Jefferson County
Healthy Marriage Initiative

Final Evaluation Report

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Executive Summary

    Introduction. In 2006, COPES Inc. was awarded a five-year Healthy Marriage Initiative grant from the Administration for Children and Families (ACF). An adaptation of Creating Lasting Family Connections (CLFC) was implemented to improve relationship skills of husbands recently released from prison and their wives. *Method*. Participants for the present study were 401 individuals who either voluntarily participated in the implementation of CLFC (intervention) or another program typically offered for those being released from prison (comparison). Two primary analyses were conducted to examine (1) whether the 144 CLFC husbands had more positive changes over time than a convenience sample of 113 men participating in the comparison condition, and (2) whether both husbands and wives (288 individuals or 144 couples) experienced positive changes over time on relationship skills as a result of exposure to the CLFC program. Surveys measuring relationship skills were administered prior to participation in the program, after participation in the program, and 3-6 months after completion of the post-test survey. *Results*. When comparing husbands to a comparable sample of men, relationship skills remained relatively constant for the comparison group; however, relationship skills improved for the CLFC group. Examining only husbands and wives exposed to the CLFC program, the pattern of changes in relationship skills was nearly identical for husbands and wives with relationship skill increasing between pre- and post-test, and increasing slightly between post-test and follow-up. *Summary/Conclusions*. Thus, the statistically significant findings suggested that the CLFC program: improved the relationship skills of husbands exposed relative to a sample of men not so exposed; improved the relationship skills of both husbands and wives; and created improvements in relationship skills that persisted at follow-up. It is likely that this implementation of the CLFC that positively affected relationship skills accomplished the ultimate goals of the HMI initiative. Although these conclusions are limited due to the findings coming from correlational research, the robust nature of positive findings of CLFC on relationship skills fosters more confidence in these conclusions.

Introduction

In 2006, COPES Inc. was awarded a Healthy Marriage Initiative grant from the Administration for Children and Families (ACF). The mission of ACF's Healthy Marriage Initiative (HMI) is to help married couples gain greater access to marriage education services that enable them to acquire the skills and knowledge necessary to form and sustain healthy marriages. ACF is particularly interested in supporting marriage education and marriage enrichment projects specifically designed for couples. This includes, but is not limited to, married couples, engaged couples, and couples interested in marriage. The Healthy Marriage Demonstration Grants are part of ACF's efforts to reach more broadly across ages and into communities throughout the country. The goal of this funding opportunity is to help communities develop and test the effectiveness of HMI for individuals, couples, youth, or other target groups (e.g., immigrant families, low-income families, families with special needs). The desired outcome of implementing these HMI grants is to help to identify what works and what does not work in building and sustaining healthy marriages.

In support of the purposes outlined for the HMI, the Jefferson County HMI established the following goal and objectives:

> *Goal: To increase the likelihood of marital stability of low-income ex-offenders who are returning to the Metro Louisville area, including their spouses, by implementing the Creating Lasting Family Connections curriculum annually for five years with 90 individuals including re-entry persons and their spouses (450 individuals total).*

Objective 1: CLFC participants will show a significant *increase in their knowledge and use of effective communication skills.*

Objective 2:   CLFC participants will show a significant *increase in their knowledge and use of conflict resolution skills.*

Objective 3: Adult CLFC participants will show a significant *increase in their knowledge and use of effective intra-personal skills.*

Objective 4: CLFC participants will show a significant *increase in their knowledge and use of emotional awareness skills.*

Objective 5: CLFC participants will show a significant *increase in their knowledge and use of emotional expression skills.*

Objective 6: CLFC participants will show a significant *increase in their knowledge and use of inter-personal skills.*

Objective 7: CLFC participants will show a significant *increase in their knowledge and use of relationship management skills.*

Objective 8: CLFC participants will show a significant *increase in their relationship satisfaction.*

Objective 9: CLFC participants will show a significant *increase in their relationship commitment.*

Program Description: Creating Lasting Family Connections

The original program design for the Jefferson County HMI consisted of an 18-20 session program of the Creating Lasting Family Connection (CLFC) curriculum. During a site visit from ACF advisors/consultants, it was recommended that COPES revise the traditional 18-20 session format of the CLFC program into a shortened version to accommodate the difficulty of retaining high-risk participants (returning offenders who are also dealing with substance abuse and/or behavioral health issues). As a result of these discussions, COPES formulated three variations of program implementation (e.g., number of sessions) to accommodate the needs and life circumstances of potential participants. Because the CLFC program is modular in

design, COPES simply dropped two modules ("Developing Positive Parental Influences" and "Getting Real") to accomplish the shortened version. Currently, the three optional program structures are:

- an 18-20 session program (original),
- a 10 session program, and
- a weekend retreat program.

Data presented in the report are from participants that received either the 10 session or the weekend retreat program.

In year two of the initiative, COPES was advised by ACF consultants to drop the comparison group components of the evaluation. As such, we did not collect comparison group data as part of the current project. However, COPES, Inc. received and administered an ACF-funded Fatherhood Initiative grant during the same time period as this project. The Fatherhood project was able to collect data from comparison group participants at baseline, exit, and follow-up (the same data collection time points as program participants). For purposes of this report, we have utilized the Fatherhood Initiative's comparison group participants to enable us to conduct a more meaningful and rigorous analysis of the data. Comparison group participants are part of the same target population and have similar characteristics that qualify them to serve as a comparison group of convenience.

Method

Participants

The participants for the present study were 401 individuals who voluntarily participated in the COPES, Inc., Jefferson County Healthy Marriage Initiative (i.e., intervention group) or one of the programs typically offered for those being released from prison (i.e., the comparison group). The male participants were released from prison between the years of 2006 and 2011. Of the 401 clients, 288 participated in the intervention condition and 113 participated in the comparison condition. As can be seen in Table 1, the individuals were in their mid thirties (*M*=34.27) and predominately African-American (51%) or Caucasian (46%) with very few Hispanic clients (3%) being represented in the sample. Examining the background characteristics of these clients, close to half lived with a relationship partner (41%), were independently housed (58%), and had children living with them (50%); however, most clients reported having a child (83%). Most clients had a high school diploma or a GED (97%); however, only about half (54%) were employed. There were two separate subsets of these cases examined in our analysis. The first subset consists of only 144 husbands participating in the Jefferson County Healthy Marriage Initiative, which implemented the Creating Lasting Family Connections (CLFC) program as previously adapted for couples and 113 men participating in other programs typically offered to prisoners upon release. The second subset consists of 144 married couples (i.e., 288 persons) participating in the CLFC program. The former subset was used to examine whether there was differential change between the intervention and comparison group for men and the later was used to examine whether there was change over time among husbands and wives participating in the intervention. We also explored the background characteristics for these two subsets of data, which also appear in Table 1. The sample subsets were very similar to the total sample with two exceptions. More specifically, the intervention analysis sample subset had fewer participants living with a child under the age of 18 (40%) and had fewer participants who were independently housed (46%).

Table 1: Sample sizes and percents for sample characteristics.

	Usable Cases	*Intervention Analysis*	*Couple Analysis*
N	401	257	288 (or 144 couples)
Wave 1 Participants	401(100%)	257(100%)	288(100%)
Wave 2 Participants	321(80%)	209(81%)	223(77%)
Wave 3 Participants	305(76%)	194(75%)	220(76%)
Dropped Out W2 or W3	96(24%)	63(25%)	68(24%)
Male	257(64%)	257(100%)	144(50%)
Hispanic	13(3%)	11(4%)	7(2%)
Caucasian	186(46%)	118(46%)	128(44%)
African-American	203(51%)	131(51%)	153(53%)
Live with Relationship Partner	164(41%)	105(41%)	136(48%)
Has Child	329(83%)	208(82%)	240(84%)
Lives with <18 Year Old Child	196(50%)	99(40%)	168(59%)
Independently Housed	232(58%)	117(46%)	196(69%)
High School Grad or GED	386(97%)	248(97%)	277(98%)
Employed	215(54%)	124(49%)	161(56%)
Age (average)	34.27	34.96	34.45

Selectivity Biases

Two alternative explanations for putative study findings are that (1) intervention effects could be due to non-random assignment of individuals to the intervention and comparison groups (i.e., a quasi-experimental design) and (2) effects could be due to participants who are likely to exhibit negative outcomes being more likely to drop out of the study, especially among those exposed to CLFC. Both of these potential sources of selectivity biases were addressed using a Heckman two-step procedure (Heckman, 1976, 1979). This approach involves regressing either (1) intervention group or (2) attrition status on participant background characteristics in the first step using a probit regression model. The second step involves producing predicted scores, where these scores are transformed to an inverse Mill's ratio (IMR), and the IMR is included in all inferential analyses. These methods are not subject to the same biases that characterize propensity methods.

Prior to performing the first step probit models, missing background characteristic data were imputed using the Expectation Maximization (EM) algorithm in SPSS 18.0. EM employs maximum-likelihood estimation to ensure consistency between the variance-covariance matrix derived from the observed data and the imputed data (Dempster, Laird, & Rubin, 1977). All background characteristics mentioned in the participants section were used as predictors and outcomes in the EM model. Due to the necessity of eliminating any case with any missing background characteristic, we felt that imputation posed fewer inferential risks than eliminating

entire cases. We can examine assignment to condition and attrition in the intervention sample subset, but we were only able to examine attrition in the couple analysis sample subset.

Our selectivity bias analyses were conducted separately for the two sample subsets due to two sample subsets being used to examine (1) whether the husbands in the intervention group differed from a convenience sample of similar men who were also recently released from prison and (2) whether both husbands and wives in the intervention group only exhibited changes over time in the targeted outcomes. The intervention comparison sample subset required an examination of selectivity biases due to attrition and assignment; however, the examination of changes over time among couples sample subset only required an examination of selectivity biases due to attrition.

Examining selectivity biases in the intervention comparison sample subset, there was evidence to suggest that participants who lived with their partner, $z=2.12$, $p=.03$, and participants who lived with their children, $z=2.57$, $p=.01$, were more likely to be in the intervention group. The overall model did not significantly predicted assignment to condition, $\chi^2(246)=256.74$, $p=.31$; however, as we did have significant predictors, we created an IMR representing biases due to assignment to be included in all of our analyses examining comparisons to the intervention group. There was no evidence to suggest attrition related selectivity biases, as there were no significant predictors of attrition and the overall model was non-significant, $\chi^2(246)=258.13$, $p=.29$.

Examining selectivity biases due to attrition in our couple sample subset, the only significant predictor of attrition suggested that participants who either did not graduate high school or did not obtain a GED were more likely to drop out of the study, $z=-2.08$, $p=.04$. Again, the overall model did not predict attrition, $\chi^2(728)=740.38$, $p=.37$; however, due to there being one significant predictor of attrition, we did create an IMR representing selectivity biases due to attrition to be included in all of our models examining change among couples.

Procedure

The survey was administered to all participants at pre-test, post-test, and follow-up. Follow-up surveys were administered 3-6 months after the post-test survey. Surveys were administered by program staff. Informed consent was first required from all participants before completing the survey. All participants were informed that their participation in the survey was voluntary and their decision to not complete the survey would not affect their participation in the program. Additionally, participants were informed that their responses were anonymous and would not be shared, except in aggregate form for reporting purposes. Full proctoring (i.e., staff reading the survey to participants) was offered to those participants who had difficulty reading. Completed surveys were placed in a sealed envelope and sent to the evaluator for data entry and analysis.

Measures

Questionnaire. Clients completed a questionnaire at each of the three waves of the study that included 71 items inquiring about various relationship skills using a 1 (strongly disagree) to 5 (strongly agree) scale. Nine facets of relationship skills targeted by CLFC were measured by these items (Olson, Fournier, & Druckman, 1986). We examined whether all items purported to measure an underlying construct were measuring the same underlying construct by calculating Cronbach's alpha at time one for each scale. Cronbach's alphas greater than .70 are considered good and alphas greater than .60 are considered acceptable. Scale scores were calculated by taking the average of responses to items comprising each scale. The psychometric properties of these measures appear in Table 2. The nine scales measured in the data with example item content were as follows.

- *Communication Skills* (α=.81, *n items*=8). Example item: I am able to express my true feelings to those whom I trust.
- *Conflict Resolution Skills* (α=.54, *n items*=6). Example item: Even when in a conflict with someone I trust, I can respectfully share my thoughts and feelings.
- *Intra-Personal Skills* (α=.65, *n items*=9). Example item: I am honest with myself about what I feel and need.
- *Emotional Awareness* (α=.78, *n items*=9). Example item: Those I trust can really understand my hurts and joys.
- *Emotional Expression* (α=.81, *n items*=9). Example item: I often let others know what I am feeling.
- *Inter-Personal Skills* (α=.81, *n items*=8). Example item: I'm open and honest with what I say to those I trust.
- *Relationship Management Skills* (α=.64, *n items*=8). Example item: I know I can count on some of the people in my life.
- *Relationship Satisfaction* (α=.89, *n items*=7). Example item: I am happy with how conflict is resolved in my relationships.
- *Relationship Commitment* (α=.77, *n items*=7). Example item: I trust my partner enough to stay with them.

Alphas were low for the Conflict Resolution Skills scale; however, alphas were acceptable for the remainder of the scales. The Conflict Resolution Skills scale was not easily remedied, as alpha was not substantially improved by dropping a small number of items. As such, findings for this scale should be interpreted with caution, as it means that the items were not necessarily measuring the same underlying construct.

Table 2: Psychometrics for Outcome Measures

	# Items	Range	Alpha Time 1
Communication Skills	8	1-5	.81
Conflict Resolution Skills	6	1-5	.54
Intra-Personal Skills	9	1-5	.65
Emotional Awareness	9	1-5	.78
Emotional Expression	9	1-5	.81
Inter-Personal Skills	8	1-5	.81
Relationship Management Skills	8	1-5	.64
Relationship Satisfaction	7	1-5	.89
Relationship Commitment	7	1-5	.77

Preliminary examination of the data indicated that these nine relationship skills were highly correlated at each wave. We performed a principal component at each wave to determine whether all of these relationship skills loaded on a single relationship skills factor. This was indeed the case, as all loadings on the first principal component were greater than .51 at each time period. Further, alphas were high at pre-test (.89), post-test (.91), and follow-up (.92). As

such, we created a relationship skills aggregate, which serves as a summary measure for all of the relationship skills examined.

Analysis

All analyses performed were concerned with whether there were changes over time among those who participated in the intervention group, and a convenience sample of comparable men being released from prison allowed us to examine this change for male intervention participants to male comparison participants. Thus, the former design reflects a purely correlational research design and the later design reflects a quasi-experimental (and correlational) research design.

HLM was used to deal with multiple observations being nested within each participant (i.e., multiple wave repeated observations) for all analyses. Although simpler general linear models can be used to handle these data, HLM performed in this manner confers the benefits of being able to use all of the data, regardless of whether a participant has all three repeated observations (*cf.* Raudenbush & Bryk, 2002) and this approach is more consistent with an intent-to-treat approach. All models were posed as random intercept models, which assume that variability may arise among individuals due to nesting. Analyses for couples examined both husbands and wives in the same equation using the form suggested by Raudenbush and his colleagues (Raudenbush, Brennan, & Barnett, 1995). These analyses included separate slopes and intercepts for husbands and wives in the same equation, which allows us to partial the variability shared by the couple, while simultaneously allowing these non-independent observations to be included in the same equation.

In our intervention comparison models, at level one (i.e., the repeated observation level), all outcomes were seen as being predicted by orthogonally coded linear (-1, 0, 1) and quadratic contrasts (1, -2, 1; i.e., "u"-shaped) time contrasts, as well as our correction for selectivity due to assignment:

Outcome = π_0 + π_1(Linear) + π_2(Quadratic)+ π_3(Selection IMR)

At level two (i.e., the individual level), the level one intercept was seen as being predicted by a coded contrast (-1 vs. 1) representing the intervention group and our estimate of random variability:

$\pi_0 = \beta_{00} + \beta_{01}$*(Intervention) + r_0*

The remaining level two equations represented the cross-level interactions between time and intervention group, as well as an intercept only equation for our level one selectivity predictor:

$\pi_1 = \beta_{10} + \beta_{11}$*(Intervention)*
$\pi_2 = \beta_{20} + \beta_{21}$*(Intervention)*
$\pi_3 = \beta_{30}$

In our models examining only couples participating in the intervention group, at level one (i.e., the repeated observation level), all outcomes were seen as being predicted by orthogonally coded linear (-1, 0, 1) and quadratic contrasts (1, -2, 1; i.e., "u"-shaped) time contrasts for husbands and wives separately, as well as our correction for selectivity due to attrition for husbands and wives separately:

Outcome =π_0(Husband Constant) + π_1(Wife Constant) + π_2(Husband Linear) + π_3(Wife Linear)
*   + π_4(Husband Quadratic) + π_5(Wife Quadratic) + π_6(Husband Selection IMR)*
*   + π_7(Wife Selection IMR)*

At level two (i.e., the individual level), the level one intercepts were seen as being predicted by our estimates of random variability:

$$\pi_0 = \beta_{00} + r_0$$
$$\pi_1 = \beta_{10} + r_1$$

The remainder of the level two equations simply represented an intercept with no predictors:

$$\pi = \beta$$

All models were run using SPSS 18.0.

Results

Changes in Relationship Skills for Men Exposed and Not Exposed to the Intervention

We first examined the pattern of means for relationship skills by condition and wave, which appears in Table 3. As can be seen in the table, the pattern of changes in means by condition for most scales is similar. The contrast of changes in the intervention and comparison groups appears in Table 4. Statistically significant effects of particular interest appear in columns five and six (i.e., Intervention X Linear and Intervention X Quadratic) of Table 3. The findings for the individual scales and the aggregate relationship skills scale appear in both tables. Findings were in the same direction for all scales; however, the Intervention X Linear and Intervention X Quadratic interactions failed to reach a conventional level of significance for Relationship Commitment. As all findings were in the same direction and the majority was significant, we only interpreted the Relationship Skills aggregate in the interest of brevity. As can be seen in Figure 1, the general pattern of results suggested that relationship skills remained relatively constant for the comparison group; however, relationship skills improved for the intervention group. More specifically, relationship skills exhibited a large increase between pre- and post-test for the intervention group; and the level of relationship skills remained high and increased slightly between post-test and follow-up for the intervention group.

Change Over Time in Relationship Skills for Husbands and Wives

For these analyses, we too first examined the pattern of means for relationship skills by spouse gender and wave, which appears in Table 5. The examination of changes over time for husbands and wives appears in Table 6. Statistically significant effects of particular interest appear in the columns two and three for wives and seven and eight for husbands (i.e., Intervention X Linear and Intervention X Quadratic) of Table 6. As with the prior analyses, the pattern of findings for the aggregate relationship skills scale and the pattern of changes over time for each individual scales, as well as statistical significance decisions, were similar, so we only interpreted the Relationship Skills aggregate in the interest of brevity. As can be seen in Figure 2, results suggested that the pattern of changes in relationship skills was nearly identical for husbands and wives. Also, relationship skills exhibited a large increase between pre- and post-test and these skills remained high and increased slightly between post-test and follow-up.

Table 3: Intervention comparison unadjusted cell means for study outcomes.

	Intervention			Comparison		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
N	144	114	112	113	100	87
Communication Skills	3.84	4.08	4.15	4.06	4.12	4.03
Conflict Resolution Skills	3.01	3.21	3.33	3.14	3.12	3.12
Intra-Personal Skills	3.24	3.43	3.42	3.19	3.30	3.21
Emotional Awareness	3.42	3.65	3.74	3.54	3.70	3.61
Emotional Expression	3.65	3.91	4.01	3.73	3.87	3.86
Inter-Personal Skills	3.55	3.85	3.89	3.73	3.79	3.78
Relationship Management Skills	3.63	3.84	3.84	3.75	3.72	3.72
Relationship Satisfaction	3.44	3.90	3.89	3.68	3.82	3.80
Relationship Commitment	4.25	4.40	4.37	4.21	4.27	4.25
Relationship Skills (avg. of 9 prior skills)	3.56	3.81	3.85	3.67	3.75	3.71

Figure 1: Relationship skills as a function of intervention group and time.
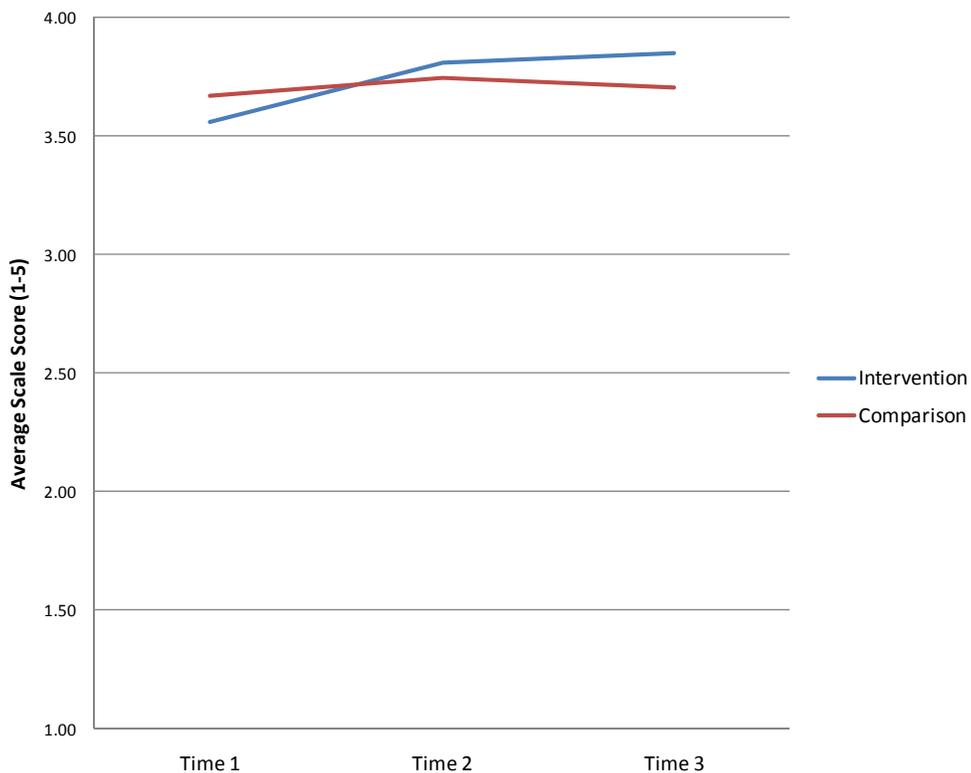
Table 4: Intervention effect unstandardized regression coefficients, effect sizes, and statistical significance.

	Intercept	Linear Change	Quadratic (U-Shaped) Change	Intervention	Intervention X Linear	Intervention X Quadratic	Assignment Correction (IMR)	Random Intercept Effect (ICC)
Communication Skills	4.06(.94)**	.07(.16)**	-.02(-.11)*	-.03(-.05)	.08(.19)**	-.01(-.02)	-.02(-.01)	.18(.54)**
Conflict Resolution Skills	3.17(.91)**	.07(.19)**	-.01(-.02)	.02(.04)	.08(.21)**	-.01(-.04)	-.02(-.01)	.17(.55)**
Intra-Personal Skills	3.33(.93)**	.05(.14)**	-.03(-.17)**	.06(.13)*	.04(.12)*	.00(.00)	-.05(-.03)	.15(.61)**
Emotional Awareness	3.73(.93)**	.10(.25)**	-.03(-.13)**	-.02(-.04)	.06(.15)**	.00(.02)	-.15(-.08)	.17(.56)**
Emotional Expression	3.92(.93)**	.12(.29)**	-.02(-.11)*	.01(.02)	.06(.14)**	.00(-.02)	-.11(-.06)	.19(.55)**
Inter-personal Skills	3.80(.93)**	.10(.24)**	-.03(-.11)*	-.01(-.01)	.07(.16)**	-.02(-.09)+	-.04(-.02)	.18(.54)**
Relationship Management Skills	3.79(.95)**	.04(.12)**	-.01(-.07)	.01(.03)	.06(.15)**	-.02(-.11)*	-.06(-.04)	.11(.48)**
Relationship Satisfaction	3.77(.90)**	.14(.26)**	-.05(-.17)**	-.02(-.03)	.08(.15)**	-.03(-.10)*	-.03(-.01)	.30(.56)**
Relationship Commitment	4.41(.97)**	.04(.09)+	-.02(-.09)+	.03(.07)	.01(.03)	-.01(-.03)	-.17(-.11)+	.09(.37)**
Relationship Skills (avg. of 9 prior skills)	3.77(.96)**	.08(.29)**	-.02(-.16)**	.01(.02)	.06(.21)**	-.01(-.07)	-.07(-.05)	.11(.63)**

Note: ** *p*<.01, * *p*<.05, + *p*<.10; Unstandardized regression coefficients listed first, and in parentheses *t*-values with accompanying degrees of freedom were transformed to an effect size *r*, using the formula presented in Cohen (1988).

Table 5: Couple unadjusted cell means for study outcomes.

	Wives			Husbands		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
N	144	113	112	144	114	112
Communication Skills	3.66	4.05	4.11	3.84	4.08	4.15
Conflict Resolution Skills	3.04	3.33	3.41	3.01	3.21	3.33
Intra-Personal Skills	3.24	3.48	3.51	3.24	3.43	3.42
Emotional Awareness	3.38	3.68	3.79	3.42	3.65	3.74
Emotional Expression	3.61	3.98	4.05	3.65	3.91	4.01
Inter-Personal Skills	3.53	3.88	3.98	3.55	3.85	3.89
Relationship Management Skills	3.68	3.96	3.96	3.63	3.84	3.84
Relationship Satisfaction	3.24	3.78	3.82	3.44	3.90	3.89
Relationship Commitment	4.27	4.39	4.43	4.25	4.40	4.37
Relationship Skills (avg. of 9 prior skills)	3.52	3.84	3.90	3.56	3.81	3.85

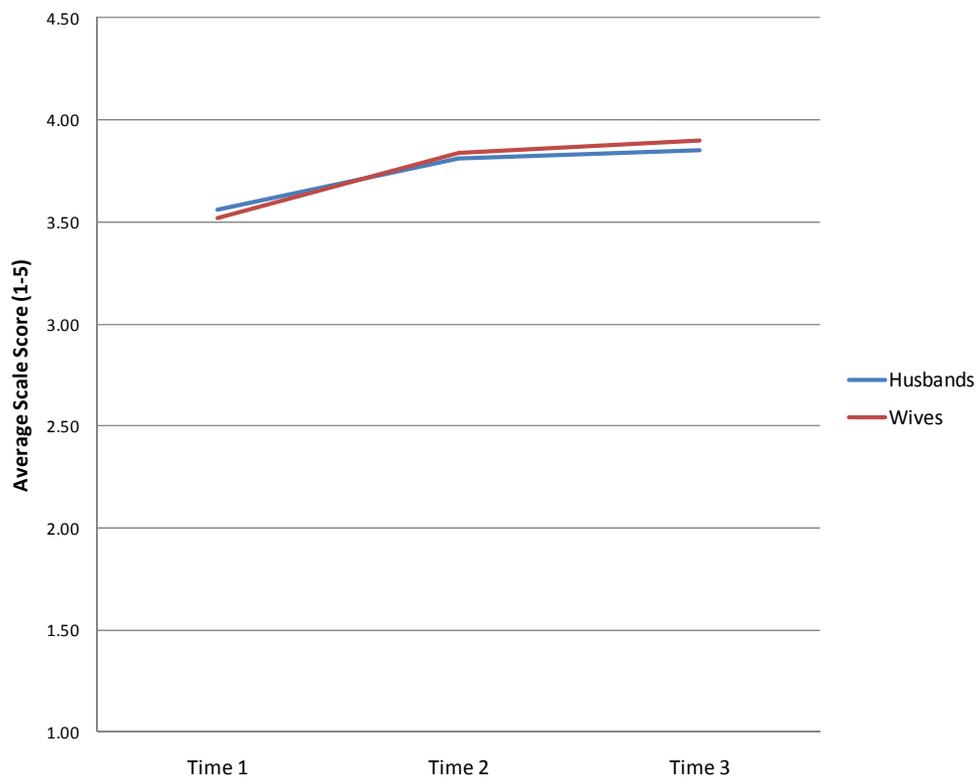*Figure 2*: Relationship skills as a function of gender and time.

Table 6: Couple change effect unstandardized regression coefficients, effect sizes, and statistical significance.

	Wives				Husbands				Random Effects (ICC)	
	Intercept	Linear Change	Quadratic (U-Shaped) Change	Attrition Correction (IMR)	Intercept	Linear Change	Quadratic (U-Shaped) Change	Attrition Correction (IMR)	Wife Intercept	Husband Intercept
Communication Skills	2.52(.41)**	.20(.33)**	-.05(-.14)**	.75(.25)**	3.55(.58)**	.15(.25)**	-.03(-.09)*	.26(.09)	.25(.42)**	.19(.32)**
Conflict Resolution Skills	2.21(.40)**	.17(.30)**	-.03(-.09)*	.56(.21)*	2.72(.47)**	.15(.26)**	-.01(-.04)	.26(.09)	.19(.35)**	.19(.36)**
Intra-Personal Skills	2.28(.45)**	.12(.24)**	-.03(-.12)*	.60(.24)**	2.74(.52)**	.08(.18)**	-.03(-.12)*	.35(.14)+	.17(.40)**	.15(.36)**
Emotional Awareness	2.21(.39)**	.18(.31)**	-.03(-.08)+	.75(.26)**	2.73(.48)**	.16(.28)**	-.02(-.08)+	.50(.18)*	.22(.41)**	.18(.33)**
Emotional Expression	2.96(.48)**	.20(.33)**	-.05(-.14)**	.49(.17)*	3.11(.55)**	.18(.30)**	-.03(-.09)+	.43(.16)+	.22(.42)**	.15(.29)**
Inter-personal Skills	2.71(.47)**	.21(.33)**	-.04(-.11)*	.58(.21)*	3.16(.54)**	.17(.27)**	-.05(-.13)**	.35(.12)	.19(.35)**	.18(.33)**
Relationship Management Skills	2.91(.53)**	.12(.25)**	-.04(-.16)**	.51(.20)*	3.67(.67)**	.10(.20)**	-.03(-.12)**	.05(.02)	.18(.43)**	.13(.30)**
Relationship Satisfaction	2.42(.31)**	.27(.35)**	-.08(-.19)**	.63(.16)+	4.07(.53)**	.21(.28)**	-.08(-.18)**	-.20(-.05)	.46(.45)**	.33(.31)**
Relationship Commitment	4.08(.66)**	.07(.14)**	-.01(-.04)	.15(.06)	3.92(.70)**	.05(.09)*	-.03(-.09)*	.23(.10)	.17(.41)**	.12(.28)**
Relationship Skills (avg. of 9 prior skills)	2.68(.54)**	.17(.40)**	-.04(-.17)**	.57(.25)**	3.30(.65)**	.14(.33)**	-.03(-.16)**	.25(.11)	.14(.43)**	.12(.35)**

Note: ** *p*<.01, * *p*<.05, + *p*<.10; Unstandardized regression coefficients listed first, and in parentheses *t*-values with accompanying degrees of freedom were transformed to an effect size *r*, using the formula presented in Cohen (1988).

Summary/Conclusions

The present study used correlational designs to examine whether an implementation of CLFC promoting healthy marriages (1) produced better outcomes in men exposed to the program relative to those not so exposed, and (2) produced positive changes in both husbands and wives exposed to the program. The data analyzed suggested that the intervention, based on statistically significant findings:

- improved the relationship skills of husbands exposed relative to a sample of men not so exposed;
- improved the relationship skills of both husbands and wives; and
- created improvements in relationship skills that persisted at follow-up.

These findings suggest that there is a direct and positive impact of the CLFC intervention on relationship skills.

These findings are similar to prior studies examining whether the CLFC program imparted these skills to fathers recently released from prison (Shamblen, McGuire, Collins, & Strader, 2011). The CLFC program has also been shown to affect outcomes that reduce costs to society through a reduction in recidivism (McGuire, Shamblen, Collins, & Strader, 2011; Shamblen et. al., 2011). Whereas this outcome was not measured for the data reported here, this robust finding more than likely occurred for the sample reported here.

The relationship skills targeted by this program reflect relationship maintenance strategies and social support, which have been shown in the literature to be related to increased commitment to relationships and a lower likelihood of divorce (Canary, Stafford, & Semic, 2002; Sullivan, Pasch, Johnson, & Bradbury, 2010). By extrapolation, it is likely that this implementation of the CLFC that positively affected relationship skills accomplished the ultimate goals of the HMI initiative, as well as increasing the longevity of these marriages.

These findings reported here do come from correlational research, so they must be interpreted with caution. More specifically, our comparison of husbands exposed to CLFC with a similar sample of men not so exposed may be an artifact of the comparison group representing a non-randomly assigned convenience sample. Despite this possible alternative interpretation of our findings, we see this explanation as untenable, due to these findings replicating prior findings using a sample more closely approximating random assignment to condition (Shamblen et. al., 2011). Further, although there was no comparison group sample of wives, we suspect we would find similar positive findings if we had such a sample, as wives participating in the CLFC program had a trajectory of increasing relationship skills that was nearly identical to the trajectory of their husbands. Thus, despite the limitations of the present study, the robustness of prior findings would argue that the program did indeed improve the relationship skills of husbands who were recently incarcerated, as well as the relationship skills of their wives.

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