singles in the university setting (Fincham et al., 2011). In summary, the current offerings have largely focused on those already in relationships and contexts involving subsamples of the community namely the

university. More research is needed on CRE for emerging adults in the community

outside the university setting, particularly those not yet in relationships.

Couple Relationship Education (CRE)
for Emerging Adults

The most common settings for programs targeting individuals in the mate

selection phase tend to be universities (Cottle et al., 2014; Fincham et al., 2011; Olmstead

et al., 2011). As others have pointed out, emerging adulthood offers a unique

development stage for this type of intervention; yet, emerging adults from the community

as a whole are likely very different than those attending universities. Therefore,

comparing the two groups might shed light on key differences, and highlight potentially

divergent ways which educators might intervene with emerging adults.

In this study, we used emerging adults from the university as a nonequivalent

comparison group, along with a treatment group of emerging adults from the community.

This offered an opportunity to compare the risks and outcomes of the two groups. In

extant literature, certain demographic variables have been associated with a higher

likelihood of divorce including being poor, having higher order marriages (i.e., married

and divorced multiple times), being less educated, and having children from prior

relationships (Amato, 2010). To the extent that university attendance constitutes

privilege, and thus potential for lower levels of risk, it may be that the emerging adults in

the treatment group experience more risk, which may more strongly warrant intervention

(Coie et al., 1993). Knowing differences in emerging adults in the treatment group

versus university group with regard to divorce rates, presence of children, education

levels, income levels, and cultural backgrounds might also help future facilitators more

succinctly focus their content to those in attendance. Such findings might also help in the formation of future editions of the program. For example, if a majority of those in attendance for the community have children, including information about child outcomes might be beneficial (see Fomby & Cherlin, 2007). Regarding relationship knowledge, comparing the baseline scores of the treatment emerging adults with those from the university would help to determine differences in perceived skills and attitudes, thereby shedding light on the potential risk levels of those in attendance. For example, one group might have less knowledge than the other which may justify further intervention or a higher dosage of the program.

Reach and Effectiveness of Premarital
Interpersonal Choices and Knowledge
(PICK) Program

To date, over 500,000 individuals have attended a PICK course, and certified instructors reside in all 50 states (J. Van Epp, personal communication, January 13, 2015). Additionally, the PICK curriculum has been around for many years — the instructor's manual is on its fifth edition (Van Epp, 2010). Yet, there have been only two published quantitative studies and a handful of preliminary unpublished evaluations of PICK. The initial findings from these evaluations are promising. Van Epp and colleagues (2008) provided PICK to military personnel and found a significant increase in retrospective pre to post scores in relationship confidence and knowledge. Brower and colleagues (2012) applied the content of PICK to adolescents and, using a retrospective prepost design, found significant increases in knowledge about healthy relationships. In addition to these two studies, three separate unpublished reports showed that pre/post

scores in knowledge and attitudes increased for attendees (Marriage Works Ohio, n.d.; Michigan Healthy Marriage Coalition, n.d.; Schumm & Theodore, 2014). Although these reports provide initial evidence for the effectiveness of PICK, more rigorous evaluative research on PICK is needed.

Premarital Interpersonal Choices and Knowledge (PICK) Program Content

There are two overarching goals featured in the PICK program, including (a) recognizing characteristics of a potential partner, and (b) appropriately pacing a relationship (see Van Epp et al., 2008 for a review). The program's first goal is to educate individuals on areas that contribute to marital stability and quality. These areas include: **F**amily dynamics and childhood experiences, **A**ttitudes and actions of the conscience, **C**ompatibility potential, **E**xamples of other relationships, and **S**kills for relationships (F.A.C.E.S.). The second goal of PICK is to provide individuals with knowledge concerning pacing in the dating process, and to help them effectively balance increased levels of closeness using factors such as knowledge, trust, and commitment. PICK content is supported by empirical research but having a base in research is not the same as having empirically-established effectiveness (Adler-Baeder, Higginbotham, & Lamke, 2004); it is possible for a program to be supported by empirical research, but not produce effective results. Because the only two published evaluations of PICK involved military personnel and adolescents, the program still needs to be evaluated in other contexts including emerging adulthood.

In the current study, we compared emerging adult attendees with nonparticipants from the university. The purpose was to (a) compare the differences in the two groups on

several demographic and life course variables, and (b) compare scores on the four outcome variables at pre and post intervention. This design is somewhat comparable to a nonequivalent group design in which groups are formed under circumstances that permit no control (or limited control) of assignment of individuals. In addition, the between-subjects comparisons allowed us to examine outcomes relative to two groups with potentially differing risk levels, thus allowing us to test the outcomes according the principles of prevention theory.

Purpose of the Current Study

The primary purpose of the current study was to (a) test the effectiveness of PICK in a treatment group of emerging adults by determining differences between pre (and retrospective pre) and post mean scores on four outcome variables including perceived relationship skills, partner selection, relational patterns, and relationship behaviors and attitudes, and (b) examine differences in mean scores for the treatment group of emerging adults versus the university sample on the four outcome measures.

Methods

Procedures

Participants were recruited from eight predominantly urban/suburban communities in a western state through newspapers advertisements, internet advertisements, word-of-mouth, collaboration with local Extension faculty, distribution of flyers, announcements in university classes, and commercials in local movie theatres. These participants attended 180 courses that took place from October 2, 2012 to August

6, 2014. Any individual over the age of 18 was eligible; registration was via internet but walk-ins were allowed. Participants completed a two page pretest survey prior to the first lesson, and a similar posttest survey at the conclusion of the last session of the course. All courses were six hours in length with identical content. Multiple formats of PICK were offered, ranging from one day six hour sessions to six one hour sessions spread out over six weeks. In terms of format, 2.1% attended a one time workshop, 16% attended two, 3-hour sessions over two weeks, 42% attended three 2-hour sessions over three weeks, and 8% attended four 1.5 hour sessions over four weeks, or six 1-hour sessions over six weeks (32% missing data on this item). A meal from a local restaurant was provided at each group meeting as an incentive for individuals to participate. Each of the nine facilitators completed the Instructor Certification Packets and passed the online test to become certified PICK instructors. Additionally, the nine instructors participated in a training conference that oriented them to the curriculum and to project procedures. To further ensure treatment fidelity, site visits were performed periodically by the initiative's project director who observed classes and gave feedback.

A nonequivalent comparison group of university students was recruited at a western university during the spring semester of 2013. A project coordinator distributed surveys to students in eight classes (five family science courses and three business courses). Students used the first 10 to 15 minutes of class to complete the two page pretest survey. This project coordinator returned to the same eight classes two weeks later and students again took the first 10 to 15 minutes of class time to complete the two page posttest survey. Survey completion was voluntary; extra credit was not offered to the students.

Participants

For this study, emerging adults were selected from the full sample of PICK participants, which consisted of 2,760 individuals. Because the program was designed primarily for single individuals, and because the outcome measures focus on aspects such as partner selection, we dropped participants who were engaged or married ($n = 312$). Additionally, we chose to limit our sample to emerging adults ages 18 to 25 in order to make the treatment group and university group equivalent in terms of developmental stage. This resulted in a sample of 682 emerging adults from the community in the treatment group, and 462 emerging adults from the university in the comparison group.

Treatment group. The mean age of the treatment group ($n = 682$) was 21.5 (*SD* = 2.24). The participants were 73.5% women and 26.3% men. Regarding race and ethnicity, 84.7% were White, 6.8% were Hispanic/Latino, 3.4% indicated Other, 1.3% were Native American, .6% were Asian-American, and .9% were African American. In this sample, 72.4% were single, 27.5% were dating, and .1% were widowed. Regarding education, 6.3% had attended some high school, 19.1% were high school graduates or had a GED, 52.5% had attended some college, 17.8% had obtained a college or technical degree, and 2.4% had obtained a Graduate degree. There were 7.8% that had at least one child and 3.0% had experienced a divorce. The median income of the treatment group was $10,000.

Nonequivalent comparison (university) group. Data were also collected from a university group that originally included 725 college students recruited from various undergraduate classes from a local university. We eliminated from this sample

individuals older than 25 who were not in emerging adulthood ($n = 263$). This resulted

in a sample of 462 individuals including 69.7% women and 29.9% men. The mean age

of the group was 21.35 ($SD = 3.98$). Regarding race and ethnicity, 91.6% of the sample

was White, 3% Latino, 1.9% other, 1.7% Asian-American, .6 Native American, and .4%

African-American. Regarding relationship status, 67.7% were single, 32% were dating.

Only .4% had at least one child and 1.1% had experienced a divorce. Median household

income was $7,000.

Measures

Because of the lack of established measures to determine effectiveness for a

program like PICK, new items were generated to reflect the content of the course. Two

measures focused on perceived personal knowledge about relationship skills and partner

selection. Two measures focused on perceived knowledge about a potential partner

including relational patterns and relationship behaviors and attitudes. Because of the

emphasis PICK places on forming relationships, traditional premarital outcome measures

such as communication skills, problem-solving, empathy, and marriage quality do not

suffice because such measures assume an extant intimate relationship. Instead, due to the

program's focus on mate selection, appropriate variables include factors such as

knowledge, attitudes, and perceptions. Fincham and colleagues (2011) discussed this

difficulty, stating that one of the main difficulties in evaluating Within My Reach (WMR)

was identifying appropriate measures. Fincham and colleagues (2011) thus began to

develop measures to meet the needs of WMR (see Vennum & Fincham, 2011). These

measures were not yet published at the inception of the current initiative. We developed

items that measured knowledge, attitudes, and perceptions of those attending the course. The first two scales measure an individual's perceived knowledge about (a) relationship skills, and (b) partner selection. The last two scales measure perceived importance of knowledge about a potential partner's (c) relationship patterns, and (d) his or her relationship behavior and attitudes. Although most of the items reflect prior research, some of the items on these measures reflect unique content featured in PICK. Reliability results for these measures are reported in Tables 1 and 2.

Perceived knowledge about relationship skills. To measure perceived relationship skills, participants rated three statements on a 5-point Likert scale ranging from 1 *disagree* to 5 *strongly agree*. These statements included: "I understand what it takes to have a healthy relationship," "I know how to communicate well with a partner," and "I have good conflict management skills." Mean scores were calculated.

Perceived knowledge about partner selection. Participants rated partner selection using four statements including, "I know how to choose the right partner for me," "I know the important things to learn about a potential partner," "I know how to pace a relationship in a safe way," and "I can spot warning signs in relationships." These statements were placed on 5-point Likert scales ranging from 1 *disagree* to 5 *strongly agree*. Mean scores were calculated.

Perceived importance of knowledge about a potential partner's relationship patterns. Participants were given the stem "how important is it to you to know the following about someone prior to becoming seriously committed?" The variable of

relational patterns was measured using four items including: "what he/she learned from his/her family when growing up," "what he/she has been like in past relationships," "how well he/she gets along with his/her parents," and "what his/her friendships are like."

Table 1

Results for the Principal Component Factor Analyses for Perceived Personal Knowledge about Relationship Skills and Partner Selection

| | | Perceived Personal Knowledge About… | | | | |
| | | Relationship skills factor loadings | | | Partner selection factor loadings | |
Item #	Personal Knowledge about:	Pre	Retro	Post	Pre	Post
1	what it takes to have a healthy relationship.	.75	.79	.79		
2	how to communicate well with a partner.	.85	.86	.86		
3	good conflict management skills.	.77	.82	.83		
4	how to choose the right partner for me.				.82	.78
5	the important things to learn about a potential partner.				.83	.77
6	how to pace a relationship safely.				.82	.80
7	how to spot warning signs in relationships.				.77	.80
	Eigenvalue	1.88	2.0	2.0	2.6	2.5
	% of variance	62.8	68.0	67.9	65.5	61.7
	α	.70	.76	.76	.82	.79

Attendees rated these four items ranging from 1 *unimportant* to 5 *crucially important*. Mean scores were calculated.

Perceived importance of knowledge about a potential partner's relationship behavior and attitudes. Relationship behavior and attitudes were measured using three statements on 5-point Likert scales ranging from 1 *unimportant* to 5 *crucially important*. Participants were given the stem "how important is it to you to know the following about

someone prior to becoming seriously committed?" and asked to rate a list of statements

ranging from 1 *unimportant* to 5 *crucially important*. These statements included: "how

he/she fights when angry," "how he/she reacts when my feelings are hurt," and "what

he/she believes about right and wrong." Mean scores were calculated.

Table 2

Principal Component Factor Analyses for Knowledge about a Potential Partner's
Relational Patterns and Relationship Behaviors and Attitudes

		Perceived Importance of Knowledge About A Potential Partner's...					
		Past relationship patterns factor loadings			Relationship behavior and attitudes factor loadings		
Item #	Knowledge about potential partner:	Pre	Retro	Post	Pre	Retro	Post
9	What he/she learned from his/her family when growing up.	.72	.83	.74			
11	What he/she had been like in past relationships.	.70	.76	.79			
13	How well he/she gets along with his/her parent(s).	.80	.83	.77			
14	What his/her friendships are like.	.76	.83	.82			
8	How he/she fights when angry.				.79	.83	.75
10	How he/she reacts when my feelings are hurt.				.81	.83	.83
12	What he/she believes about right and wrong.				.67	.65	.77
	Eigenvalue	2.2	2.7	2.4	1.7	1.8	1.8
	% of variance	55.5	66.1	60.5	57.1	59.5	61.3
	α	.73	.77	.78	.62	.66	.68

Plan of Analysis

   Mixed models testing. To test differences between the various means at the

various times in the treatment group emerging adults, we used a linear mixed models

analysis for longitudinal data (see Everitt, 2010). Within a linear model, there are fixed

effects and error (Winter, 2013). Not only does the mixed model analysis account for fixed effects, it also accounts for randomness introduced by individual differences — "essentially giving structure to the error" (Winter, 2013, p. 3). The mixed model analysis has several advantages over other options, especially repeated measures ANOVA, because time is accounted for as a continuous variable thus accounting for different periods of time; moreover, cases need not be dropped because of missing data. We also used mixed models to compare the pretest and posttest scores of the treatment group with the scores from the university sample on all four outcome measures.

Chi-square comparisons. We used chi-square tests to explore the differences between the treatment group and the university sample, and compared them on the following variables: gender, race/ethnicity (White, Latino, and Other), income (0 to $20,000, $20,001 to $35,000, and $35,000 or higher), education level (high school degree or less, some college, college degree, and graduate degree), previous divorce (yes/no), and presence of children (yes/no).

Response shift bias. As a class participant's understanding changes from pre to post intervention, it is hypothesized that the way they interpret questions on presurveys differs on post surveys. Because individuals do not know the course content beforehand, they will likely produce biased scores in the pretest due to a lack of understanding about the questions themselves. This is known as response shift bias (Howard, 1982). Response shift bias has been tested by comparing pretest means with retrospective pretest means to determine if the differences are statistically significant (Drennan & Hyde, 2008). Significant differences between the two means is presumed to indicate altered understanding about the construct being measured, and show that response shift bias has

occurred. To test this phenomenon, we used mixed models design to compare pretest

means with retrospective pretest means. Three of the four measures in this study featured

posttest then retrospective pretest evaluations (Marshall, Higginbotham, Harris, & Lee,

2007) in the post survey, including perceived relationship skills, partner selection, and

relationship behavior and attitudes. To test for response shift bias, participants were

asked on the posttest survey to "mark the boxes that reflect your opinion *before* and *after*

attending this course" for perceived relationship skills, and "how important was it to you

before the course *and* how important *is it now* to know the following about someone

prior to becoming seriously committed" for mate selection and behaviors and attitudes.

Results

Reliability testing. Because the outcome measures were psychometrically

untested, we conducted principal components factor analyses to determine the reliability

of the measures before testing the difference scores in the mixed models analyses. The

results are reported in Tables 1 and Table 2. Eigenvalues, factor loadings, and

Cronbach's alpha levels were sound.

Class format. Because the 6-hour program was offered in different formats

(including one, two, three, four, or six session formats), we tested for potential difference

in outcome scores by program format. We combined the four week and six week formats

because of the relative similarity and because there were too few attendees in each group

alone to produce statistically meaningful results. On all four outcome variables, there

were no significant differences except for the variable relationship behavior and attitudes:

the post score mean for the four to six week format, on average, was significantly higher than the mean of the three week format ($t = -2.01$, $p < .05$).

Differences in Means for the Treatment Group

Using a mixed models analysis, we tested for changes in the treatment group over time for the four variables, including perceived knowledge of (a) relationship skills, and (b) partner selection, as well as perceived importance of knowledge about (c) past relationship patterns, and (d) relationship behaviors and attitudes. In mixed models, one must specify a reference point. The posttest was used as the reference point; the *t* test scores reflect differences compared to the posttest means.

Knowledge about relationship skills. Means for perceived relationship skills differed significantly across each time point (see Table 3). The mean was highest at the posttest. The posttest mean ($M = 4.28$, $SD = .53$) was significantly higher than the retrospective pretest ($M = 3.23$, $SD = .72$, $t = -33.76$, $p < .001$), and the pretest ($M = 3.44$, $SD = .66$ $t = -28.62$, $p < .001$). Means differed by gender ($t = 2.15$, $p < .05$) indicating that men scored higher than women on perceived relationship skills.

Table 3

Mixed Model Results for Perceived Knowledge of Relationship Skills

Parameter	Mean scores	Estimate	Std. error	*t* statistic	*p*
Intercept		4.25	.027	157.49	.001
Pre	3.53 *3.41*	-.84	.029	-28.62	.001
Retro pre	3.35 *3.18*	-1.06	.031	-33.76	.001
Post	4.34 *4.27*	-	-	-	-
Gender		.099	.046	2.15	.032

Note. Women's means are italicized.

24

Knowledge about partner selection. Mean scores for perceived personal knowledge about partner selection differed significantly across each time point, again with highest scores found at the posttest (see Table 4). The mean score at the posttest (*M* = 4.20, *SD* = .55) differed significantly compared to the pretest mean (*M* = 3.20, *SD* = .79, *t* = -27.83, *p* < .001). Due to space considerations on the survey, no retrospective pretest data were collected for this measure.

Knowledge about a potential partner's relational patterns. For both men and women, means for relational patterns at posttest (*M* = 4.51, *SD* = .52) were significantly higher than the means at pretest (*M* = 4.00, *SD* = .66, *t* = -19.14, *p* < .001) and retrospective pretest (*M* = 3.70, *SD* = .80, *t* = -23.32, *p* < .001; see Table 5). The test for gender differences was also significant (*t* = -8.67, *p* < .001) showing that women, at all points, rated themselves significantly higher on knowledge of relational patterns.

Knowledge about a potential partner's relationship behaviors and attitudes. Mean differences on relationship behaviors and attitudes were significantly higher at posttest (*M* = 4.66, *SD* = .45) compared to the pretest (*M* = 4.31, *SD* = .58, *t* = -14.87, *p* < .001) and retrospective pretest (*t* = -19.25, *p* < .001; see Table 6). Means varied significantly by gender (*t* = -8.77, *p* < .001). On average, women scored higher than men regarding the importance of knowing about their partner's dynamics before becoming committed.

Table 4

Mixed Model Results for Perceived Knowledge about Partner Selection

Parameter	Mean scores	Estimate	Std. error	*t* statistic	*p*
Intercept		4.11	.028	144.67	.001
Pre	3.20	-.95	.034	-27.83	.001
Post	4.20	-	-	-	-
Gender		.01	.051	.21	.837

Table 5

Mixed Model Results for Knowledge about a Potential Partner's Relational Patterns

Parameter	Mean scores	Estimate	Std. error	*t* statistic	*p*
Intercept		4.60	.026	178.2	.001
Pre	3.61 *4.13*	-.51	.026	-19.14	.001
Retro pre	3.44 *3.78*	-.81	.035	-23.32	.001
Post	4.31 *4.57*	-	-	-	-
Gender		-.38	.044	-8.67	.001

Note. Women's means are italicized.

Table 6

Mixed Model Results for Knowledge about a Potential Partner's Relationship Behaviors and Attitudes

Parameter	Mean scores	Estimate	Std. error	*t* statistic	*p*
Intercept		4.73	.022	211.65	.001
Pre	3.98 *4.43*	-.33	.022	-14.87	.001
Retro pre	3.83 *4.19*	-.55	.029	-19.25	.001
Post	4.47 *4.72*	-	-	-	-
Gender		*-.35*	*.040*	*-8.77*	*.001*

Note. Women's means are italicized.

Response Shift Bias

The pretest means were compared with the retrospective pretest means on the measures of perceived knowledge about relationship skills, knowledge about potential partner's relational patterns, and knowledge about potential partner's relationship behaviors and attitudes. All three tests yielded significant differences. For perceived knowledge of relationship skills, the pretest mean (*M* = 3.44, *SD* = .66) differed significant from the retrospective pretest mean (*M* = 3.23, *SD* = .72) (*t* = 7.51, *p* < .001).

Regarding knowledge of a potential partner's relational patterns, the pretest mean ($M =$ 4.0, $SD = .66$) differed significantly from the retrospective pretest mean ($M = 3.70$, $SD =$ .80; $t = 6.79$, $p < .001$). For knowledge of a potential partner's relationship behaviors and attitudes, the pretest mean ($M = 4.31$, $SD = .58$) differed significantly from the retrospective pretest mean ($M = 4.10$, $SD = .71$; $t = 7.97$, $p < .001$). On all three comparisons, the pretest mean was significantly higher than the retrospective pretest mean, indicating the presence of response shift bias.

Treatment Group versus Nonequivalent Group

As stated previously, we hypothesized that emerging adults from the community on the whole would likely be different from those attending universities. To understand differences between groups, we used chi-squared tests to examine differences between emerging adults (ages 18 to 25) in single or dating relationships in the treatment group and emerging adults attending university courses for the following variables: gender, race/ethnicity (White, Latino, and Other), income (0 - $20,000, $20,001 - $35,000, and $35,000 or higher), education level (high school degree or less, some college, college degree, and graduate degree), previous divorce (yes/no), and presence of children (yes/no). Compared to the university emerging adults, the treatment emerging adults differed in ethnicity ($\chi^2 = 12.46$, $p < .01$) with the treatment group having more Latinos and more individuals from other ethnic groups. They also differed in income levels ($\chi^2 =$ 29.69, $p < .001$) with those from the treatment group making more money on average than the university group. In the treatment group, education levels ($\chi^2 = 136.41$, $p < .001$) were more diverse than the university group with more individuals having only high

school degrees, fewer individuals with some college, but more with college degrees.

Emerging adults in the treatment group were more likely to have experienced a divorce

($\chi^2 = 7.04$, $p < .01$), and were more likely to have children ($\chi^2 = 35.41$, $p < .001$).

Group Comparisons

Using mixed models, we compared differences in the means of outcome variables

between the single emerging adults from the university and those from the treatment

relationship skills, partner selection, a potential partner's relational patterns, and a

potential partner's relationship behaviors and attitudes.

Knowledge about relationship skills. At pretest, the mean for perceived

relationship skills was higher for the university emerging adults ($M = 3.79$, $SD = .58$)

than for the treatment group ($M = 3.44$, $SD = .67$; $t = 9.47$, $p < .001$). The nonequivalent

(university) group by treatment by time variable differed significantly for perceived

relationship skills ($t = 18.88$, $p < .001$). This test compares the treatment group and

comparison group scores from pretest to posttest, and showed significant improvement in

the treatment group, and not for the comparison group. Results indicated that emerging

adults in the treatment group improved from pre to post treatment (3.44 at pretreatment

versus 4.28 at post treatment) when compared with those from the university (3.79 versus

3.85). Results did not differ by gender (see Table 7).

Knowledge about partner selection. At pretest, the mean score for partner selection

was again significantly higher for the emerging adults in the university group ($M = 3.58$,

$SD = .71$) compared with the mean for those in the treatment group ($M = 3.19$, $SD = .79$)

($t = 8.67$, $p < .001$). At posttest, the mean score for partner selection was significantly

higher for the treatment group compared with the posttest score for the university group.

The nonequivalent by treatment by time variable differed significantly for partner

selection ($t = 17.31$, $p < .001$), indicating that those in the treatment group improved in

scores from pre to post treatment (3.19 at pretreatment versus 4.15, $SD = .55$ at post

treatment) when compared with the university group (3.58 versus 3.71, $SD = .63$). Once

again, mean scores did not differ significantly by gender (see Table 8).

Table 7

Mixed Model Results for Perceived Relationship Skills with Nonequivalent Group

Parameter	Estimate	Std. error	*t* statistic	*p*
Intercept	4.26	.025	169.05	.001
Nonequivalent x treatment	-.41	.038	-11.28	.001
Pre to post	-.83	.026	-32.11	.001
Nonequivalent x treatment x time	.76	.040	18.88	.001
Gender	.06	.035	1.75	.08

Table 8

Mixed Model Results for Perceived Knowledge about Partner Selection with Nonequivalent Group

Parameter	Estimate	Std. error	*t* statistic	*p*
Intercept	4.15	.029	145.42	.001
Nonequivalent x treatment	-.44	.042	-10.47	.001
Pre to post	-.95	.031	-30.16	.001
Nonequivalent x treatment x time	.82	.048	17.31	.001
Gender	-.012	.04	-.312	.755

Knowledge about a potential partner's relational patterns. At pretest, the

mean score for knowledge about relational patterns did not differ significantly for the

university group ($M = 4.03$, $SD = .57$) compared with the treatment group ($M = 4.00$, SD

= .67). The nonequivalent by treatment by time variable differed significantly,

suggesting that the treatment group improved more over time compared with the

university students (t = 12.90, p < .001): the mean for emerging adults in the treatment

group went from 4.00 at pretreatment to 4.51 post treatment, while the mean for

emerging adults from the university went from 4.03 at pretreatment to a mean of 4.04

post treatment. The scores for men in both the university group and the treatment group

on average were significantly lower than scores for women on knowledge about potential

partner's relational patterns (t = -10.21, p < .001; see Table 9.

Table 9

*Mixed Model Results for Knowledge about Potential Partner's Relational Patterns
with Nonequivalent Group*

Parameter	Estimate	Std. error	t statistic	p
Intercept	4.0	.026	178.19	.001
Nonequivalent x treatment	-.46	.038	-12.14	.001
Pre to post	-.51	.025	-20.32	.001
Nonequivalent x treatment x time	.50	.039	12.90	.001
Gender	-.35	.040	-10.21	.001

Knowledge about a potential partner's relationship behaviors and attitudes.

Regarding knowledge about a potential partner's relationship behaviors and attitudes, the

treatment group mean (M = 4.31, SD = .58) was higher at pretest compared with the

university students (M = 4.25, SD = .58; t = -1.97, p < .05). The nonequivalent by

treatment by time variable differed significantly, suggesting again that the treatment

group improved more over time compared to the university group (4.31 at pretest to 4.66

at posttest, versus 4.25 to 4.32) (t = 7.31, p < .001). Women's mean scores were higher,

on average, than men (t = -10.83, p < .001) in both the university and treatment groups

(see Table 10).

Table 10

Mixed Model Results for Knowledge about Potential Partner's Relationship Behaviors and Attitudes with Nonequivalent Group

Parameter	Estimate	Std. error	t statistic	p
Intercept	4.73	.023	205.60	.001
Nonequivalent x treatment	-.30	.033	-8.99	.001
Pre to post	-.33	.022	-15.06	.001
Nonequivalent x treatment x time	.25	.034	7.31	.001
Gender	-.34	.032	-10.83	.001

Discussion

The current study focused on emerging adults in the mate selection process prior to entering committed intimate relationships (Cottle et al., 2014). The purpose of the PICK program is to provide singles with information that might help them make healthier relationship decisions in the future, thereby decreasing risk. By offering the program to a community sample, we attempted to reach emerging adults who might be relatively more at-risk for divorce. Divorce tends to be more likely for individuals with lower education levels, for those in remarriages, those with children from past relationships, and those from lower socioeconomic backgrounds (Amato, 2010).

The current study is one of the first evaluations to examine the effectiveness of PICK with a community sample. The results of this study provide evidence that PICK helps individuals gain knowledge about forming healthy relationships. Attendees

demonstrated significant pretest to posttest gains in all four outcomes: perceived

knowledge about relationship skills, knowledge about partner selection, knowledge about

a potential partner's relational patterns, and knowledge about a potential partner's

relationship behaviors and attitudes.

In the treatment group, men scored higher than women on perceived relationship

skills (e.g., healthy communication and conflict management), but there were no gender

differences regarding knowledge of partner selection. Scholars have emphasized that

there are far more gender overlaps than gender differences in communication, and that

dichotomous views are typically inaccurate; this finding may possibly support a nuanced

view (Dindia & Canary, 2006). Conversely, women scored higher than men on two of

the four outcome measures, including perceived knowledge about a potential partner's

past relational patterns, and a potential partner's relationship behaviors and attitudes.

This finding suggests that women in the study were more likely to carefully examine their

potential partners' relationships and personality characteristics. This finding is in

agreement with past research that suggests women, more than men, tend to be relatively

more particular about the characteristics of a potential partner (Schwarz & Hassebrauck,

2012) and have been found to value generosity, intellect, sociability, reliability, kindness,

and humor whereas men tend to place more emphasis on physical attractiveness,

creativity, and being a domestic partner.

Using prevention theory as a guide, we compared means of emerging adults in the

treatment group to means in a university nonequivalent comparison group. Our purpose

in including a nonequivalent comparison group in this study was to compare both pre and

post intervention scores among a more diverse treatment group, versus a university

control group. As expected, the pre to post gains on the four outcomes made by the emerging adults in the treatment group were significantly higher compared with the pre to post means of the emerging adults from the university, thereby offering further support for the effectiveness of PICK. Regarding outcomes, the current results are consistent with research on PICK that has documented increases from pre to posttests in areas of compromise, trust, knowledge, and understanding (Marriage Works Ohio, n.d.; Michigan Healthy Marriage Coalition, n.d.; Schumm & Theodore, 2014; Van Epp et al., 2008).

By targeting emerging adults in the community with PICK we attempted to (a) reach individuals early before dysfunction develops, and (b) reach those most at-risk for dysfunction. Regarding risk factors (Coie et al., 1993) that contribute to divorce (Amato, 2010), the differences in demographics between emerging adults from the community and university emerging adults suggest that in some ways the treatment group may have been at higher risk for relationship dysfunction. Overall, the treatment group emerging adults had significantly less education than the university group (e.g., 26% of the treatment group had a high school education or less compared to 6.5% of the university group), higher rates of divorce (3.1% compared with 1.1%), and higher likelihood of having children (7.8% compared with .4%). Contrariwise, there were potential protective factors among some in the community sample: nearly 20% had obtained a college degree, and mean income levels were higher for this group ($7,000 for university students versus $10,000 for the treatment group). This suggests, perhaps not surprisingly, that the emerging adults in the treatment group were more diverse than the emerging adults in the university group.

The initial scores for each group (that is, the preintervention scores) may be also be viewed as potential markers for risk. However, comparing the means on the four outcomes for the two groups produced mixed results. For example, the university group had higher scores than the treatment group on perceived relationship skills and knowledge about partner selection; thus, it may be that the emerging adults in the treatment group were relatively more at risk when it comes to these two aspects. Conversely, those in the treatment group scored higher than university emerging adults on knowledge about a potential partner's relationship behaviors and attitudes. Taken together, the pretreatment means suggest that the university group was more confident in their initial personal relational knowledge, but that the community (treatment) group was at least somewhat more confident in their initial knowledge about partner selection.

Response shift bias. In the current study, we found evidence of response shift bias. On the three scales in which we used retrospective pretreatment measures (perceived relationship skills, knowledge about relational patterns, and knowledge about a potential partner's relationship behaviors and attitudes), mean scores between pretest and retrospective pretest differed significantly. We found that participants tended to rate their knowledge higher before the intervention, but lower on the retrospective post, perceiving (presumably) they actually knew less than they thought they did before they started. These findings provide clear evidence for response shift bias, which has implications for pretest/posttest designs. Some studies have shown that employing retrospective pretest designs are more accurate than pre/post designs because they more closely reflect behavioral indices (Howard, 1982; Pratt, McGuigan, & Katzev, 2000). Others have also demonstrated that participants' perceptions of the construct being

measured shifts from pre to posttest because of exposure to program content (Drennan &

Hyde, 2008). Although the retrospective pretest design might not replace traditional

pretest/posttest design, the current findings demonstrate empirical differences in each

method, and suggest that a retrospective design may be useful in measuring the impact of

relationship education. Conversely, Hill and Betz (2005) argued and also showed that

other biases besides response shift bias were at work in their research. They showed that

retrospective pretests were susceptible to such biases as faulty recall, emotionality, and

cognitive distortion (i.e., individuals naturally want to feel they invested their time wisely

in a program). Because of these biases, Hill and Betz (2005) recommend using

retrospective pretests on measures of attendee's subjective experience, but also using

pre/post designs on outcome measures such as skills and knowledge. More research on

retrospective pre/post designs is needed to further examine the pros and cons.

Strengths and Limitations

Strengths of the current study include sample sizes with ample statistical power.

A mixed models approach was used to appropriately account for random effects in

subjects and time. In addition, the inclusion of a nonequivalent group of university

emerging adults provided a way to test prevention theory through demographic

comparisons and mixed model comparisons, thus allowing us to examine program

outcomes with more confidence. Despite these strengths, there are also limitations to the

current study. One limitation is that the current measures lack thorough psychometric

testing. We established one form of reliability through principal components analyses

and internal consistency using Cronbach's alpha tests which produced acceptable internal

consistency scores ranging from .62 to .82, but other forms of reliability including

test/retest and parallel forms are not established for these measures, nor was validity (e.g.,

predictive, concurrent, convergent, or divergent validity). Moreover, the nature of the

program is preventative and the measures are attitudinal, gauging perceived knowledge

about variables such as relationship skills and partner selection that presumably have not

yet occurred. That is, we did not determine how the tested knowledge and attitudes

transforms into behavior.

Future Research

Because PICK has been relatively less evaluated compared to other premarital

programs such as PREP and PREPARE-Enrich, there are many opportunities for future

research. As other evaluations targeting individuals in the mate selection phase have

noted (Antle et al., 2013; Braithwaite et al., 2010; Van Epp et al., 2008), participants

should be followed to see how the program affects their behavior longitudinally —

namely their choice of partners, and correlations of ratings of relationship knowledge

with actual relationship behaviors. Because the current measures were self-report, future

researchers might employ behavioral coding longitudinally as relationships progress

(Antle et al., 2013; Van Epp et al., 2008) thereby eliminating issues such as social

desirability bias, helping to further establish the effectiveness of the program. Change

mechanisms and predictor variables might also be examined in order to examine such

issues as how, and for whom this type of CRE works. Because the current sample was

somewhat diverse in terms of age, life course stage, income, and education level, it would

be advantageous to understand for whom PICK works. Because the program continues to

expand in reach, future evaluations should also seek to establish the effectiveness of PICK with various target groups including high school students, incarcerated individuals, and individuals with low socioeconomic backgrounds. Finally, future research might also examine the cost effectiveness of the PICK program.

Implications

Based on the current findings, it appears that PICK helps those searching for relationships (Markman & Rhoades, 2012), including emerging adults who had already experienced divorce. In addition, the formative data showed that 96% of attendees would recommend the course to others and 97% thought the program was a good experience suggesting that regardless of life course stage (having children, having experienced a divorce, and experiencing emerging adulthood or mid to later adulthood), individuals were highly satisfied with the program. Because of the prevalence of attendees who have children, those who host future PICK courses might consider eliminating potential barriers by providing child care to parents.

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CHAPTER III

FACILITATOR CHARACTERISTICS AND PREDICTORS IN THE

PREMARITAL INTERPERSONAL CHOICE AND KNOWLEDGE **PROGRAM**

Introduction

The efficacy of couple relationship education (CRE) is increasingly a topic of empirical study. Several meta-analyses show that CRE programs help couples in established relationships increase in communication skills and marriage quality (Hawkins, Blanchard, Baldwin, & Fawcett, 2008; Hawkins & Fackrell, 2010). Although efficacy evaluation is still needed, especially with underserved populations (Bradbury & Lavner, 2012), the efficacy of CRE has been documented sufficiently enough that researchers are calling for an examination of (a) change mechanisms (Wadsworth & Markman, 2012), and (b) which programs work for whom (Rauer et al., 2014). Beyond the important step of testing the impact of a CRE program, understanding change mechanisms and which programs work for whom is important to help educators provide effective education for specific populations. Yet, CRE serves as an umbrella term for many different interventions, some of which have received relatively less empirical attention.

One type of premarital relationship education that has been studied relatively less often is premarital education targeting individuals in the mate selection phase. These programs seek to influence individuals as they form intimate relationships, and are fewer in number than programs that target established relationships (Antle et al., 2013; Cottle, Thompson, Burr, & Hubler, 2014; Van Epp, Futris, Van Epp, & Campbell, 2008). The

content of these programs is somewhat different from traditional CRE because the instruction is not necessarily focused on the current relationship dynamics of the couple. Instead, the instruction is targeted to individuals, and focuses on elements that lead to successful long-term intimate relationships, including what to look for in a partner and how to make commitment decisions. Because programs that target individuals in the mate selection phase tend not to focus on a current dyadic relationship and may target individuals who are not yet in romantic relationships, traditional outcome measures such as marital satisfaction and communication are typically inappropriate in terms of examining program effectiveness (Fincham, Stanley, & Rhoades, 2011; Stewart, Bradford, Higginbotham, & Pfister, 2015). Instead, initial evidence suggests that these programs can help individuals increase in areas of relationship pacing, perceived relationship skills, relationship knowledge, and confidence in one's ability to communicate (Antle et al., 2013; Cottle et al., 2014; Stewart et al., 2015; Van Epp et al., 2008). However, empirical testing of such interventions is in a relatively early stage, and much more work is needed to examine the effectiveness of programs that target those in the mate selection stage.

The purpose of this study is to examine predictors of outcomes in the *Premarital Interpersonal Choices and Knowledge* (PICK) program (Van Epp, 2010), an educational intervention that targets singles. In this study, we tested (a) facilitator characteristics, and (b) demographic variables as predictors of change scores on four variables: perceived relationship skills, partner selection, relationship patterns, and relationship behaviors and attitudes. Because little is known in terms of which factors contribute to change in individually based CRE, we used empiricism as a guide. We started by testing predictors

of each of the four outcomes using general linear model analyses. We then tested the

remaining significant predictors of change in a multivariate context in order to test the

relative importance of each predictor using structural equation modeling (SEM). The use

of SEM allowed us to examine these predictors simultaneously to understand the relative

importance of each predictor, and to determine concurrently the amount of variance

explained in the four outcome measures.

Literature Review

Prevention Theory

One rationale for testing predictor variables is rooted in prevention theory (Coie et

al., 1993), a framework that considers the balance between risk and protective factors.

According to this framework, risk factors are seen as typically cumulative, and may

fluctuate with developmental stages. Protective factors that help individuals resist

tendencies toward dysfunction should be provided to those who are at-risk. Additionally,

intervention should be provided early when predictors of dysfunction are in their nascent

stage, when problems are most adaptable to positive change. An assumption of

prevention theory is that there is a unique interaction effect between individuals and their

environments. For this reason, Coie and colleagues argued that "analyses of differential

responses by subgroups of participants may help to identify tentative boundary conditions

on the effectiveness of the interventions" (p. 1017).

Similarly, other researchers argue that CRE interventions should be tailored to

specific groups in terms of timing across the life course. Hawkins and colleagues (2004)

stated "an important reason for temporal specificity is that it makes curricula more

concrete. The more tailored educational offerings are to the temporal and life

circumstances of their participants, the more likely they are to meet perceived needs"

(Hawkins et al., pg. 550). Similarly, Bradbury and Lavner (2012) pointed out,

> because we often assume 'one size fits all,' we rarely examine whether a given
>
> program is more or less effective depending on relationship status or duration
>
> within a given study, or whether programs tested with different populations differ
>
> in their effect size across studies. (pg. 119)

Therefore, as programs are provided to individuals across developmental stages, it is

important to examine whether, and how, the program might affect attendees differently.

The commonality of everyone in our current sample was that they indicated they were not

in established relationships. In order to examine other differences, we used participant

age, presence of children, and having been divorced to serve as basic proxy variables for

timing across the life course (Hawkins et al., 2004).

How Couple Relationship Education (CRE)
Works: Change Mechanisms in Couple
Relationship Education (CRE)

Research examining change mechanisms for CRE targeting individuals is sparse.

In a recent review, Wadsworth and Markman (2012) stated, "future research needs to

specify the mechanisms of change for *individual*-focused interventions" (pg. 110). But

many of the change mechanisms in CRE that Wadsworth and Markman (2012) outlined

assume an existing intimate relationship; thus, their list included variables appropriate to

extant couple relationships such as communication dynamics, self-regulation in

interacting with a partner, positive connections, and dyadic coping. Such variables focus

overtly on interpersonal processes, and so could arguably be identified in prior relationships, or to some extent in friendships or family relationships. However, there are only a handful of change mechanisms mentioned by Wadsworth and Markman that apply well to CRE with individuals who are not in established relationships: knowledge about relationships, group processes, and (with regard to the actual education), facilitator/participant alliance.

Given that facilitator-related factors might contribute to change in individual-based CRE, we propose to test facilitator characteristics as a change mechanism on the four outcome measures of PICK (i.e., self-report measures of perceived relationship skills, partner selection, relational patterns, and relationship behaviors and attitudes). Much like in family therapy (Barber, 2009), it is possible that facilitator characteristics might be further pared down to techniques and alliance. In therapy, techniques and alliance work in tandem in their impact on therapeutic outcomes. CRE differs in important ways, of course: education is its primary tool, and its main purpose is to "help families build knowledge and skills" (Myers-Walls, Ballard, Darling, & Myers-Bowman, 2011, p. 362) rather than to repair relationships. We now consider facilitator quality (i.e., skill) and facilitator/participant alliance.

Facilitator quality. Many scholars conclude that effective education by a facilitator contributes to positive outcomes in CRE (Arcus, 1995; Duncan & Goddard, 2010; Hughes, 1994). Hawkins and colleagues (2004) concluded that "teaching processes might be as crucial to educational outcomes as the content itself" (p. 549). But surprisingly, facilitator effectiveness is little studied. Higginbotham and Myler (2010) showed that the facilitators' abilities of explaining course material clearly and drawing on

experiences in helpful ways significantly and positively predicted wife's ratings of the quality of the program, and the quality of the facilitation while managing time well and drawing on experiences in helpful ways predicted higher ratings of program quality for husbands. Adding to their work, Bradford and colleagues (2012) found that participant-reported facilitator quality was associated with significantly higher participant ratings of both couple and individual functioning. The results of these two studies suggest that facilitator quality has an impact on participant outcomes in CRE. Other research on *Within My Reach* showed that participant ratings were higher for facilitators who had at least three years of experience (Olmstead et al., 2011). In the same study, participants indicated that facilitator characteristics were ranked fourth in terms of helpfulness, behind curriculum delivery (i.e., use of videos, application activities), teaching specific relationship skills (i.e., speaker/listener technique), and class structure (i.e., class size, interaction).

   Facilitator-participant alliance. In psychotherapy research, the therapeutic alliance between client and therapist has been linked with positive therapeutic outcomes (Friedlander, Escudero, Heatherington, & Diamond, 2011; Horvath, Del Re, Flückiger, & Symonds, 2011). Research shows that the therapeutic alliance accounts for roughly 30% of change in therapy, whereas techniques only account for around 15% (Lambert & Barley, 2001). Because of the important role the client/therapist relationship plays in therapy outcomes, Markman and Rhoades (2012) argued that researchers should examine the facilitator/participant alliance in CRE. In doing so, however, we hasten to note that there are several key factors that make the alliance in CRE different from the alliance in therapy: (a) CRE is often briefer than therapy, (b) CRE is education-based and, therefore,

individuals tend to share relatively less personal information, and (c) the presence of

other participants in the room might "dilute" or alter the impact of the alliance. Thus, it

is possible that alliance in CRE may be less impactful than alliance in therapy.

In CRE specifically, we are aware of only four studies that have examined the

facilitator/participant alliance (Bourgeois, Sabourin, & Wright, 1990; Owen, Antle, &

Barbee, 2013; Owen, Rhoades, Stanley, & Markman, 2011; Quirk, Owen, Inch, France,

& Bergen, 2014), and the results are mixed. One study showed that leaders accounted for

1.3% change in relationship adjustment, 4.5% change in positive communication, 5.2%

change in negative communication, and 10.5% change in confidence about the future of

the relationship (Owen et al., 2011). The variance diminished greatly when

leader/participant alliance was examined by itself: less than 1% for relationship

adjustment, positive communication, and negative communication. Quirk and colleagues

(2014) showed that positive alliance in CRE was associated with more positive

communication, less negative communication, and more dedication. Bourgeois, and

colleagues (1990) showed that the leader/participant alliance was a significant predictor

of relationship outcomes for husbands, but not for wives. In a study using PREP, Owen,

Antle, and Barbee (2013) showed that there was no impact of the alliance on outcomes of

relationship functioning and relationship dynamics. They concluded that the

nonsignificant results might be due to (a) the size of the groups (the intervention featured

large groups), (b) the group dynamics of the program (i.e., collaboration and interaction

between participants), and (c) individuals attending without their partners.

Given the mixed results of these studies, further examination of the facilitation in

CRE is needed, particularly in CRE for individuals. Besides examining the change

mechanism of facilitator characteristics (which includes facilitator quality and facilitator alliance) in the current study, we propose to also test predictors, including (a) demographic factors (i.e., age, ethnicity, gender, income, and education level), and (b) timing factors (i.e., presence of children, number of divorces, and relationship status).

For Whom Couple Relationship
Education (CRE) Works:
Predictors of Effectiveness

One step toward knowing which CRE programs work for whom is to examine the potential impact of various demographic variables on intervention outcomes. Because the current program is offered to the community, the individuals who attend come from differing life stages and have varying degrees of distress. Due to the number of predictor variables we propose to test, we review briefly the current research on predictor variables in general.

Current research for predictor variables in relational CRE has produced mixed results. For example, one study showed that marital status and income for men predicted program efficacy (Adler-Baeder et al., 2010), but not for women; married men experienced a greater increase in relationship confidence and lower-income men experienced greater gains in couple functioning. In another study, Rauer and colleagues (2014) showed that income and race were predictors of CRE program outcomes, with low-income men and women experiencing greater gains in relationship quality and positive behaviors respectively, and Whites experiencing greater gains in marriage quality when compared to Blacks. Although these studies suggest that low-income individuals experience greater gains in outcomes, income is not a consistent predictor.

For example, in a meta-analysis, effect sizes for those with low incomes ranged from $d =$ .25 to .29, whereas effect sizes for those with middle incomes effect sizes ranged from $d = .30$ to .40 (Hawkins & Fackrell, 2010), which is contrary to the results produced by the two studies mentioned previously. In a premarital intervention, variables such as gender, race, education level, age at marriage, children, use of public assistance, and marital status did not predict program outcomes of satisfaction, conflict, and commitment (Stanley et al., 2006). Level of risk was found not to be a significant predictor in one study (Halford & Wilson, 2009), but significant in another (Barton, Futris, & Bradley, 2014). In a meta-analysis of 117 outcomes, Hawkins and colleagues (2008) showed that gender, income, and ethnicity were not predictors of CRE outcomes, although the authors noted a lack of ethnic and economic diversity in the samples of the extant studies.

The studies mentioned above were predominantly of CRE targeting couples, not individuals in the mate selection stage. Outcome predictors for programs targeting individuals in the mate selection phase are less studied. One study targeting individuals in the mate selection stage tested predicting variables and showed that older adults learned relatively less compared to their younger counterparts (Antle et al., 2013). Specific to PICK, Van Epp and colleagues (2008) tested several predictor variables including sex, race, current relationship status, previously married, and presence of children on four dependent variables and found that only gender by time significantly predicted the dependent variable of attitudes about mate selection: women were more likely than men to endorse the belief that they should wait for a perfect partner, and less likely to agree that love is a sufficient reason to marry. Therefore, more evaluation of predictor variables for PICK is needed.

**Measures for Couple Relationship
Education (CRE) with Individuals**

As mentioned previously, there are few instruments that measure variables

appropriate to individually focused CRE. Until recently, researchers have had to either

(a) develop their own measures to determine the effectiveness of their programs, and/or

(b) modify existing measures to fit singles (Cottle et al., 2014; Fincham et al., 2011;

Stewart et al., 2015). The current study employs four scales of a measure designed to

reflect the information gained from PICK developed by the authors (see Stewart et al. for

tests of reliability including principal components analyses and Cronbach's tests of

internal consistency). Two of these measures focus on perceived personal knowledge

(i.e., relationship skills and partner selection), and two others focus on the perceived

importance of knowledge about a potential partner (i.e., the potential partner's relational

patterns, and potential relationship behavior and attitudes).

Study Purpose

Although there is some evidence to suggest that PICK is effective (see Stewart et

al., 2015), less is known about the change mechanisms and the predictors of participant

outcomes. Understanding what contributes to change and for whom these changes occur

might allow educators to tailor interventions to better help potential attendees. In sum,

given that researchers are calling for a better understanding of the change mechanisms

(*how* CRE works), and the predictors of CRE (*for whom* CRE works; Rauer et al., 2014;

Wadsworth & Markman, 2012; Rauer et al., 2014), we propose to test facilitator

characteristics and several demographic variables as predictors of four PICK outcome

variables. The purpose of the current study is to examine (a) the potential impact of facilitator characteristics, and (b) demographic predictor variables on four PICK outcome variables including perceived relationship skills, partner selection, relational patterns, and relationship behavior and attitudes.

Methods

Procedures

PICK has two main goals (see Van Epp et al., 2008). The first is to educate individuals on factors that contribute to marital stability and quality, including the potential partner's family dynamics, attitudes, compatibility, and relationship history and skills. The second goal is to help individuals pace a relationship, balancing increasing levels of closeness using cumulative factors such as knowledge, trust, and commitment. PICK shares some similarities with content in three premarital surveys, including RELATE (Busby, Holman, & Taniguchi, 2001), PREPARE-Enrich (Fowers & Olson, 1989, 1993), and FOCCUS (Larson, Newell, Topham, & Nichols, 2002).

The PICK program was offered in eight different locations in a Western state. Classes were offered as part of a federal healthy marriage initiative grant. Participants were recruited through local newspaper advertisements, billboards, movie theatre advertisements, and by word-of-mouth advertising. The participants attended a variety of formats of a six hour PICK course. These courses ranged from single day six hour sessions, to six one hour sessions spread out over six weeks. Regarding attendance format, 5.4% attended a one day workshop, 15.7% attended two, 3 hour meetings that took place over two weeks, 35.1% attended three, 2 hour meetings over three weeks, and

4.6% attended meetings spread out over four to six weeks (32% missing data). Tests for potential difference in outcome scores by program format yielded no significant differences except for the variable relationship behavior and attitudes: the post score mean for the four to six week format, on average, was significantly higher than the mean of the three week format ($t = - 2.01, p < .05$). All classes were provided at no charge in locations readily accessible by the community. Meals were catered at no charge for those who participated. All group facilitators were PICK Instructor certified, which includes online training and passing an exam. Facilitators also attended a training conference that provided them with course policies and procedures. Several site visits were performed by the project coordinator and feedback was given to the instructors to further ensure treatment fidelity.

Participants

The participants included 2,760 individuals recruited from communities throughout the state. We opted to drop those from the sample who were in long-term relationships ($n = 312$) because the content of the course and the outcome measures were designed for singles. The final sample included 2,448 individuals including 71.3% women and 25.2% men. The mean age was 36.93 ($SD = 14.15$), and ranged from 18 to 79. Regarding Ethnicity, 83.4% were White, 5.4% were Hispanic/Latino, 2.7% indicated Other, 1.2% were Native American, 1.2 % were Asian-American, and .7% were African American. Regarding relationship status, 71.2% were single, 17.6% were dating, and 2.7% were widowed. In terms of education level, 15.1% were high school graduates or had a GED or less, 32.2% attended some college, 33% obtained a college or technical

degree, and 14.3% had obtained a Graduate degree. Forty-three percent reported having

experienced at least one divorce and 46% had at least one child. The median income was

$25,000. Regarding level of religiosity, 7% reported not being religious at all, 7.8%

reported being slightly religious, 14% were somewhat religious, 34.1% were very

religious, and 31.4% were extremely religious. In terms of class size, the classes ranged

in size from 1 to 78 with a mean of 15.33 ($SD = 9.24$).

Measures

Because programs that target individuals in the mate selection stage are relatively

new, there is a paucity of tested measures to examine the effectiveness of such programs.

We wrote items that reflect the content of the curriculum, and included four scales: two

that focused on perceived personal knowledge, and two that focused on perceived

knowledge about a potential partner. All of the measures were self-reported (Stewart,

Bradford, Higginbotham, & Pfister, 2015). In this study, we used difference scores as the

dependent variable. This method is accepted as representing adjusted change (Dalecki &

Willits, 1991). The four dependent variables were the post minus pre ($T_2 - T_1$) differences

for each of the four outcome variables: (1) perceived personal knowledge about

relationship skills, (2) perceived personal knowledge about partner selection, (3)

perceived importance of knowledge about a potential partner's relational patterns, and (4)

perceived importance of knowledge about relationship behaviors and attitudes.

Perceived knowledge about relationship skills. Perceived relationship skills

were measured using three items that ranged on a 5-point Likert scale from 1 *disagree* to

5 *strongly agree*. These statements included: "I understand what it takes to have a

healthy relationship," "I know how to communicate well with a partner," and "I have good conflict management skills." Items were combined and a mean was calculated for pre and post scores. Cronbach's alphas were .73 for pretest and .79 for posttest.

Perceived knowledge about partner selection. This measure included four items: "I know how to choose the right partner for me," "I know the important things to learn about a potential partner," "I know how to pace a relationship in a safe way," and "I can spot warning signs in relationships." A 5-point Likert scale was used ranging from 1 *disagree* to 5 *strongly agree*. The item scores were combined and a mean was computed for pre and post scores. Cronbach's alphas were .83 at pretest and .81 at posttest.

Perceived importance of knowledge about a potential partner's relationship patterns. The relationship patterns variable was measured using four items scaled on 5-point Likert scale. Participants were given the question, "how important is it to you to know the following about someone prior to becoming seriously committed?" and asked to rate a list of statements ranging from 1 *unimportant* to 5 *crucially important*. These statements included: "what he/she learned from his/her family when growing up," "what he/she has been like in past relationships," "how well he/she gets along with his/her parents," and "what his/her friendships are like." The item scores were combined and a mean was computed for pre and post scores. Cronbach's alphas were .78 at pretest and .81 at posttest.

Perceived importance of knowledge about a potential partner's relationship behavior and attitudes. Relationship behavior and attitudes were measured using three statements on 5-point Likert scales ranging from 1 *unimportant* to 5 *crucially important*. Participants were given the stem, "how important is it to you to know the following about

someone prior to becoming seriously committed?" and asked to rate a list of statements ranging from 1 *unimportant* to 5 *crucially important*. These statements included: "how he/she fights when angry," "how he/she reacts when my feelings are hurt," and "what he/she believes about right and wrong." Means were computed for pre and post. Cronbach's alphas for this measure were .67 at pretest and .72 at posttest.

Facilitator quality and facilitator/participant alliance. Participants rated facilitator quality on five statements using a Likert scale ranging from 1 *disagree* to 5 *strongly agree* (see Higginbotham & Myler, 2010). These statements included: "the facilitator explained the course material clearly," "the facilitator answered questions well," "the facilitator was effective in getting people to participate," "the facilitator managed the time well," and "the facilitator drew on his/her own experiences in helpful ways." Cronbach's alpha for this measure was .85.

Three items were used to measure the facilitator/participant alliance, modified from the "bond" subscale of the Working Alliance Inventory (Horvath & Greenberg, 1989) to be appropriate to the context of relationship education. These items included three statements on a 5-point Likert scale ranging from 1 *disagree* to 5 *strongly agree*. These statements included: "I feel the facilitator appreciates me and my concerns," "I believe the facilitator cares, and likes me as a person," and "I trust the facilitator." A mean score was computed. Cronbach's alpha for this measure was .86.

Facilitator quality and facilitator/participant alliance have been treated as conceptually distinct, but in our data we found evidence that these two measures were collinear, which is perhaps not surprising given the relatively short duration of the class. The two variables correlated highly ($r = .70$), and when analyzed as predictors in the

same model, the estimates became unstable. We thus decided to collapse the measures into a single construct. When analyzed via principle components factor analysis, the rotated solution yielded a single factor (eigenvalue = 4.78, with 59.8% variance explained) with factor loadings ranging from .74 to .83, $\alpha = .90$, suggesting that these constructs should be combined into one: facilitator characteristics.

Plan of Analysis

Our purpose in this study was to examine facilitator characteristics and demographic variables as potential predictors of difference scores on the four outcome variables (perceived knowledge about relationship skills, partner selection, a potential partner's relational patterns, and a potential partner's relationship behavior and attitudes). We did this in two steps: first, using four *separate* general linear model analyses to test predictors of each of the four difference scores; and second, using structural equation modeling (SEM) to *simultaneously* test the relative importance of each significant predictor in a multivariate environment. The demographic variables included age, gender, prior divorce (yes/no), relationship status (single or dating), ethnicity (White, Latino-American, and other), income (broken down as follows — 0 to $20,000, $20,001 to $35,000, $35,001 to $60,000, $60,001 to $99,999, and $100,000 and over), level of religiosity (ranging on a 5-point Likert scale from 1 *not at all* to 5 *extremely*), education level (high school educated or less, some college, college or technical degree, and graduate degree), being raised in a stepfamily (yes/no), and whether the participant has a child/children in the home (yes/no).

We included all variables in the four separate general linear model analyses because few studies have examined outcome predictors of CRE with individuals. We also

wanted to simultaneously test facilitator characteristics with other predictors to more accurately represent the actual context of relationship education. Age and facilitator characteristics were treated as covariates because they are continuous variables while all other variables are categorical. Thus, when age or facilitator characteristics were significant predictors, we performed a Pearson correlation test between each variable and the difference score to determine the direction of the relationship, in place of posthoc analyses. Because the GLM procedure only produces posthoc tests when there are no covariates in the model, we opted to examine the direction of the relationships of the remaining categorical variables by calculating and contrasting the mean difference scores on the four outcome variables. Using structural equation modeling (SEM; AMOS version 22; Arbuckle, 2013), we then tested all significant predictors of the four outcomes in a multivariate context in order to examine the relative importance of each predictor. The use of SEM allowed us to determine concurrently the amount of variance explained by all the significant predictors.

Results

General Linear Model Analyses

Using GLM analyses, we tested variables to understand *how* and *for whom* the program was most effective. The four dependent variables were the post minus pre (T_2 - T_1) differences for each of the four outcome variables: perceived relationship skills, knowledge about partner selection, a potential partner's relational patterns, and a potential partner's relationship behaviors and attitudes. The results for the four GLM

models are reported in Table 1. In the narrative, mean difference scores are reported as *D*

rather than *M* to distinguish them from ordinary pre or post mean scores.

Table 11

Predictors of Difference Scores: GLM

Predictor	df	Perceived skills	Partner selection	Relational patterns	Behaviors and attitudes
				F	
Facilitator characteristics	1	59.01***	43.49***	6.40*	3.36
Gender	1	.90	6.61*	10.38***	7.43**
Level of religiosity	4	3.67**	4.88***	1.12	2.71*
Relationship type	2	3.50*	3.65*	2.58	.88
Presence of children	1	3.21	7.67**	.22	2.79
Age	1	.44	.77	4.67*	.61
Income level	4	1.52	1.02	1.65	2.57*
Education level	4	.52	.40	.61	1.33
Presence of divorce	1	.21	.05	1.41	2.39
Ethnicity	2	1.68	.76	.61	1.37
Raised in stepfamily	2	1.36	.57	2.43	2.43

Note. * *p* < .05, ** *p* < .01, and *** *p* < .001.

Predictors of difference scores. There were three significant predictors of

difference scores on *perceived knowledge of relationship skills*: facilitator characteristics

(*F* = 59.01, *p* < .001), level of religiosity (*F* = 3.67, *p* < .01), and relationship type (*F* =

3.50, *p* < .05). For facilitator characteristics, the Pearson's correlation between the

difference score and facilitator quality was positive and significant (*r* = .22, *p* < .001)

demonstrating that those with higher facilitator quality scores had greater difference

scores (i.e., experienced greater change in the course of the intervention). For level of

religiosity, individuals with lower levels of religiosity had mean difference scores ranging

from .90 to 1.1 while those with higher levels had scores ranging from .79 to .83. With

regard to relationship type, singles had slightly larger difference scores (*D* = .87, *SD* =

.73) compared to dating individuals (*D* = .84, *SD* = .77), and widows (*D* = .80, *SD* = .90).

There were five significant predictors of difference scores on *perceived knowledge about partner selection*: facilitator characteristics (*F* = 43.49, *p* < .001), gender (*F* = 6.61, *p* < .05), level of religiosity (*F* = 4.88, *p* < .001), relationship type (*F* = 3.65, *p* < .05), and presence of a child (*F* = 7.67, *p* < .01). Once again, ratings of facilitator characteristics were positively correlated with difference scores (*r* = .19, *p* < .001). Women had larger difference scores (*D* = 1.18, *SD* = .84) than men (*D* = .92, *SD* = .79). Those with lower levels of religiosity had larger difference scores (ranging from 1.21 to 1.29) than highly religious individuals (1.09 for very religious; 1.06 for extremely religious). Singles had larger difference scores (*D* = 1.16, *SD* = .83) than dating individuals (*D* = 1.00, *SD* = .86) and widows (*D* = .972, *SD* = .78). Those with children had larger difference scores (*D* = 1.24, *SD* = .91) than those without children (*D* = 1.02, *SD* = .75).

There were three significant predictors of difference scores on *perceived knowledge about potential partner's relational patterns*: facilitator characteristics (*F* = 6.40, *p* < .05), gender (*F* = 10.38, *p* < .001), and age (*F* = 4.67, *p* < .05). Facilitator characteristics were positively, but not significantly correlated with difference scores (*r* = .05, *p* = .053). Men's difference scores (*D* = .54, *SD* = .63) were higher than women's difference scores (*D* = .43, *SD* = .57). Regarding age, there was a negative, significant correlation between age and difference scores (*r* = -.11, *p* < .001) suggesting that younger participants experienced larger gains than older participants.

Finally, there were three significant predictors of difference scores on *perceived knowledge about potential partner's relationship behavior and attitudes*: gender (*F* =

7.43, $p < .01$), level of religiosity ($F = 2.71$, $p < .05$), and income level ($F = 2.57$, $p <$ .05). Men's difference scores were again higher ($D = .35$, $SD = .57$) than those for women ($D = .26$, $SD = .50$). Those with lower levels of religiosity had larger difference scores (ranging from .35 to .37) than "very" and "extremely religious" individuals ($D =$ .26 and .24 respectively). Those with lower income levels (0 to $20,000; $20,001 to $35,000) had larger difference scores ($D = .30$ and .31 respectively) than those with higher incomes (ranging from $D = .23$, $SD = .48$ [$35,001 to $60,000] to $D = .17$, $SD =$ .74 [$100,000 or greater]).

Structural Equation Model Analysis

All significant predictors from the general linear model analyses were then entered into a structural equation model to allow a simultaneous test in a multivariate environment, thereby assessing their relative importance. Maximum likelihood estimation was used to handle missing data. This method creates a covariance matrix with existing data and then imputes data with expected values.

The structural model is presented in Figure 1 with standardized path coefficients. Fit indices for this model were good ($\chi^2 = 310.05$, $df = 103$, $p < .001$, CFI $= .981$, TLI $=$ .969, RMSEA $= .029$). For *perceived knowledge of relationship skills*, two of the original three predictors remained significant in the multivariate environment. Facilitator characteristics predicted larger difference scores ($\beta = .23$, $p < .001$). Religiosity was predictive ($\beta = -.09$, $p < .001$), with those with lower religiosity having larger difference scores. Relationship type was insignificant ($\beta = -.02$, $p = .51$). Together, these variables

explained 6.7% of the variance in the difference scores about perceived knowledge of relationship skills.

For *perceived knowledge about partner selection,* all five of the original predictors remained significant. Higher scores on facilitator characteristics predicted larger difference scores ($\beta = .20, p < .001$). Other significant predictors included: gender ($\beta = .10, p < .001$) — women had larger difference scores than men; level of religiosity ($\beta = - .10, p < .001$) — those who reported lower levels of religiosity had larger difference scores; relationship type ($\beta = - .06, p < .01$) — singles had larger difference scores than those dating and widows; and presence of children ($\beta = .07, p < .001$) — those with children had larger difference scores than those without children. Together, these variables explained 6.7% of the variance in the difference scores about perceived knowledge of partner selection.

Regarding *perceived knowledge about a potential partner's relational patterns,* two of the original three predictors remained significant. Gender was predictive ($\beta = -.10, p < .001$) indicating again that in this model men had greater difference scores than women, and age ($\beta = -.10, p < .001$); younger participants had relatively larger difference scores. Facilitator quality was insignificant ($\beta = .03, p = .18$). Together, these variables explained 1.9% of the variance in knowledge in the difference scores about a potential partner's relational patterns.

Figure 1

Structural equation model results
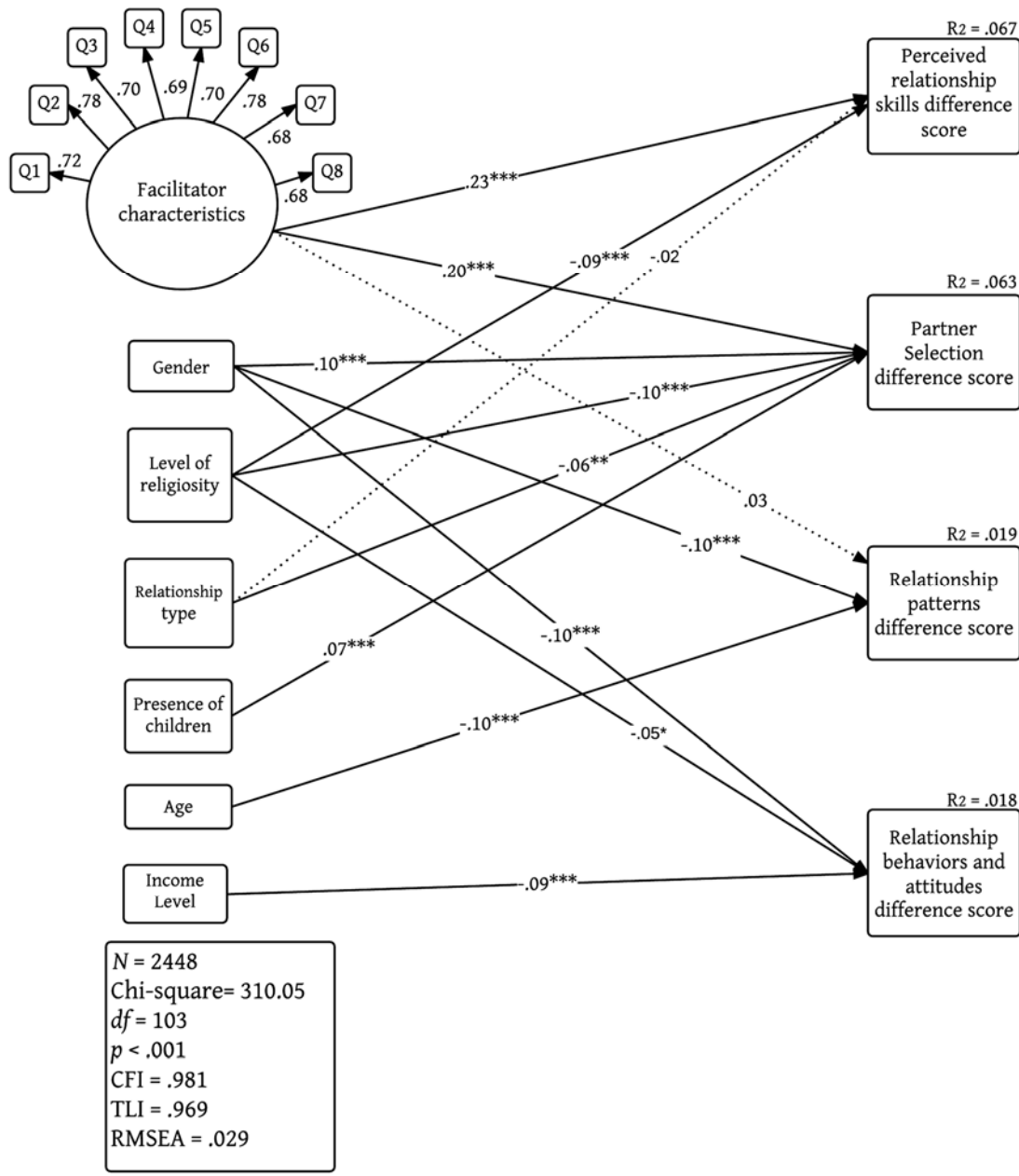
Note: Gender: 0 = *male,* 1 = *female*; relationship type: 0 = *single or widowed,* 1 = *dating*; presence of children: 0 = *no children,* 1 = *children.*
p < .05. **p* < .01. ***p* < .001.

Finally, for *perceived knowledge about a potential partner's relationship behavior and attitudes*, all of the original three predictors remained significant in the multivariate environment. The following predictors were significant: gender ($\beta = -.10$, $p < .001$) suggesting that men had higher difference scores than women, level of religiosity ($\beta = -.05$, $p < .05$) suggesting that being less religious was predictive of higher difference scores, and income level ($\beta = -.09$, $p < .001$) or having a lower income was associated with higher difference scores on knowledge about a potential partner's relationship behaviors and patterns. Together, these variables explained 1.8% of the variance in the difference scores about knowledge of a potential partner's relationship behavior and attitudes.

Discussion

The current study was performed in response to the call to better understand change mechanisms and predictors for attendees of CRE (Rauer et al., 2014; Wadsworth & Markman, 2012). Recent research on these same data (Stewart et al., 2015) provided prior evidence that – relative to a comparison group – PICK participants experienced significant pretest to posttest gains in all four outcomes: perceived knowledge about relationship skills, partner selection, a potential partner's relational patterns, and a potential partner's relationship behaviors and attitudes. Although more modest, the results of this study provide some insight to the question of *how* and *for whom* PICK works. We first discuss our findings regarding facilitator characteristics as one aspect of how, then demographic predictors as one aspect of for whom CRE works.

How Couple Relationship Education (CRE)
Works: Facilitator Characteristics

When tested in conjunction with participant demographics, facilitator

characteristics (e.g., explaining course material, answering questions, facilitating

participation, appreciation, caring, and trust from the facilitator) positively predicted

change in two out of the four outcome variables. Overall, facilitator characteristics was

the most important factor in operation in this CRE. Relative to other variables, the

comparatively larger coefficients suggest that facilitator characteristics accounted for a

relatively larger amount of the 6.7% of the variance explained in perceived relationship

skills and the 6.3% of the variance explained in perceived knowledge about partner

selection. For perceived knowledge of relationship patterns, facilitator characteristics

was a significant predictor of change scores in the GLM analysis, but was not significant

in the structural equation model and was not significant in either model for relationship

attitudes and behaviors. Taken together, these findings suggest that facilitator

characteristics were relatively *more* important in terms of participants' personal

knowledge (i.e., relationship skills and partner selection), but relatively *less* important in

terms of participants' knowledge about a potential partner. That said, one might not

expect facilitator characteristics to account for large portions of the variance given that

the program was only six hours long,

The results for facilitator characteristics largely support past findings. For

example, Higginbotham and Myler (2010) showed that certain facilitator qualities were

associated with the overall quality of the CRE experience but these facilitator qualities

overall produced small effect sizes. Bradford and colleagues (2013) showed that higher

ratings of the facilitator quality were associated with larger gains in marital and individual functioning. These findings also support past research which suggests that facilitator/participant alliance is important, but alone accounts for relatively little overall variability. For example, Owen and colleagues (2011) showed that leader/participant alliance in premarital education accounted for less than 1% change in negative communication, 1% change in positive communication, 1% change in relationship adjustment, and 10.5% change in confidence about the future of the relationship.

Other possible explanations for the modest results of the facilitator characteristics in the current study include the briefness of the intervention and teaching in a group setting. It is possible that if the intervention were longer, some facilitator characteristics such as facilitator/participant alliance might become somewhat more impactful, and individuals might have more time to establish an alliance with the facilitator; although how predictive the alliance might be is obviously an empirical question. Additionally, as Owen and colleagues (2013) noted the size of the group may affect how much the alliance contributes to changes in outcomes variables. Regarding group size, dosage, outcome measures, and facilitator/participant alliance, more research is needed to better understand in what CRE contexts the alliance is important.

Barber (2009) argued that competence and alliance are likely intertwined, and that both play an essential role in therapeutic outcomes. Given the results of this study, it would appear that this argument may hold true for CRE; it is likely that facilitator quality and alliance are far more intertwined in CRE than they are in psychotherapy setting, and thus might be combined in future research studies (see Owen et al., 2011) but more empirical testing of facilitation is warranted. One possible explanation for the high

correlation between facilitator quality and alliance is the amount of time spent in the program. Because the course was only taught for a total of six hours, there may be relatively little time for educator quality (i.e., explaining content, answering questions) to become distinct from alliance (i.e., participant perceptions of appreciation and care from the facilitator). It is possible that with more course time, quality and alliance might begin to diverge as attendees developed a closer alliance with the facilitator.

There are likely other factors besides facilitator characteristics that contribute to change in CRE. These results support prior research that suggests that other factors also predict CRE outcomes, including curriculum delivery, teaching specific relationship skills, and class structure (Olmstead et al., 2011). There may be some overlap between our measure of facilitator characteristics (explaining course materials clearly, effectively getting people to participate, and effective use of personal experience) and what Olmstead and colleagues labeled curriculum delivery (using effective role plays, using videos, and using Power Point slides relevant to the group).

For Whom Couple Relationship
Education (CRE) Works: Demographics

Again, although modest, the results of this study also provide some insight to the question regarding *for whom* CRE works. Taken together, it was unusual for demographic variables to remain predictive of change scores, which may suggest that on the whole, the PICK program worked somewhat similarly for most attendees. The model yielded a short list of predictors that were statistically significant — gender and level of religiosity significantly predicted three out of the four outcome variables while relationship type, presence of children, age, and income level each predicted only one

outcome variable. Because these factors were tested concurrently, the results suggest that

facilitator characteristics contributed more to outcome gains on perceived skills and

partner selection while specific demographic variables and life course events including

gender, level of religiosity, relationship type, presence of children, age, and income level

contributed somewhat more to change in relational patterns and relationship behaviors

and attitudes. Yet these specific demographic variables and life course events only

contributed to 1.9% and 1.8% of the variability in the outcomes of relational patterns and

relationship attitudes and behaviors respectively. The very small amount of variance

explained in this model regarding the latter two variables (i.e., relational patterns, and

relationship attitudes and behaviors) may suggest that especially with regard to these two

variables, the PICK program worked somewhat similarly for most attendees.

Summary

In response to the question *how* PICK works, the results suggest that facilitator

characteristics are modestly, but perhaps substantively important. Of the predictors in the

study, this was most impactful, particularly with regard to participant gains in personal

knowledge. Regarding *for whom* this program works, in general, the results for predictor

variables in the current study suggest that the program outcomes are fairly stable among

demographic variables. Our results generally support past research that shows no

prediction for CRE participants in areas of ethnicity, income levels (not significant on

three out of the four outcome variables in this study), presence of children (not significant

on three out of the four outcome variables in this study), and education levels (Hawkins et

al., 2008; Stanley et al., 2006). Specific to predictors of the PICK program, the current

research also supports past research (Van Epp et al., 2008) that showed no prediction for variables of race and current relationship status (not significant on three out of the four variables).

   Strengths and limitations. This study has several strengths and limitations. The strengths of this study include: (a) testing facilitator characteristics as one mechanism of *how* change occurs in CRE, (b) testing *for whom* CRE works by examining demographic variables as predictors of four outcomes, and (c) examining these predictors concurrently using data from a large group of singles from a statewide initiative, to allow an assessment of relative importance.

   There are also several limitations to the current study involving measurement and sampling. As outlined in Stewart et al. (2015), neither the predictor variable of facilitator characteristics nor the outcome measures in this study have subjected to thorough testing, particularly in terms of validity. However, the results of the structural equation models (e.g., factor loadings and model fit indices) suggest that these measures have good initial reliability. Other limitations include the lack of a culturally diverse sample, which has traditionally been problematic for CRE in general (Ooms & Wilson, 2004). Additionally, scholars have noted that data collection usually happens at the conclusion of the program, which is problematic when testing for certain facilitator characteristics such as the facilitator/participant alliance (Owen et al., 2011). It may be that certain facilitator characteristics including facilitator/participant alliance is more of a process variable and, therefore, needs to be measured over the course of the program. Because it was not collected multiple times during the program, we do not know whether better outcomes led to higher alliance ratings or the other way around (see Owen et al., 2011).

Furthermore, we chose to test facilitator quality and facilitator/participant alliance together, but other researchers might easily argue to separate them based on conceptual grounds. Additionally, the current findings apply to the PICK course and perhaps other premarital interventions, but not necessarily to CRE in general. Given these limitations, interpretation of the results should be done cautiously.

Future Research

Future research directions include a focus on measurement, change mechanisms, and further exploration of predictors. Regarding measurement, future research is needed to establish the validity and reliability of the current measures. Measurement for programs targeting individuals in the mate selection phase is still in its initial stage. Measures for *Within My Reach* were developed by Vennum and Fincham (2011) and reflect some of the questions in the outcome measures for this study. For example, the Relationship Deciding Scale has subscales of confidence (e.g., "I believe I will be able to effectively deal with conflicts that arise in my relationships" and "I have the skills needed for a lasting stable romantic relationship") which has questions similar to those asked in the perceived relationship skills measure, warning signs (e.g., "I am able to recognize early on the warning signs in a bad relationship" and "I know what to do when I recognize the warning signs in a bad relationship") which has questions similar to those found in the knowledge about partner selection measure in this study. Still, establishing the validity of the current measures would help to strengthen future research that uses these measures. Future researchers might also attempt to triangulate the data by having multiple data collection methods including qualitative interviews, self-report measures,

and behavioral observation to more fully and accurately understand the impact of the intervention on attitudes, perceptions, and behavior. In terms of change mechanisms, further work needs to be performed to understand more specifically how, and to what extent, facilitator quality and alliance affect CRE outcomes. For example, length of the program and group size likely affect the facilitator quality and alliance, but a better understanding of the mechanisms by which this occurs might further inform facilitators to more effectively intervene. Future research might also focus on other areas as potential change mechanisms for PICK. Some researchers have already begun to examine other change mechanisms, such as class format and educational processes. For example, Owen and colleagues (2013) examined group cohesion among participants as a possible change mechanism in CRE.

Implications

The current findings confirm that facilitators played a significant role in effecting change among the participants in this particular sample. Facilitator characteristics was a significant positive predictor on two of the four outcome variables. Although these findings were modest in terms of effect sizes and outcomes, the findings suggest that how facilitators educate (i.e., responding to questions, getting individuals to participate, time management, and drawing on personal experience) and the relationship they have with individuals (i.e., can help attendees understand and gain more knowledge) is somewhat important.

In terms of tests for predictor variables, what we did not find is instructive. Because there were few predictor variables that were significant and even fewer that

contributed to substantially to the effect sizes on the four outcomes, it would appear that the PICK program may be relatively consistent in helping many different individuals gain knowledge including those from various life stages (i.e., those with children, those that have been divorced, and those in mid to later adulthood). In addition, an overwhelmingly large percentage, 94.5% of attendees that filled out the satisfaction survey reported that they agreed or strongly agreed to the three questions on the satisfaction measure (e.g., attending this course was a good experience, I would recommend this course to others, and the information in the course was useful to me) further suggesting that individuals from multiple life stages found the program useful. Because the test on predictors is meant to determine *for whom* the program is most effective, it would appear that PICK might be effective and beneficial for a wide array of individuals. Although the results do suggest that those with lower levels of religiosity benefit more from the program than the highly religious, therefore, future researchers and interventionists should consider setting (perhaps using other locations besides religious centers) to reach those that might benefit the most from this program. Although this study provides initial evidence, continual evaluation of PICK with various groups and further testing of predictor variables is still needed.

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CHAPTER IV

DISCUSSION

The two studies in this dissertation are some of the first published evaluations of the *Premarital Interpersonal Choices and Knowledge* (PICK) program. There have only been two published quantitative studies and a few unpublished manuscripts evaluating PICK. These past evaluations have relied on retrospective pre/post measures (Brower et al., 2012; Van Epp, Futris, Van Epp, & Campbell, 2008) or pre/post designs (Marriage Works Ohio, n.d.; Michigan Healthy Marriage Coalition, n.d.; Schumm & Theodore, 2014) and only one study employed a control group analyzing the data with MANOVA (Van Epp et al., 2008). Therefore, *t* tests have been the primary statistical analysis used to understand pre to post changes in areas such as understanding, confidence, and trust. These initial results provided a preliminary gauge on the effectiveness of PICK, but more needs to be done to understand how PICK helps individuals.

The two studies in this dissertation advance the evaluation of PICK to the next level by: (a) using more advanced statistical analyses (e.g., linear mixed models), (b) evaluating the program using a large sample size of emerging adults ($n = 682$), (c) using university students as a nonequivalent comparison group, and (d) examining facilitator characteristics and demographic and life course variables as possible predictors using a general linear model analyses followed by structural equation modeling. Although these studies advance the evaluation of PICK, there is still much more research that needs to occur.

Future research of PICK should focus on these general areas: (a) measurement refinement, (b) longitudinal designs, (c) change mechanisms, and (d) contexts or settings.

Regarding measurement, scales with established psychometric properties should be developed or located in order to increase the internal validity of future evaluations. A measure that might work in the future to evaluate PICK is the Relationship Deciding Scale (RDS; Vennum & Fincham, 2011). There are three subscales that fit the content of PICK well including Relationship Confidence, Knowledge of Warning Signs, and Deciding. Furthermore, the RDS measure has established convergent, divergent, concurrent, and predictive validity and reliability. Regarding longitudinal designs, ideally, future research should track individuals over months and even years to determine how the program affects actual partner selection behaviors. These designs might even randomly assign individuals into two groups with one group receiving the book *How to Avoid Falling in Love with a Jerk* (Van Epp, 2010) and the other attending the PICK program. Such longitudinal, experimental designs would more clearly determine gains made from attending the PICK program. Facilitator characteristics including facilitator quality and facilitator/participant alliance might be more fully explored to better understand how they affect change in those that attend PICK. In addition, other change mechanisms might also be examined including group dynamics and programming content. More specifically, determining which content, FACES or RAM, plays a greater role and for whom might help in future programming. Finally, PICK is currently being offered in various settings including jails, high schools, communities, and military locations. To establish external validity, PICK should be continually evaluated in each of these settings to determine how effective PICK is with different populations.

The evaluative research for PICK is still very much in its incipient stage. There are many other avenues not mentioned above including using qualitative methods to

better understand for whom and how PICK works. Based on the findings of the current

studies, it appears that the future of the PICK-a-Partner program is bright. With

promising prior findings and the current research in these two studies providing a

preliminary foundation, hopefully researchers can move to further establish PICK as an

effective program.

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Appendix:

Measures

Adult Pre Program Survey
PICK Program

PLEASE MARK YOUR CHOICES CLEARLY. ANSWER AS HONESTLY AS POSSIBLE. THERE ARE NO "RIGHT" ANSWERS. ANSWERS ARE CONFIDENTIAL AND WILL NOT BE SEEN BY YOUR PARTNER, CLASSMATES, OR THE FACILITATOR.

1. Your name: *(first)* _____   *(last)* _____

2. Your partner's name *(if attending)*: *(first)* _____   *(last)* _____ *(or, **N/A**)*

3. How did you find out about this course? _____

4. Age: _____

5. Gender: ① Male   ② Female

6. Ethnic background *(mark one)*:

   ① African-American ② Asian-American ③ Caucasian ④ Hispanic/Latino ⑤ Native American ⑥ Other

7. I am currently *(mark one)*:   ① Married   ② Single ③ Dating ④ Engaged ⑤ A Widower/Widowed

8. I live with: ① My parent(s) ② My partner or spouse ③ Friends or roommates ④ On my own ⑤ Other

9. Time in current romantic relationship *(if applicable)*: Years _____, Months _____.

10. How many times have you been divorced? _____

11. How religious are you?   ① Not at all ② Slightly ③ Somewhat ④ Very ⑤ Extremely

12. Have you ever lived in a stepfamily?   ① Yes ② No

13. How many children do you have? _____

14. Ages of children? *(mark using X's)*
   2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

15. How many of your children live in your home, full or part-time? _____

16. Your highest level of education completed *(mark only one)*:

   ① Elementary / middle ② Some high school ③ High school graduate or GED ④ Some college
   ⑤ College or technical degree ⑥ Graduate degree

17. What is your individual income per year? *(mark using an X)*

   $5,000 $10,000 $15,000 $20,000 $25,000 $30,000 $35,000 $40,000 $45,000 $50,000 $55,000 $60,000 $65,000 $70,000 $75,000 $80,000 $85,000 $90,000 $95,000 $100,000 $100,000 +

18. How often do you worry that your income will not be enough to meet your expenses and bills?

   ① Never ② Hardly ever ③ Once in a while ④ Often ⑤ Almost all the time

19. Why did you decide to attend this course? _____

20. How much relationship education have you had previously (e.g., classes, workshops, or counseling)?

   ① None ② Some ③ A lot

21. Please mark your level of agreement:	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree
a. I understand what it takes to have a healthy relationship.	①	②	③	④	⑤
b. I know how to communicate well with a partner.	①	②	③	④	⑤
c. I have good conflict management skills.	①	②	③	④	⑤

22a. Please *INDICATE YOUR RELATIONSHIP STATUS* by marking ① or ②:

    ① I'm in a relationship.

    ② <u>I'm NOT currently</u> in a relationship.

22b. Please mark your satisfaction with your current relationship (*or past relationships, if currently single*):

Completely Unhappy	Moderately Unhappy	Slightly Unhappy	Neither Happy or Unhappy	Slightly Happy	Moderately Happy	Completely Happy
①	②	③	④	⑤	⑥	⑦

23. How important is it **to you** to know the following about someone **prior to** becoming seriously committed?	<u>Unimportant</u>	<u>Less Important</u>	<u>Somewhat Important</u>	<u>Important</u>	<u>Crucially Important</u>
a. *How he/she fights* when angry.	①	②	③	④	⑤
b. *What he/she learned* from his/her family when growing up.	①	②	③	④	⑤
c. *How he/she reacts* when my feelings are hurt.	①	②	③	④	⑤
d. *What he/she has been like* in past relationships.	①	②	③	④	⑤
e. *What he/she believes* about right and wrong.	①	②	③	④	⑤
f. *How well he/she gets along* with his/her parent(s).	①	②	③	④	⑤
g. *What his/her friendships* are like.	①	②	③	④	⑤

24. Do you feel there is need to change *how you are in relationships*? Mark <u>one</u>:

    ① No change is needed at all.   ④ Many changes are needed.

    ② A few changes are needed.   ⑤ There is a need for almost total change.

    ③ Some changes are needed.

25. Would you like resources on any of these topics? <u>Mark as many as apply</u>:

    Please see the resource packet for related services

Alcohol/Drugs	① Yes	② No	Child Support	① Yes	② No	Employment	① Yes	② No
Housing	① Yes	② No	Health/Nutrition	① Yes	② No	Finances	① Yes	② No
Parenting	① Yes	② No	Relationships	① Yes	② No	Violence/Abuse	① Yes	② No

26. Please mark your level of agreement:	<u>Disagree</u>	<u>Slightly Disagree</u>	<u>Agree Somewhat</u>	<u>Agree</u>	<u>Strongly Agree</u>
a. I know how to choose the right partner for me.	①	②	③	④	⑤
b. I know the important things to learn about a potential partner.	①	②	③	④	⑤
c. I know how to pace a relationship in a safe way.	①	②	③	④	⑤
d. I can spot warning signs in relationships.	①	②	③	④	⑤
e. I plan to use what I learn from this course in my relationships.	①	②	③	④	⑤

27. What **can you do** to avoid <u>falling</u> for a Jerk(ette)? _____

_____

_____

28. What **can you do** to avoid <u>being</u> a Jerk(ette)? _____

_____

_____

29. What do you want in a **committed relationship**? _____

_____

_____

Adult Post Program Survey
PICK Program

PLEASE MARK YOUR CHOICES CLEARLY. ANSWER AS HONESTLY AS POSSIBLE. THERE ARE NO "RIGHT" ANSWERS. ANSWERS ARE CONFIDENTIAL AND WILL NOT BE SEEN BY YOUR PARTNER, CLASSMATES, OR THE FACILITATOR.

1. Your name: _____   _____
   First Name   Last Name

2. Are you willing to **fill out a follow-up survey** and/or be interviewed to help us better understand the impact of the course? We'll keep all data entirely confidential. If yes, please provide your email address: _____

3. **For each statement, please mark your level of agreement.**

	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree
a. The facilitator explained the course material clearly.	①	②	③	④	⑤
b. The facilitator answered questions well.	①	②	③	④	⑤
c. The facilitator was effective in getting people to participate.	①	②	③	④	⑤
d. The facilitator managed the time well.	①	②	③	④	⑤
e. The facilitator drew on his/her own experiences in helpful ways.	①	②	③	④	⑤
f. I feel the facilitator appreciates me and my concerns.	①	②	③	④	⑤
g. I believe the facilitator cares, and likes me as a person.	①	②	③	④	⑤
h. I trust the facilitator.	①	②	③	④	⑤
i. Attending this course was a good experience.	①	②	③	④	⑤
j. I would recommend this course to others.	①	②	③	④	⑤
k. The information in the course was useful to me.	①	②	③	④	⑤

4. What are the <u>two most useful</u> things you learned in this course?

   a. _____

   b. _____

5. Do you have any **suggestions** to make this class more helpful and/or enjoyable? _____
_____

6. Please mark the boxes that reflect your opinion **BEFORE** and **AFTER** attending this course.

	BEFORE the course:					Now, AFTER the course:				
	Disagreed	Slightly Disagreed	Agreed Somewhat	Agreed	Strongly Agreed	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree
a. I understood/understand what it takes to have a healthy relationship.	①	②	③	④	⑤	①	②	③	④	⑤
b. I knew/know how to communicate well with a partner.	①	②	③	④	⑤	①	②	③	④	⑤
c. I had/have good conflict management skills.	①	②	③	④	⑤	①	②	③	④	⑤

7. Do you feel there is a need to change <u>*how you are* in relationships</u>? Mark <u>one</u>:

   ① No change is needed at all.   ④ Many changes are needed.
   ② A few changes are needed.   ⑤ There is a need for almost total change.
   ③ Some changes are needed.

8. What was your **biggest** *relationship* concern, problem, or question *before attending this course?* _____
_____

9. How much did this course help with your concern, problem, or question?   ① None   ② A little   ③ Some   ④ A lot

10a. Please *INDICATE YOUR RELATIONSHIP STATUS* by marking ① or ②:
    ① I'm in a relationship.
    ② I'm **NOT** currently in a relationship.

10b. Please mark your **satisfaction** with your current relationship (*or past relationships, if currently single*):

Completely Unhappy	Moderately Unhappy	Slightly Unhappy	Neither Happy or Unhappy	Slightly Happy	Moderately Happy	Completely Happy
①	②	③	④	⑤	⑥	⑦

11. How important **was it to you before the course** AND how important **is it now** to know the following about someone *prior to* becoming seriously committed?

	BEFORE the course:					Now, AFTER the course:				
	Unimportant	Less Important	Somewhat Important	Important	Crucially Important	Unimportant	Less Important	Somewhat Important	Important	Crucially Important
a. *How he/she fights* when angry.	①	②	③	④	⑤	①	②	③	④	⑤
b. *What he/she learned* from his/her family when growing up.	①	②	③	④	⑤	①	②	③	④	⑤
c. *How he/she reacts* when my feelings are hurt.	①	②	③	④	⑤	①	②	③	④	⑤
d. *What he/she has been like* in past relationships.	①	②	③	④	⑤	①	②	③	④	⑤
e. *What he/she believes* about right and wrong.	①	②	③	④	⑤	①	②	③	④	⑤
f. *How well he/she gets along* with his/her parent(s).	①	②	③	④	⑤	①	②	③	④	⑤
g. *What his/her friendships* are like.	①	②	③	④	⑤	①	②	③	④	⑤

12. Please mark your level of agreement:	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree
a. I know how to choose the right partner for me.	①	②	③	④	⑤
b. I know the important things to learn about a potential partner.	①	②	③	④	⑤
c. I know how to pace a relationship in a safe way.	①	②	③	④	⑤
d. I can spot warning signs in relationships.	①	②	③	④	⑤
e. I plan to use what I learned from this course in my relationships.	①	②	③	④	⑤
f. As a result of this course, I will choose partners more carefully.	①	②	③	④	⑤
g. As a result of this course, I will have healthier relationships.	①	②	③	④	⑤

13. What **are you going to do** to avoid **falling** for a Jerk(ette)? _____
_____
_____
_____
_____

14. What are **you going to do** to avoid **being** a Jerk(ette)? _____
_____
_____
_____
_____

Adult Follow-up Program Survey
PICK Program

It was great having you in our course. We'd love to have an update from you and get your thoughts on the classes you attended. We value *your* input in particular because we use it to make these classes more meaningful and relevant. Thanks for filling in these answers!

1. Your name: _____   _____
      First Name   Last Name

2. What have you done to avoid <u>falling</u> for a Jerk(ette)? _____
_____
_____
_____
_____
_____

3. What have you done to avoid <u>being</u> a Jerk(ette)? _____
_____
_____
_____
_____
_____

4a. Please *INDICATE YOUR RELATIONSHIP STATUS* by marking ① or ②:
   ① I'm in a relationship.
   ② <u>I'm NOT currently</u> in a relationship.

4b. Please mark below your satisfaction with your current relationship (*or past relationships, if currently single*):

Completely Unhappy	Moderately Unhappy	Slightly Unhappy	Neither Happy or Unhappy	Slightly Happy	Moderately Happy	Completely Happy
①	②	③	④	⑤	⑥	⑦

5a. Since taking our course, have you experienced a change in your relationship status: ① Yes   ② No

5b. If yes, what was the change:
   a. Slowed a relationship down
   b. Broke up with someone
   c. Started dating
   d. Began dating someone seriously
   e. Got engaged
   f. Got married
   g. Other

5c. How did information from our course influence, if at all, the change(s) in your relationship status?
_____
_____
_____
_____

6. Please mark your level of agreement:	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree
a. I understand what it takes to have a healthy relationship.	①	②	③	④	⑤
b. I know how to communicate well with a partner.	①	②	③	④	⑤

	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree
c. I have good conflict management skills.	①	②	③	④	⑤
d. I know how to choose the right partner for me.	①	②	③	④	⑤
e. I know the important things to learn about a potential partner.	①	②	③	④	⑤
f. I know how to pace a relationship in a safe way.	①	②	③	④	⑤
g. I can spot warning signs in relationships.	①	②	③	④	⑤
h. I have used the information I learned from this course in my relationship(s).	①	②	③	④	⑤

7. As a result of this course...	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree	N/A
a. I have chosen partners more carefully.	①	②	③	④	⑤	☐
b. I have had healthier relationships.	①	②	③	④	⑤	☐

8. Since taking the course, I have....	Disagree	Slightly Disagree	Agree Somewhat	Agree	Strongly Agree	N/A
a. Worked on improving myself.	①	②	③	④	⑤	
b. Talked about what I learned in the course with my friends.	①	②	③	④	⑤	
c. Noticed things I would like to do differently in my relationship(s).	①	②	③	④	⑤	
d. Done nothing different in my approach to relationship(s).	①	②	③	④	⑤	
e. Made changes in my relationship(s).	①	②	③	④	⑤	☐
f. Tried to get to know my partner(s) more deeply.	①	②	③	④	⑤	☐
g. Worked to build trust in relationships.	①	②	③	④	⑤	☐
h. Been careful about how much I depend on partners.	①	②	③	④	⑤	☐
i. Paid attention to how well I know, trust, and depend on someone before becoming committed.	①	②	③	④	⑤	☐
j. Enforced sexual boundaries in my relationship(s).	①	②	③	④	⑤	☐

9. If single (or in a relationship), please rate these statements:	Very low	Low	Even	High	Very High
a. What do you think the chances are that you and your future (or current) partner/spouse will eventually separate?	①	②	③	④	⑤

	Strongly Disagree	Disagree	Mixed	Agree	Strongly Agree
b. My relationship with my future (or current) partner/spouse will be more important to me than almost anything else in my life.	①	②	③	④	⑤
c. I will think of me and my future (or current) partner/spouse more in terms of "us" and "we" than "me" and "him/her."	①	②	③	④	⑤
d. I will (do) want my committed relationship to stay strong no matter what rough times we may encounter.	①	②	③	④	⑤

10. Do you feel there is a need to change *how you are in relationships*? Mark one:

① No change is needed at all.   ④ Many changes are needed.

② A few changes are needed.   ⑤ There is a need for almost total change.

③ Some changes are needed.

11. How important to you **is it now** to know the following about someone *prior to* becoming seriously committed?	Unimportant	Less Important	Somewhat Important	Important	Crucially Important
			Now:		
a. *How he/she fights* when angry.	①	②	③	④	⑤
b. *What he/she learned* from his/her family when growing up.	①	②	③	④	⑤
c. *How he/she reacts* when my feelings are hurt.	①	②	③	④	⑤
d. *What he/she has been like* in past relationships.	①	②	③	④	⑤
e. *What he/she believes* about right and wrong.	①	②	③	④	⑤
f. *How well he/she gets along* with his/her parent(s).	①	②	③	④	⑤
g. *What his/her friendships* are like.	①	②	③	④	⑤

12. Please respond to the following open-ended questions.

    a.   Looking back, why did you attend the course?

    b.   Before taking this course, how had relationships gone for you?

    c.   What were the positive aspects of taking the course?

    d.   Where there any negative aspects? If yes, what things posed problem(s) for you?

    e.   Was there anything that surprised you? If yes, please explain.

    f.   What were your experiences with the other people in your course?

    g.   What were some of the main things you learned?

    h.   How has taking the course changed your approach to dating and/or how you interact in relationships?

    i.   Do you think this course would be useful to others? If so, how?

    j.   What else would you like to share?

THANK YOU!