

**Practice makes Perfect? An Exploration of Benefits Gained from a six week
Mindfulness-Based Couple Relationship Education Course**

by

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Abstract

Mindfulness-Based Couple Relationship Education (MBCRE) courses seek to provide participants with skills that they can use to benefit themselves and their relationships. This pilot study of *Couples Connecting Mindfully (CCM)*, a MBCRE course does just that through focusing both on individual and relational mindful practice. This project examined magnitude of practice, examining duration (number of minutes) and frequency (times) as well as the number of weeks participants' attended the class in relation to a variety of outcome variables. Participants were 58 males and females who were recruited and attended a six-week mindfulness course. The sample was split by gender. Mindfulness, stress level, positive and negative interactions, depressive symptoms, individual empowerment, confidence, and couple quality were the outcomes examined in this study. Analyses indicate that the duration of practice and number of weeks attended are significant predictors of outcomes for males, where frequency of practice is predictive of outcomes for females. Implications of these findings and suggestions for future studies for researchers and the teaching of *CCM* in the future for educators are discussed.

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Table of Contents

Abstract	ii
Acknowledgements.....	iii
List of Tables	vii
1. Introduction	1
CRE.....	1
Overarching Theory	1
Mindfulness-based CRE	2
Practice.....	4
Current Study	5
II. Review of Literature.....	5
Overview.....	5
Theoretical Approaches to the Study of Relational Outcomes for Participants in CRE	7
Mindfulness-based CRE	8
Practice.....	11
The Implementation of Practice in Mindfulness-Based CRE.....	14
Overview of Current Study	16
III. Method	18
Participants.....	18
Program Design and Implementation	19

Procedure	22
Measures	23
Plan of Analysis	26
IV. Results	27
Descriptive Statistics and Correlations	27
Hypothesis 1: Individuals who completed more times practicing their weekly homework assignments will report greater relationship quality, confidence, change in mindfulness, individual empowerment, positive interactions and less stress, negative interactions, and depressive symptoms than individuals who completed fewer times of weekly homework. Significant gender based differences among the associations of outcomes related to this hypothesis will occur.	30
Hypothesis 2: Individuals who self-reported more time (minutes) in mindful practices on a weekly basis will report greater levels of change in mindfulness, positive interactions, relationship quality, individual empowerment, confidence, and lower stress levels, negative interactions, and depressive symptoms than individuals who self-reported less time (minutes) in weekly mindful practices. Significant gender based differences among the associations of outcomes related to this hypothesis' various outcomes will occur.	30
Research Question 1: Do individuals who attend a greater number of classes (weeks) throughout the Couples Connecting Mindfully course report greater levels of change in mindfulness, positive interactions, relationship quality, individual empowerment, confidence, and lower stress levels, negative interactions, and depressive symptoms than those who attended a lesser number of classes? Will significant gender based differences among the associations of outcomes related to this research questions' various outcomes occur?	31
V. Discussion	32
Effect of Magnitude of Practice	32
Examining Outcomes	33
Implications	34
Limitations and Future Directions	35
Conclusions	37

References.....	39
Appendix A: Change in Mindfulness Item.....	59
Appendix B: Global Stress Level Item.....	60
Appendix C: Positive and Negative Interactions Item.....	61
Appendix D: Depressive Symptoms Item.....	62
Appendix E: Individual Empowerment Item.....	63
Appendix F: Confidence and Commitment Items.....	64
Appendix G: Couple Quality Item.....	65
Appendix H: Weekly Surveys.....	66

List of Tables

Table 1. Descriptive Statistics of Outcomes	46
Table 2. Correlations of Variables with Outcomes Difference Scores for Females and Males ...	47
Table 3. Linear Regression for Mindfulness for Males and Females	48
Table 4. Linear Regression for Stress for Males and Females	49
Table 5. Linear Regression for Positive Interactions for Males and Females	50
Table 6. Linear Regression for Negative Interactions for Males and Females.....	51
Table 7. Linear Regression for Depressive Symptoms for Males and Females.	52
Table 8. Linear Regression for Individual Empowerment for Males and Females	53
Table 9. Linear Regression for Confidence for Males and Females	54
Table 10. Linear Regression for Couple Quality for Males and Females	55
Table 11. Demographics of CCM Participants	56
Table 12. Descriptive Statistics and T-test Results for Males for all Outcomes	57
Table 13. Descriptive Statistics and T-test Results for Males for all Outcomes	58

Introduction

CRE

Couple Relationship Education (CRE) programs have become more popular over the last few decades with an aim to benefit couple's relationships through teaching skills associated with healthy relationships and enhancing relational qualities (Hawkins & Ooms, 2012; Markman & Rhoades, 2012). With the popularity it has gained, the focus of CRE has moved from educating distressed couples to fostering the dynamics of well-functioning relationships and the foundation of love (Kozlowski, 2013).

Research shows that couples who participate in CRE programs are more likely to practice forgiveness, communication, and commitment (Fincham, Stanley, & Beach, 2007; Gottman & Silver, 1999), which have been shown to benefit individuals physically and mentally. These benefits are positive for individuals, but have a relational impact as well. A more recent addition in relation to CRE is the inclusion of mindfulness-based CRE, which very prominently includes a specific skill building through practice aspect to it. Therefore, the purpose of the current study is to examine a six-week Mindfulness-Based CRE program, *Couples Connecting Mindfully*, to better understand the skill building/practice aspect of this type of CRE offerings.

Overarching theory

Social learning theory (Bandura, 1963) and experiential theory (Kolb, 1984) both play an important part in understanding how CRE may affect relationships. Although a variety of theories have been utilized to explain behavior changes in attending CRE, the aforementioned

link education and behavioral changes. Bandura's social learning theory suggests that people will take on behaviors that are modeled for them through others they view as more knowledgeable, focusing on the social context. Kolb's experiential theory highlights the importance of interaction with others to learn. These two theories interact in this study seamlessly due to the promotion of both individual and paired skill building that is taught through example.

Mindfulness-based CRE

Mindfulness is an open attention to and awareness of the present moment, without becoming engaged in emotional reactions to circumstances (Kabat-Zinn, 1990). Khiry, Sharma, and Fournier's meta-analysis (2015), established the practice of mindfulness as associated with lower anxiety, depression, and distress, as well as improved quality of life of healthy individuals. Jon Kabat-Zinn, author of the book *Full Catastrophe Living* (1990), highlights the importance of the relationship in mindfulness. This is due to the innate promotion of unity, connection and closeness within relationships. For example, the application of a loving kindness meditation has been shown to generate increased feelings of compassion, gentleness, and empathy towards someone else while also benefitting the individual practicing the meditation by calming their mind (Kabat-Zinn, 1990).

Mindful practices are correlated with many individual benefits that may also promote a healthier relationship (Kozlowski, 2013). Individual psychological well-being has been shown to facilitate stronger romantic relationships, which is possible through mindful practices because they have been shown to be associated with less psychological distress (Kozlowski, 2013). People who live a more mindful lifestyle also are likely to view their relationships in more positive ways because they are less likely to experience negative affectivity, an important predictor of relational conflict (Gottman & Evenson, 1992).

Carson, Carson, Gil, and Baucom (2004) found mindful practices to be efficacious in enriching romantic relationship functioning and improving individual psychological well-being across a wide range of measures. Carson et al., (2004) developed and utilized an 8 week mindfulness program derived from John Kabat-Zinn's (1990) work aimed at enhancing the relationship of non-distressed couples through mindfulness based stress reduction strategies. Using randomized wait-list controlled trials, they studied 22 individuals through summary measures, before and after the intervention as well as three months later. The study used a daily diary method to measure outcomes for two pre-intervention weeks as well as the final three weeks of the eight week program. Carson and colleagues focused on both individual well-being and relationship functioning, like the current study proposes to do. Empirical support was found for the implementation of a mindful approach to boost coping skills and relational functioning, reporting that "process of change measures showed improvements in individual relaxation, acceptance of partner, confidence in ability to cope, and overall functioning across a range of domains" (Carson et al., 2004, p. 488). This evidence is just one example of the wide array of possible benefits that relational mindfulness can provide when adopted into one's life.

Studies have shown that mindfulness increases levels of empathy in medical school students, as well as encourages less avoidance in romantic relationships, highlighting the benefits of mindfulness to all types of relationships (Kozlowski, 2013). The majority of research focused on relationship satisfaction and mindfulness uses the core principles of mindfulness combined with a relationship dynamic theory to justify studying the association (McGill, Adler-Baeder & Rodriguez, 2015). While many of the mindful practices taught are done so as individual practices, they are often relationally focused, highlighting the importance of caring for others,

not only one's self. As the research is progressing, it is becoming more focused on mindfulness in combination with relationship education programs (McGill et al., 2015).

Practice

While everyone has heard the old saying “practice makes perfect,” the idea of practice in this type of program hasn't been directly researched, whereas it has in other fields, for example education, including homework adherence and college education majors (Fernandez-Alonso, Suarez-Alvarez, & Muniz, 2015; Russel-Bowie, 2013). In relation to physical activity, Suppli, Due, Henriksen, Rayce, Holstein, and Rasmussen (2012) conducted a longitudinal study in which a sample of 561 adolescent participants were followed from age fifteen to twenty-seven in relation to their physical activity levels. Findings from this study provide evidence that vigorous physical activity at an early age was predictive of similar levels later in life. This research highlights the fact that making a habit out of a practice over time contributes to the maintenance of that practice over time. This research also reflects some of the factors in the Transtheoretical Model (TTM) created by Prochaska, DiClemente, and Norcross (1983). TTM states that people move through a series of stages when modifying behavior. The last stage of TTM is the maintenance stage, which has been highlighted in the research above. Other stages include pre-contemplation, contemplation, preparation, and action.

Research has indicated that practice is an important factor for gaining the most benefits out of an activity. For example, the instillation of habits in regards to homework is important in learning contexts (Fernandez-Alonso, Suarez-Alvarez, & Muniz, 2015). Homework adherence in therapy is also a significant predictor of outcomes for individuals in therapy (Eaton, Abeles, and Gutfreund, 1988). Integrating 150 minutes of physical activity weekly is positively related to the prevention of a myriad of health diseases and conditions (Garber et al., 2011; Warburton et al.,

2007). This type of practice is also important in regards to habit formation, for example exercising at least four times per week for six weeks led to a developed exercise habit for individuals (Kaushal & Rhodes, 2015). Also, when education majors were given the ability to work hands-on with music instruction, they experienced an improvement in self-assurance (Russel-Bowie, 2013). Furthermore, this research in the field of education provides a strong argument for the need to assess practice skills in CRE as a moderator of program effectiveness. There is a dearth of practice based assessments in CRE, not only mindfulness-based CRE.

Current Study

The current study is timely in light of the fact that research is moving towards an understanding of mindfulness as a means for promoting more positive relationships through prosocial behaviors and higher relationship quality (McGill et al., 2015). Through self-report, participants in a six week *Couples Connecting Mindfully (CCM)* class indicated, in amount of days, the completion of homework assignments per week. Homework assignments included completing the mindful practice at least once per day. In addition, each participant also reported the amount of time, in minutes, that they spent in mindful practice each day. Over the six weeks, six different mindful practices were taught and assigned. These included: awareness of breath, body scan, yoga/mindful movement, loving kindness, partner connect, and music meditation.

Review of Literature

Overview

Studies show that a myriad of benefits can be developed through healthy relational behaviors. Healthy behaviors could be defined as using communication and problem solving skills effectively (Gottman & Silver, 1999). According to Fincham and colleagues (2007), the understanding and use of forgiveness also plays a large part in healthy marriage behaviors. These

types of behaviors are related to positive well-being for both partners in romantic relationships (Kiecolt-Glaser & Newton, 2001), as well as for both children and families as a whole (Grych & Fincham, 1990; Kirkland, et al., 2011). Those who are married and cohabitating with a partner also report significant improvements in mental health status (Amato, 2015). Those who are in healthy partnerships report fewer health problems (Waite & Gallagher, 2000) and historically live longer (Ross, Mirowsky, & Goldsteen, 1990). Findings from studies such as these have promoted the implementation of CRE programs. CRE programs have been found to be effective in promoting relationship behaviors that are healthy (Hawkins & Ooms, 2012; Markman & Rhoades, 2012). CRE programs are multi-faceted though, as they have also been associated with preventing distress and dissolution within the relationship (Carroll & Doherty, 2003), while some even focus on divorce prevention (Markman, Stanley, & Blumberg, 1994). Participants of CRE programs report communication skills and conflict management skills as relevant topics of education (Burr, Hubler, Gardner, Roberts, & Patterson, 2014). CRE often highlights the importance of “fighting fair,” the ability to communicate through conflict, and therefore the above findings are a positive indication of the effectiveness of CRE.

It has been determined that participants in a six-week Mindfulness-Based CRE class experienced greater change in stress and positive interactions than did participants in a one day CRE program (Rodriguez, 2015). The current study continues assessing the benefits of the Couples Connecting Mindfully course through attempting to examine individual benefits from amount of days and amount of time spent in practice over the six week course. However, theory revolving around CRE programs will first be delineated, as well as examining the effects of regular skill based practice performance. Also, the literature surrounding the Mindfulness-Based CRE program will be explored.

Theoretical Approaches to the Study of Relational and Individual Outcomes for Participants in CRE

Theory should be used in all aspects of CRE programs, including design, application, and assessment (Adler-Baeder et al., 2004). Several CRE programs are based on social learning, experiential theory, and behavioral assumptions coupled with targeted behavioral changes. (Markman & Rhoades, 2012). It is known from Bandura's social learning theory perspective (Bandura, 1977) that individuals learn about relational behaviors through social context, specifically by models provided within that context. Applying this to CRE programs, it is assumed that in the classes, participants will engage in experiences that will influence them to take on the behaviors that are modeled for them by the facilitators. Individuals are more likely to act in a way that will benefit them (Thibaut & Kelley, 1959). Therefore, participants are expected to begin to practice skills more after understanding that their behaviors result in either negative or positive consequences (Bandura & Walters, 1963).

It is suggested through experiential learning theory that adults learn through synergetic interactions between themselves and their surroundings (Kolb & Kolb, 2012). Experiential learning theory assumes that adults will modify their behaviors over time due to the events they experience and the choices they make throughout their life. Applying this to CRE programs, participants of these programs will learn skills and their benefits and even practice those skills in class, after which they will begin to implement them outside of class and in their daily lives due to the active practicing (Carroll & Doherty, 2003). It is the active practicing that stimulates further at home practicing; these types of behaviors are reflective of experiential theory. All three theories stated above provide an argument for the effectiveness of CRE and even more specifically, the Couples Connecting Mindfully course.

Mindfulness-Based CRE

Mindfulness can be defined as an open attention to and an awareness of the present moment. Further, what is taking place both internally and externally to oneself (Brown & Ryan, 2003). Mindfulness originated in Eastern culture and is frequently associated with the formal practice of mindful meditation, which is the active process of being aware in the present moment (Kabat-Zinn, 1991). The active process of mindful meditation may be engaged through techniques such as awareness of breath during deep breathing exercises, mindful eating, mindful walking, or practicing yoga (Barnes, Brown, Krusemark, Campbell, & Rogge, 2007).

In 1979, Jon Kabat-Zinn developed the Mindfulness Based Stress Reduction (MBSR) program to assist individuals who were struggling with medical illnesses to regain control of their mental and emotional health and to experience peace of mind (Kabat-Zinn, 1991). Originally, the intention of the program was use in clinical settings. Although mindfulness is originally a solo practice, in which individuals are purposefully choosing to engage in mindful behaviors, it has also been found to increase unity and closeness within relationships. This may be due to the individuals changing their perception of the stress, their ability for compassion, growth in nonjudgment, and an increase of gratitude that they are experiencing through mindful practice (Kabat-Zinn, 1991).

According to Gottman and colleagues, stress negatively impacts emotion regulation and behavioral expression, which then results in a decline of relational quality (Gottman et al., 1998). Fortunately, learning how to manage stress and emotions can be taught to the majority of individuals (Gross, 2001). Being able to recognize arousal triggers and physiological changes is important and is a skill that is taught in MBCRE programs, as well as finding behavioral actions to implement to help calm these responses. It is expected then, that if an individual learns how to

effectively manage stress by focusing on their physiological responses using mindful practice more often than not, he or she will be more able to manage stressors, thus leading to higher quality, more satisfying romantic relationships (Gottman et al., 1998).

Research has shown that practicing mindfulness can inhibit negative reactivity during conflict (Baer, 2003). This may be due to having an open-mind to new experiences and increased awareness of the here-and-now, a characteristic of mindfulness (Kabat-Zinn, 1991). Mindfulness has also been shown to be positively associated with improved mental and physical health (Grossman et al., 2004). Mindful practice is related to improvements in self-esteem as well as reductions in stress, both of which allow for individuals to view their experiences, stressful or not, positively rather than negatively (Samuelson, Carmody, Kabat-Zinn, & Bratt, 2007).

A review of the current literature revealed three mindfulness-based relationship education programs that have been critically examined (Carson, Carson, Gil, & Baucom, 2004; Carson, Carson, Gil, & Baucom, 2007; Gambrel & Piercy, 2014a; Gambrel & Piercy, 2014b; Rodriguez 2015). Gambrel and Piercy (2014a, 2014b) examined 33 couples in their study, 16 of which participated in their Mindful Transition to Parenthood Program, a four week mindfulness class. Seventeen couples were in the waitlist control group. Quantitative analyses results yielded almost no significant findings for the Part 1 study (Gambrel & Piercy, 2014a). Qualitative findings reflected that males experienced significant improvement in relationship satisfaction and improved their negative affect. Gambrel and Piercy used the *Five Facet Mindfulness* Questionnaire to assess change in mindfulness, which yielded significant results for men as well. Findings concerning the current study specifically reflected that participants who participated in the examined mindfully based program, measured through assignments and attending classes, attendance and mindful practice, was not significantly related to outcomes for men or women

(Gambrel & Piercy, 2014a). However, the Part 2 phenomenological study found significant results through qualitative analyses for the same outcomes (Gambrel and Piercy, 2014b). Couples reported that the program helped them to show increased acceptance and awareness through being more present in the moment with themselves and their partners. In addition, researchers in this study interviewed 81% of the couples and found that they reported deepened connections with their partners and felt more confident about becoming a parent.

Carson and colleagues (2004 & 2007), assessed the effectiveness of mindfulness and marital satisfaction or quality in a sample of non-distressed couples. Over the course of eight weeks, 22 heterosexual couples were part of the mindfulness program, which was adapted from the Mindfulness-Based Stress Reduction program created by Jon Kabat-Zinn, while 22 couples made up the wait-list control group. Both groups were assessed on multiple individual and relational outcomes. Findings revealed that couples who participated in the program reported significant increases in relationship satisfaction, relatedness, closeness, autonomy, acceptance of one another, relationship quality, relaxation, and psychological distress. Couples maintained these benefits at the 3-month follow-up assessment. Couples who participated in the program were instructed to complete daily diaries. These diaries were collected for two weeks pre-intervention, at baseline and just prior to the intervention, and also the final three weeks of the program, which is 8 weeks in total. The last three weeks of diaries were collected during the treatment period and immediately after the intervention ended (Carson et al., 2004). On the days that couples engaged in mindful practices, they reported lower levels of overall stress and relationship specific stress, and higher levels of relationship happiness and stress coping efficacy (Carson et al, 2004). The above findings suggest that this mindfulness-based CRE program was effective in establishing benefits both individually and relationally for the participants.

The outcomes of these two studies are consistent with the notion that mindfulness is associated with greater relational quality, as stated by Burpee & Langer (2005). It also supports the assumption that couples who participate in a MBCRE program will report stronger self-awareness and experience reductions in stress. It was assumed in this study that an individual's ability to manage stress is vital to healthy relationships (Carson, et al., 2004). The study outcome found that MBCRE allowed individuals to better manage stressors; therefore it is assumed that participants will experience an increase in relational happiness as they increase their use of these practices and better manage stress.

The third mindfulness-based relationship education program that was critically examined was done so by Priscilla Rodriguez (2015) in a thesis study. Rodriguez's study examined the benefits of a six-week preliminary mindfulness – based CRE course when compared to a one day CRE course (Rodriguez et al., 2015). Using gender as a covariate, Rodriguez and colleagues assessed their analyses. Findings from the study showed that greater benefits were experienced in the six week long mindfulness course. Gender impacted various findings based on specific research questions.

Based upon the research results reviewed above, it is reasonable to expect that individuals who participate in mindful practices for longer amounts of time and for more days will report greater change in mindfulness, reduced stress, reduced depressive symptoms, increase in positive interactions and decrease in negative interactions, increase in individual empowerment, and experience higher relational quality as well as confidence in their relationship.

Practice

Research shows that consistent physical activity can be predictive of physical activity later in life. Data for the study completed by Suppli, Due, Henriksen, Rayce, Holstein, and

Rasmussen (2012) were collected via questionnaires in order to determine whether various levels of vigorous physical activity at age fifteen predicted levels of vigorous physical activity at age nineteen and twenty-seven. Using logistic regression analyses to estimate odds ratio, the experimenters found that low levels of vigorous physical activity at age 15 was predictive of similar levels of vigorous physical activity at ages 19 and 27 (Suppli et al., 2012). This study is evidence that practice at an early age can be predictive of future practice.

According to Garber, Blissmer, Deschenes, Franklin, Lamonte, Lee, Nieman, and Swain (2011) and Warburton, Katzmarzyk, Rhodes, and Shephard (2007), incorporating 150 minutes of moderate-to-vigorous intensity physical activity each week is associated with the prevention of at least 25 chronic health diseases and conditions. Warburton et al. also states that regular moderate physical activity appears to be an effective intervention to reduce depressive symptoms for those with clinical depression and also that physical activity reduces anxiety symptoms (Warburton et al., 2007). According to Garber et al., a regular, daily exercise regimen for adults is necessary to improve and maintain physical fitness and health and is also essential for most adults (2011). Warburton and colleagues also noted that change in fitness moderated the relationship between fitness and self-esteem, stated plainly, the greater the change in fitness, the greater the increase in self-esteem. According to Kaushal and Rhodes (2015), habit is thought to have a reciprocal relationship with behavior in that habit affects behavioral repetition, but that repetition also strengthens habit formation. This is especially seen in the physical activity domain.

According to Lally, Van Jaarsveld, Potts, and Wardle (2010) it takes, on average, 66 days to develop a health related habit, such as healthy eating and drinking and exercise. However, contrary to Lally's conclusion, Kaushal and Rhodes found that participants in six week study successfully developed an exercise habit through exercising at least four times per week.

Affect and consistency were the two largest predictors of habit formation in this study (Kaushal & Rhodes, 2015). A study done by Abel, Lloyd, and Williams (2013) stated that “45 minutes of yoga practiced 6 days per week, for 6 months, improved maximum expiratory pressure and maximum inspiratory pressure [in the lungs] by 57% and 117% respectively, in 40 eighth grade male and female students” (p. 186). This shows that the repeated practice of yoga benefits lung capacity in adolescents, a health benefit. Fernandez-Alonso, Suarez-Alvarez and Muniz (2015) found that for high-schoolers, doing homework remains valid in learning contexts, specifically when the assignment is systematic and regular, with the aim of instilling habits and promoting autonomous learning. This shows that when the task is performed consistently, individuals perform at a higher level. Research supports the notion that humans’ actions are based on a relationship between external factors and internal drives and the ways in which factors related to these impact each individual (Bandura, 1971). New patterns of behavior can be learned through either direct experience or through observing others. However, behavior must be learned, at least roughly, before it can be performed. Bandura further stated that behavior is extensively controlled by its consequences. Therefore, it is expected that the more than an individual takes part in a skill that benefits his or her health, stress level, or relationship, the more that they would continue to use it due to positive reinforcement from the action.

In a study done by Russel-Bowie (2013), college students who were involved directly in teaching music subsequently reported a boost in confidence, further developing their understanding of music education past the textbook alone. This study is an example of the importance of experiential learning theory due to the involvement the students were allowed. This study supports the idea that practicing actions is an important addition above learning only through more traditional classroom environments.

Similar to research related to the education field, therapy based research has shown that therapeutic alliance is strengthened through interactions between the client and therapist throughout the first three therapy sessions as they progress (Eaton, Abeles, and Gutfreund, 1988). This finding highlights the potential importance of attending the Couples Connecting Mindfully course, as the therapeutic alliance is also an important indicator of therapy outcomes. Results from a meta-analysis by Kazantzis, Deane, and Ronan (2000), prove that homework compliance proves to be a significant predictor of therapy outcomes. The findings remained true even when compared across all sample characteristics and types of homework. Groups that demonstrated high levels of homework adherence also demonstrated increased improvement in therapy. More specifically, homework produced significantly different effects for depression. Finally, homework compliance-outcome relationship was not moderated by type of therapy homework assigned (Kazantzis et al., 2000).

The Implementation of Practice in Mindfulness-Based CRE

Mindful practices have been shown to be beneficial in many different ways, including improving psychological and physiological health, as well as enhanced behavioral outcomes (Shear, 2011). For the current study, mindfulness based CRE and specifically, the relationship between health, stress level, and romantic relationship quality and the amount of mindfulness based CRE practiced were examined. A thorough review of existing literature revealed that there is a dearth of research specifically related to magnitude of practice in relation to Mindfulness-based CRE. Furthermore, CRE research in general is lacking examination of practices taught in courses. There is clearly evidence for variations in outcomes, meaning it is likely that many factors influence outcomes, practice being one of them. Further, Wadsworth and Markman (2012) highlight the small to moderate effects that CRE is typically responsible for. They stress

the importance of assessing for current states rather than traits and also using performance-based measures whenever possible, due to their better ability to capture effects when compared to self-report. It is also important that researchers identify who will benefit most from these practices. Wadsworth and Markman highlight the need to consider which level of data analysis is most appropriate, couple or individual, and suggest that gender may play a larger part than most CRE providers currently believe (2012). While these findings are generalizable to overall CRE, they too apply to Mindfulness-Based CRE, as there is little research on this topic itself as a CRE practice.

An exhaustive literature search located few studies related to practice in Mindfulness Based Stress Reduction (MBSR). Snippe, Nyklfček, Schroevers, and Bos (2015) found that those who completed a home practice of one mindfulness exercise during the day experience higher levels of mindfulness in the evening. Shannon, Simmelink-McCleary, Im, Becher, and Crook-Lyon (2014) found that for graduates in a trauma treatment course, mindfulness based stress-reduction was received with mixed reviews. Some students embraced the practice, while others cited a “lack of motivation coupled with a lack of support for self-care,” or that mindful practices “seemed too difficult” as reasons for not practicing self-care strategies regularly. However, those who completed the practices regarded changes in self-care practices as improvements. However, it is important to note that throughout the course, students fluctuated in the amount of mindfulness based stress reduction techniques used. These findings indicate that there is an unclear picture of the benefits from practicing mindfulness based practices, especially in regard to one’s relationships.

Abel, Lloyd and Williams (2013) found that during focused breathing, “ the lungs are emptied and filled more completely, which has been suggested to cause an increase in forced

vital capacity and vital capacity” of the lungs (p 189). Bootzin & Stevens (2005) found that, for adolescents who are struggling with substance abuse and insomnia who completed at least 4 or more sessions in a treatment program that involved mindfulness based stress reduction showed improved sleep, which could eventually lead to a reduction in problems with abusing substances at a 12 month follow up (Bootzin & Stevens, 2013). Abel, Lloyd and Williams (2013) also found that pulmonary function is likely to improve when individuals complete at least ten weeks of yoga training, performed at least two days per week, for one hour at a time (p. 190). Practice is an important piece to many research studies, including studies related to mindfulness. Though this piece is missing in most Couple Relationship Education research generally and Mindfulness-Based Couples Relationship Education research, we aim to understand more about the magnitude of practice and the accompanying benefits in Mindfulness-Based CRE.

Overview of Current Study

As social learning theory predicts, the more days spent in practice are believed to lead to greater satisfaction. Experiential theory also applies here, as it is expected that the positive experiences one has while implementing mindful practices will reinforce one’s desire to complete them. This is based on both the emphasis placed on stress-managing mindful practices and using mindful practice to better one’s relationship taught in the Mindfulness-Based CRE curriculum.

This attempted to provide the field of mindfulness research with a much needed understanding of number of days practicing homework assignments and overall amount of time spent practicing between sessions. Because different mindful practices are taught each week, it is expected that people will spend different amounts of time in minutes each week in different practices. It was also hypothesized that a greater number of days spent in mindful practice will

provide greater benefit for participants. In total, it is expected that both the amount of time in minutes and number of times participants' spent in mindful practice each week will positively impact relational satisfaction. The previous study examining the *CCM* pilot course controlled for gender in analyses conducted to eliminate shared variance (Rodriguez, 2015). The current study shares a percentage of subjects that this study utilized, therefore all analyses will be carried out with each gender separately.

Based upon tenants of social learning theory and experiential theory; existing literature on Mindful-Based CRE and practice; and previous findings of gender based differences in preliminary research of the current *CCM* program the following two hypotheses and one research question are proposed:

H1: Individuals who completed more times practicing their weekly homework assignments will report greater relationship quality, confidence, change in mindfulness, individual empowerment, positive interactions and less stress, negative interactions, and depressive symptoms than individuals who completed fewer times of weekly homework. Significant gender based differences among the associations of outcomes related to this hypothesis will occur.

H2: Individuals who self-reported more time (minutes) in mindful practices on a weekly basis will report greater levels of change in mindfulness, positive interactions, relationship quality, individual empowerment, confidence, and lower stress levels, negative interactions, and depressive symptoms than individuals who self-reported less time (minutes) in weekly mindful practices. Significant gender based differences among the associations of outcomes related to this hypothesis' various outcomes will occur.

RQ 1: Do individuals who attend a greater number of classes (weeks) throughout the Couples Connecting Mindfully course report greater levels of change in mindfulness, positive interactions, relationship quality, individual empowerment, confidence, and lower stress levels, negative interactions, and depressive symptoms than those who attended a lesser number of classes? Will significant gender based differences among the associations of outcomes related to this research questions' various outcomes occur?

Method

Participants

Participants were recruited as a part of the Alabama Healthy Marriage and Relationship Education Initiative, a federally funded healthy relationship initiative. Participants were recruited using several different methods. Advertisements were placed at multiple locations throughout the Auburn and Opelika community in the form of flyers. Personal visits to Auburn University classes were also utilized to recruit for one class. Email and phone calls were employed for recruitment of participants as well. Social media was also used to advertise the free six week course that was being offered. All courses within the program were open to the community and no selection criteria were used. While couples were encouraged to attend due to the couple-focused nature of the class, some individuals participated without their significant other and some single individuals attended the class as well. While practice through homework assignments was encouraged from the establishment of the program, assessments for the completion of homework were created at a later time. Due to the beginning of the weekly surveys taking place after the creation of the program, the current sample consists of 58 participants (21 couples) who completed a minimum of three weeks, or half, of the course.

In the current sample, 38% of participants are at least part time college students. Also, 39% have children. The mean age for participants is 31.51 years old (SD = 11.72; range 19 to 73 years). 74% of participants attended the class with their partner. For all other demographic values, please refer to Table 11.

Program Design and Implementation

Couples Connecting Mindfully (CCM) is a voluntary participation program that is couple focused. Participants were compensated for their completion of at least 3 sessions of the course. The majority of classes were typically taught by a male/female team of relationship educators, although one class was taught by a team of two females, while two classes were taught by a team of two males, due to availability of facilitators. The teams of facilitators were trained in program delivery and evaluation data collection.

The *CCM* curriculum was developed out of a growing field of research indicating the benefits available to those who use mindful practices. The *CCM* curriculum was developed and field tested by a team lead by Julianne McGill and Scott Ketring at Auburn University, as part of the AHMREI project, PI, Francesca Adler-Baeder. This program emphasizes physiological, emotion, and mindfulness-based stress reduction skills to address both individual stress and stress within relationships. The *CCM* program consists of 1.5 hour classes held over a six-week period. Couples are encouraged to attend together, although individuals were not turned away from attending. Beginning midway through the pilot studies for the *CCM* program, an added evaluative piece was implemented. This was the use of weekly surveys, meant to distinguish the use of mindful practices, time spent in mindful practices, and the relational benefits reaped from mindful practices.

The focus of the *CCM* program is the process of how stress, one's physiology, and awareness of self and surroundings impact relational functioning. The natural inclination to push away from one's partner during times of stress is highlighted in the class. With the use of mindful practices, one is more easily able to turn toward instead of away from their partner during times of stress. There is a different class objective each week accompanied by weekly handouts and weekly homework assignments consisting of a mindful practice introduced in that class. The homework assignments serve the purpose of practice for participants in using the techniques that they learned additively throughout the class.

When on an airplane, one is instructed to put on their own air mask before assisting others. The layout of the program classes is similar. The course is divided into two separate sections, one focused on self, the other focused on interactions in relationships. The first lesson of the program is focused on what it means to be mindful and when mindfulness is used. Also, the seven core attitudes of mindfulness are outlined (Kabat-Zinn, 1991). These seven attitudes are non-judging, patience, beginner's mind, trust, non-striving, acceptance, and letting go. The activity that is taught in the first class is awareness of breath, also that week's homework assignment. Awareness of breath allows participants to focus only on their breathing, an individual focus, which they will later share their experience of with their partner.

The second lesson of the program focuses on the impact that stress has on the brain, health, and relationships and how the use of mindful practices can combat stress to facilitate well-being. More of the benefits of mindfulness are shared at this point of the program, such as improving sleep problems, weight issues, reducing depressive symptoms, and alleviating headaches. The activity taught during the second class is the body scan. This technique tunes

people into their body and what it is telling them through focused meditation and breathing for specific body parts throughout the practice. This practice is assigned as homework each day.

The third lesson of the program focuses on mindful movement and emphasizes the importance of engaging in physical exercise. Facilitators help participants to better understand how mindfulness is a core component of some exercises, such as yoga or mindful walking. Participants engage in yoga during this class time and are introduced to mindful walking, which will be reviewed in the following week. The homework assignment on week three is to practice yoga or mindful movement for 15 minutes each day.

While a relational focus is present throughout, the focus of exercises taught over the first three weeks of the programs introduce mindful practice to participants. The second half of the *CCM* program is focused more specifically on the couple relationship and exercises that highlight the couple relationship. Specifically, care for others and navigating conflictual events within the relationship are discussed. The fourth lesson is focused on the benefits of mindful practices for romantic relationships, such as promoting connection, unity, and closeness. The importance of touch in romantic relationships is taught in regards to one's sexuality and the importance of communication about these topics with one's partner. A "loving kindness" meditation is taught, in which the partners recite a mantra about themselves and their partner, reinforcing the care for self as well as care for others. This mindful practice very clearly links the importance of care for self and care for ones' relationship. Loving kindness meditation is assigned as that week's homework.

Conflict is unavoidable in relationships. The fifth lesson of the course centers on conflict management and how conflict can impact one's health. The class specifies how mindfulness can help the participants control their level of anger during an argument and promote unity through

turning towards one another, instead of away. A “loving connection” meditation is taught that week and is assigned as that week’s homework. While this meditation is best used in times of conflict, it may be used daily as well. Participants must ask themselves as they engage in loving connection practice, “what can I do or say differently right now to better my relationship,” which helps them to act positively towards their partner instead of negatively during times of stress.

The last lesson in the course is centered on the benefits of music and the positive impact it can have to relationships. The meditation for that week involves the use of music during breathing exercises. Participants are able to provide their love songs for the class and experience the power of music as they meditate with their partner. The purpose of this activity is to help individuals’ link music and positive memories, creating emotional connection between partners. While this is the end of the class, couples are encouraged to continue to practice being mindful and to engage in mindful practices together and reminded of the positive benefits, both individually and relationally, that mindfulness provides.

Procedure

Participants completed a pre-program questionnaire prior to beginning of *CCM*. The questionnaire has approximately 260 self-report items regarding topics such as socio-demographic information about their household, global stress level, change in mindfulness, positive and negative interactions, mental health (depressive symptoms), relationship quality, individual empowerment, and relational confidence. Other measures were also included but are not relevant to this study and therefore not included. Pre-program questionnaires took approximately 30 minutes to complete. The measures examined for the current study, pre-program can be viewed in appendices A-G.

Throughout the course of the program, starting in the second week, weekly questionnaires were provided at each session. Questions regarding time spent in mindful practices as well as which mindful practices were included, as well as ratings of relationship satisfaction week to week. Participants filled out the questionnaire in class during easel time, the period of the class where the prior week's experiences with mindful practices were discussed, in order to collect the data. Only those who attended the previous class were able to fill out the questionnaire for that week's homework. See appendix H to view all five weekly questionnaires.

A post-program questionnaire was completed during the last of six weekly sessions of the CCM program. Some participants who were unable to complete the survey at the last session took the questionnaire home and returned it by mail. The post-program questionnaire was almost identical to the pre-program questionnaire with the exception of items questioning the participants' impressions of the class and the educators. Participants were instructed to complete the questionnaires independently and were paid \$50 for completing the set of questionnaires. The measures utilized in the current study can be viewed in appendices A-G.

Measures

Mindfulness. In order to assess change in mindfulness, a 15-item measure, the *Mindful Attention Awareness Scale* is used (Brown & Ryan, 2003). Responses are rated on a 6-item Likert scale, where 1=almost always, 2=very frequently, 3=somewhat frequently, 4=somewhat infrequently, 5=very infrequently, 6=almost never. An example of an item in this measure is as follows, "I forget a person's name almost as soon as I've been told it for the first time." Mean scores were calculated for responses, with scores ranging from 1 to 6. A higher score indicates a more mindful disposition in participants. Cronbach's alpha = .80.

Global Stress Level. In order to assess participants stress level, participants answer a 1-item measure. Participants rate their level of stress based on a 7-point Likert scale (1=no stress, 4=moderate stress, 7=high stress) to the following statement: “For the past month, how would you rate your overall level of stress?” A higher score on this measure indicates higher levels of stress. Cronbach’s alpha = .74.

Positive and Negative Interactions. The scale for Negative Interactions includes 5 items (adapted from Huston & Vangelisti, 1991). Participants ranked their behaviors using a 5-point Likert Scale in which 1=never, 2=sometimes, 3=once or twice a day, 4=often throughout the day and 5=always. The following is a sample statement: “On average, how often do you criticize or complain to your spouse/significant other?” Mean scores were computed for responses. The average score on the measure ranges between 1 to 5, where higher scores are indicative of a higher level of negative interactions. Similarly, the Positive Interactions scale score is the average of a 4 item scale where participants report how much they agree with certain statements. They rank their behaviors using a similar 5-point Likert scale. Statements include things like “on a typical day, how often do you share emotions, feelings, or problems with your spouse/significant other?” Mean scores for the responses were computed, where the average score on the measure can rank from 1 to 5. Higher scores indicate higher levels of positive interactions. Cronbach’s alpha = .78 for positive interactions; .566 for negative interactions.

Depressive Symptoms. An assessment of depressive symptoms was measured using the average of responses to the 5-item measure from the *Center for Epidemiologic Studies Depression Scale (CES-D)*, adapted from Radloff (1977). Participants evaluated their depressive symptoms over the last week on a 3 point Likert scale, where 1=rarely or none (less than 1 day),

2=some or a little (1-2 days), 3=occasionally or moderately (3-4 days), 3=most of the time (5-7 days). Participants ranked their answers to statements such as: “I felt depressed” and “I felt that everything I did was an effort.” Mean scores were computed for responses to these items; average scores ranged from 0 to 3. Higher scores on this measure indicate a greater number of depressive symptoms. Cronbach’s alpha = .712.

Individual Empowerment. Individual empowerment was assessed using a six-item scale adapted from Adler-Baeder, Bradford, Skuban, Lucier-Greer, Ketring, & Smith (2010). Participants ranked their experiences of individual empowerment using a five-point Likert scale, where 1=I have not thought about this, 2=I have thought about this, but that’s all, 3=I need help to do (or make) this happen, or to do it better, 4=I can and do this OR I have started doing this, 5=I do this on a regular basis. Responses to statements such as “I manage the stress in my life” and “I recognize my strengths” were evaluated. Mean scores for these items were computed with the average score ranging from 1 to 5. A higher score on this measure indicates greater individual empowerment. Cronbach’s alpha = .704.

Confidence. The assessment of confidence was determined using the average of a 5-item measure from the *Confidence and Dedication Scale*, which is from the revised *Commitment Inventory* (adapted from Stanley & Markman, 1992). Participants ranked their answers to statements such as: “I feel good about our prospects to make this relationship work for a lifetime.” Participants responded on a 5-point Likert Scale, where 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, and 5=strongly agree). This scale was used for three items. For the other two items of the measure, which focused on commitment to the relationship, a 5-point Likert scale was also used, where 1=not committed at all, 3=committed, 5=completely committed. The following questions were asked for these two items: “How

committed are *you* to maintaining your current romantic relationship?” and “In your opinion, how committed is *your romantic partner* to maintaining your current romantic relationship?” Mean scores for these items were computed. The average score on this measure ranged from 1 to 5; higher scores indicate a higher level of confidence in the relationship. Cronbach’s alpha = .87.

Couple Quality. Couple quality was assessed using the *Quality of Marriage Index (QMI)* adapted from Norton (1983). Participants evaluated their relationship using a 7-point Likert scale, where 1=very strongly disagree, 2=strongly disagree 3=disagree, 4=mixed, 5=agree, 6=strongly agree, 7=very strongly agree. Participants ranked their agreement with statements on this measure, such as “My relationship with my partner is very stable” and “My relationship makes me happy.” Mean scores were computed, where the average score ranked between 1 to 7. Higher scores on this measure indicated higher relationship quality. Cronbach’s alpha = .93.

Weekly Survey. Each participant’s progress through the course was measured by completion of weekly surveys. These surveys were created specifically for this program and included statements such as “How many times did you do the assigned homework?” which was rated on a 10 point Likert scale response. Mean scores were computed, where the average score ranked from 1 to 10, meaning the greater the number the greater the number of days spent in practice. Participants also ranked the amount of time they spent in practice using a 4 point Likert scale in which 1=less than 15 minutes, 2=15 minutes, 3=20 minutes, and 4=more than 20 minutes. They answered the following: “On average, how long did you spend on the homework each day?” Mean scores were computed in which the average score ranked anywhere from 1 to 4. Higher scores on this measure indicate a greater amount of time spent in practice. Weekly scores for both questions were then summed.

Plan of Analysis

All analyses were run separately for males and females based on prior findings investigating the *CCM* program that resulted in several gender based significant findings (Rodriguez, 2015). In order to test whether individuals who completed more times of weekly mindful homework reported greater change in outcomes than those participants who completed fewer times of weekly homework (H1), if individuals who self-reported spending more time (minutes) in mindful practices indicated greater change in outcomes than participants who self-reported shorter time (minutes) (H2), and if individuals who attended a greater number of weekly classes indicated greater change in outcomes than those who attended less classes (RQ1) a linear regression model was conducted after examining correlational relationships between the predictors and the outcomes.

First, in each regression the difference score between time one and time two of each outcome (e.g., relationship quality) will be the dependent variable, regressed onto T1 of the outcome (Step 1) in order to evaluate change in the outcome. Next, the mean of the number of times spent in mindful practice, the mean amount of minutes spent in each mindful practice, and the mean of the number of weeks attended in the six-week course will be included as predictors of change (Step 2). Separate models will be tested for each outcome (change in mindfulness, stress level, positive and negative interactions, individual empowerment, depressive symptoms, confidence, and couple quality).

Results

Descriptive Statistics and Correlations

The aim of this study was to identify the predictive nature of certain variables on change in outcomes in the six-week *Couples Connecting Mindfully* course. Descriptive statistics for all outcomes for both male and female participants are located in Table 1. Two tailed Pearson's

correlations were conducted for each outcome with the file split by gender. Correlation tables for each outcome for both males and females are in Table 2. Regression tables are located in Table 3 through Table 10.

Demographics of the sample, located in Table 11, indicate that about half of the sample was married while fifty-four percent of participants attained college or post-college degrees. This sample was not only highly educated, but also forty-five percent of the sample reported household income as greater than \$40,000 per year. This creates a highly educated sample of subjects who are less financially strained and more likely to be involved in marriages. Paired samples t-tests were conducted to compare pre-test and post-test conditions and are available to view in Table 12 and Table 13. Results from the paired samples t-tests indicated that males experience significant change in individual empowerment ($p = 0.027$) and couple quality ($p = 0.083$), while females experienced significant change in mindfulness ($p = 0.002$), negative interactions ($p = 0.064$), and depressive symptoms ($p = 0.001$). Change for both males and females was in the predicted direction for outcome variables (see Table 12 and Table 13).

Further, an examination of the descriptive statistics for males and females (see Table 1) indicated that both males and females reported high functioning scores at baseline for the majority of all outcomes. For the outcome mindfulness, males and females both indicated at pre-test that they were in the upper 2/3 of scores, suggesting that participants report they are pretty mindful before starting the program. For the outcome stress, males and females both indicated that they were experiencing moderate stress. For the outcome positive interactions, males and females both indicated through self-report that they were in the upper 50% of scores. This suggests that participants were pretty involved in positive interactions at baseline and therefore there is evidence for a restricted ability to show improvement. For the outcome negative

interactions, males and females both self-reported that they were in the lower 1/3 of scores which in turn leaves little room for improvement in scores over the six weeks. Depressive symptoms for males and females both were low at pre-test, suggesting that there is a restricted ability to show improvement. For the outcome individual empowerment, males and females both reported that they were in the upper 2/3 of scores on the measure, which leaves little room for change over the six-week course. For the outcome confidence, males and females both reported being in the upper 2/3 of scores at pre-test, leaving very little room for improvement at post-test. Males and females both are in the upper 2/3 of scores at baseline for the outcome couple quality as well. This indication is evidence for a restricted ability for both males and females to show improvement on couple quality. Overall, due to the higher functioning at baseline for participants, little room for change was available. Therefore, the significant findings in this study indicate robustness of the outcomes.

While we used every eligible case, the relatively small number in the sample when split by gender suggested the need for a power analysis to be conducted. The power analysis was conducted through the program G-Power (Faul, Erdfelder, Buchner, & Lang, 2009) to examine needed sample size for adequate predictive power. For the current power analysis adequate predictive power was set as 0.80. When calculating the power analyses for the various planned analyses to answer the two hypotheses and one research question the number of additional subjects needed ranged from 39% to 79% additional subjects.

After completion of the power analysis through G-Power, we chose to minimize the possibility of committing type II error through reporting only on variables that were correlated with the predictors. Therefore, after a review of the correlation table (Table 2) only outcome

variables with a correlation coefficient of 0.40 or greater, a stringent cutoff requirement, were included in the regression model and reported. The findings are reported below.

H1: Individuals who completed more times practicing their weekly homework assignments will report greater relationship quality, confidence, change in mindfulness, individual empowerment, positive interactions and less stress, negative interactions, and depressive symptoms than individuals who completed fewer times of weekly homework. Significant gender based differences among the associations of outcomes related to this hypothesis will occur.

For females, the outcome variable couple quality was significantly correlated with times spent in practice at or above the cutoff criteria of 0.40. None of the other outcome variables for females correlated with minutes at or above the .40 cutoff. Therefore, a linear regression was conducted to identify the impact of times spent in practice on change in couple quality. Times spent in practice were found to be statistically significant in the hypothesized direction for females for change in couple quality ($\beta = .45, p = .031$).

For males, an inspection of the correlation table (Table 2) revealed no significance correlations between times spent in practice and any of the outcome variables at the 0.40 level therefore none of the originally planned regressions were carried out for any of the outcome variables.

H2: Individuals who self-reported more time (minutes) in mindful practices on a weekly basis will report greater levels of change in mindfulness, positive interactions, relationship quality, individual empowerment, confidence, and lower stress levels, negative interactions, and depressive symptoms than individuals who self-reported less time (minutes) in weekly

mindful practices. Significant gender based differences among the associations of outcomes related to this hypothesis' various outcomes will occur.

An inspection of the correlation table (Table 2) revealed a significant association, at or above the cutoff criteria of 0.40, between minutes and change in positive interactions for males. None of the other outcome variables correlated with minutes at or above the .40 cutoff. Therefore, a linear regression was conducted to identify the impact of minutes spent in practice on change in positive interactions. For males, minutes spent in practice were found to be statistically significant in the hypothesized direction for males for change in positive interactions ($\beta = .62, p = .008$).

For females, self-report of minutes spent in practice was not significantly correlated with duration of practice for any of the outcome variables at or above the .40 cutoff. Therefore, no linear regressions were performed for this predictor and any of the outcome variables.

Research Question 1: Do individuals who attend a greater number of classes (weeks) throughout the Couples Connecting Mindfully course report greater levels of change in mindfulness, positive interactions, relationship quality, individual empowerment, confidence, and lower stress levels, negative interactions, and depressive symptoms than those who attended a lesser number of classes? Will significant gender based differences among the associations of outcomes related to this research questions' various outcomes occur?

An inspection of the correlation table (Table 2) revealed a significant correlation above the cutoff criteria of 0.40, between weeks attended and change in mindfulness and changes in confidence for males. None of the other outcome variables correlated with weeks attended at or above the .40 cutoff. The subsequent linear regression model did not return significant results

for change in mindfulness ($\beta = .36, p = .22$). Weeks attending were positively predictive of change in confidence for males at the near significant level of ($\beta = .41, p = .058$). The power analysis for this outcome variable, confidence revealed that, while our sample for this analysis was 18 subjects, we needed 7 more subjects therefore the decision to report the $p = .058$ as “near significant” was determined.

For female subjects, no outcome variables were correlated with weeks attended at or above the 0.40 cutoff level, therefore none of the planned linear regressions were conducted.

Discussion

This study examined how the magnitude of practice, both in minutes and number of times, as well as weeks attended, impacted change in outcomes for the pilot *CCM* study. The outcome variables that were examined were mindfulness, stress level, positive and negative interactions, individual empowerment, depressive symptoms, confidence, and couple quality. Correlations showed a strong relationship between time one and time two in outcomes, both individual and relational. T-tests reflected some of these results, showing significant change in various outcomes. These results are indicative of the effectiveness of the *Couples Connecting Mindfully* program due to significant relationships occurring with quite a small sample size.

Effect of Magnitude of Practice

Times practicing was predictive of improved couple quality, at time two for females. No other change in outcomes were found to be significantly correlated with times practicing for either males or females. Change in couple quality for females could be due to the continued partaking in mindful practice over time being viewed as a commitment to care for self and the relationship.

The more minutes males spent in practice predicted an increase in positive interactions in their relationship. This is likely due to longer time intentionally spent in mindful practice leading to more introspection and a change in positive exchanges between males and their partners. No other outcomes variables were found to reach the cutoff correlation with minutes practicing for males while no outcome variables reached cutoff for females in relation to minutes spent practicing.

Males' positive change in confidence also was predicted by the number of weeks attended. Therefore, the more weeks that male participants attended, the greater change they experienced in confidence in their relationship. Further, the more weeks they attended the greater change in commitment to their relationship occurred as well. No other outcome variables were found to reach the cutoff correlation with weeks attending for males while no outcome variables reached cutoff for females in relation to weeks attending.

Examining Outcomes

Change in positive interactions, which was strongly and significantly related at time one and time two according to basic analyses, appeared to change, not when males or females practiced mindfulness more times, but instead when males spent longer amounts of time (measured by minutes) in practice. Females did not mirror these findings at all, illustrating that men and women may experience change differently in a mindfulness.

The outcome change in confidence, which includes commitment items as well, was correlated at time one and time two for males and females. However, descriptive statistics showed that females experienced a very small decline in confidence and commitment in the couple relationship. Confidence ratings were high at time one for females and remained high through the six-week course. Males experienced a positive change in their confidence and

commitment to their relationship over the six weeks. Their ratings on this measure were already high at baseline, so there was not much room for improvement. This could be explained through the idea couples who attend the course show commitment and confidence in their relationship by attending the class to grow their skills both individually and relationally.

Couple quality proved to be an interesting finding. Preliminary analyses reflected a strong association and correlation of the outcome. When examining descriptive statistics, it became clear that couple quality was ranked high at time one for both genders, making it a challenge to detect significant findings, especially in light of the insufficient sample size. However, it is a positive reason as to why not all hypotheses revealed significant, predictive power for change. Males initially ranked their couple quality as higher than females by a slight margin.

While the other outcomes were included due to theory and previous studies, they did not meet criteria from correlation to be utilized in regressions. Change in these outcomes may be significant when a larger sample can be utilized and should be utilized in future studies.

Implications

Findings from this study suggest factors that might impact the way in which future *Couples Connecting Mindfully* classes should be approached and facilitated. Males and females benefitted differently in relation to several outcome variables in our analyses. When facilitating the class these differences between the genders will be important to keep in mind as they may well impact outcomes. All three predictors, minutes, times, and weeks attended, play a significant part in change in our individual and relational outcomes for men or women, respectively. Therefore, for example, during easel time each week at the beginning of class, when the previous week's homework is discussed and feedback is given, these differentials by

gender may be important to consider for the couple. These findings provide facilitators with an opportunity to normalize the different practices each week, knowing the gender differences that occur in the *CCM* class. For example, during the week involving the loving kindness meditation, which focuses on self and relationship, facilitators can use the findings from this study to adjust their feedback and message to the participants depending on gender, if needed. They can discuss with males whether length of time spent was more impactful and females whether the number of times was. If weeks are missed, facilitators will be able to use this knowledge to discuss the difficulty that could come with missing a class. While a curriculum is important to follow closely for accurate research purposes, as well as building skills each participant's experience in this type of course is going to be very individualized and specific. Normalizing participants' experiences may help couples be more comfortable (individually and collectively) with the probable different experiences each member of heterosexual couples might be finding and sharing concerning their respective experiences.

Limitations and Future Directions

As with any study, there are limitations for this study that are important to note. Most important to note in this study is the small sample size. We know for certain analyses that if they were conducted with a larger sample size more significant findings would likely result. Adequate power is needed to determine robust findings. Secondly, the weekly questionnaire that participants are provided with at each class beginning in the second week does not assess specific practices completed throughout the week, making it hard to identify which practices are most effective for people. It would be ideal for future questionnaires to include the magnitude of practice for each individual practice engaged in. For example, giving a participant the ability to

state that they engaged in 25 minutes of body scan that week and 10 minutes of awareness of breath.

A limitation in the current study is due to missing data from weeks that participants didn't attend, if they did not come to every class. If a participant missed one class in the course, two data points were eliminated due to not receiving the questionnaire regarding their practice from the week they attended nor their practice from the week after they were absent. It is of utmost important to find a solution to this problem in future studies. One potential solution is the distribution of the survey at the end of each class with the assignment to bring the survey back at the next class. Therefore, only one data point of missing data is created if participants miss and bring their surveys back as assigned. Placing a well-defined process to connect missing data into position in the course is necessary, evidenced by the occurrence of missing data points in the current study. Facilitators should consistently remind participants that it is not as important what mindful practice you choose to utilize in weekly practice, but that you are practicing something, to hopefully boost participant's involvement in practice even if they miss a week.

Looking forward, these predictors could be examined in different aspects of the class as well. There is certainly potential to research more hypotheses and research questions with the variables involved in the current study as we look forward to the implementation of *CCM* courses across the state and beyond.

In the future, it would be advantageous to the curriculum to identify the needed level of investment from participants to truly see change and to present that to the participants. Another potential method improvement would be the use of reminders for participants to do their homework and report on it. There are many available options to perform this, including diaries,

similar to Carson et al. (2004), phone calls three times per week, automated text messages or e-mails.

Conclusion

These findings have important implications for future offerings of *CCM* courses, as the curriculum is being finalized and prepared for distribution throughout the state of Alabama and beyond. The fact that two of the significant findings for this study, increased positive interactions for males in relation to minutes practiced and increased reported couple quality by women in relation to more times practicing, is affirmation for the use of couple based mindfulness to improve couple relationships. Further, males and females both changed significantly in the predicted direction on both individual and relational outcomes. This study is additive to the previous studies that finds couple focused mindfulness is an effective means to teach mindfulness, as is done in the *Couples Connecting Mindfully* program. This is some of the first evidence for positive outcomes for couple based mindful practice. It is important that future evaluations of the program are aware of the way in which participants experience the program. These findings have the potential to be an educational tool for the participants as well, allowing them to better understand how to reap the greatest benefits from mindful practice. Females' experienced change in couple quality as they increase their frequency of mindful practices. Males' experienced change in their positive interactions with their partner as well as their confidence and commitment to their relationship as they engaged in mindful practice for longer periods of time and as they attended more weeks of the course. These findings are advantageous to the couple due to their ability to understand how each other may receive benefits from *CCM* differentially. Overall, relational outcomes were most important for both genders, reminding researchers that it is all about healthy relationships. Future research should investigate these

analyses with a larger sample size and adapt weekly data collection to better understand when and how participants reap the greatest benefits from *CCM* and how they do so. *CCM* focuses on both individual and relational health and well-being. Individual and relational outcomes should continue to be examined as participants' strive to increase both their individual and couple well-being.

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Tables

Table 1

Descriptive Statistics of Outcomes

	Male Participants			Female Participants		
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>
Mindfulness						
Pre-Test	24	4.18	0.85	32	3.74	0.84
Post-Test	20	4.29	0.79	30	4.26	0.8
Stress						
Pre-Test	23	4.04	1.5	31	4.25	1.48
Post-Test	20	4	1.6	30	4.16	1.36
Positive Interactions						
Pre-Test	21	3	0.74	29	3.22	0.84
Post-Test	17	3.07	0.62	24	3.26	0.71
Negative Interactions						
Pre-Test	22	1.89	0.42	30	2.13	0.58
Post-Test	18	1.9	0.47	27	1.93	0.34
Depressive Symptoms						
Pre-Test	24	0.47	0.48	32	0.85	0.68
Post-Test	20	0.49	0.55	30	0.46	0.43
Individual Empowerment						
Pre-Test	24	3.74	0.71	33	3.89	0.6
Post-Test	20	3.94	0.78	30	3.97	0.48
confidence						
Pre-Test	22	4.48	0.6	30	4.4	0.71
Post-Test	18	4.51	0.59	26	4.37	0.77
couple quality						
Pre-Test	22	5.7	1.21	30	5.58	1.38
Post-Test	18	5.76	0.99	27	5.67	1.23

Table 2

Table 2

Correlations of Variables with Outcomes Difference Scores for Females and Males

	Times	Minutes	Week Total	Perception of Health	Perception of Stress	Mindfulness	Stress	Positive Interactions	Negative Interactions	Depressive Symptoms	Individual Empowerment	Confidence	Couple Quality
Times	1	.489*	-0.191	0.147	0.208	0.012	-0.22	0.424	0.02	-0.057	-0.206	-0.017	0.101
Minutes	0.345	1	-0.011	0.395	0.183	0.134	-0.185	.640**	0.202	-0.06	-0.279	-0.138	-0.078
Week Total	0.205	0.056	1	-0.132	-.420*	.515*	-0.201	0.19	-0.353	0.015	-0.265	0.433	0.005
Perception of Health	.383*	.367*	.491**	1	0.336	-0.212	0.204	0.309	.484*	0.047	-0.367	0.072	-0.299
Perception of Stress	0.133	0.173	.569**	.759**	1	-0.09	-0.314	0.254	0.111	-0.174	-0.437	-0.16	0.334
Mindfulness	-0.117	-0.086	0.048	-0.157	-0.072	1	-0.315	0.243	-0.26	0.189	0.141	-0.163	-0.031
Stress	0.006	-0.193	0.108	0.31	0.063	-0.149	1	-0.009	0.145	.519*	0.154	0.372	-0.162
Positive Interactions	0.01	-0.081	0.157	-0.019	0.1	0.452*	-0.33	1	0.007	0.046	-0.12	0.115	-0.07
Negative Interactions	0.075	0.053	-0.127	0.035	-0.094	-0.062	-0.181	-0.019	1	0.131	-0.14	-0.385	-0.294
Depressive Symptoms	0.01	-0.247	0.62	0.076	0.067	0.106	0.313	0.097	0.311	1	0.222	0.027	0.003
Individual Empowerment	-0.267	0.065	-0.152	-0.126	-0.093	.421*	-0.041	-0.036	0.263	0.015	1	-0.26	-0.372
Confidence	0.088	-0.042	0.209	0.259	0.155	0.098	0.133	0.239	0.08	0.096	0.134	1	0.215
Couple Quality	.557**	0.191	0.174	.418*	0.334	0.015	-0.112	0.268	-0.006	0.083	-0.034	.533*	1

Note: Females below diagonal, males above diagonal, *Correlation is significant at the 0.05 level; **Correlation is significant at the 0.01 level. Mindfulness, stress, positive interactions, negative interactions, depressive symptoms, individual empowerment, confidence, and couple quality are the difference scores.

Table 3. *Linear Regression for Mindfulness for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Mindfulness T1	-.30	.16	-.42 [†]	.17 [†]	3.76	-.32	.16	-.36 [†]	.13	4.09 [†]
Step 2										
Mindfulness T1	-.22	.21	-.30	.34	1.91	-.40	.19	-.46*	.17	1.25
Times	-.05	.09	-.12			.01	.11	.03		
Minutes	.21	.21	.26			-.26	.27	-.19		
Weeks	.28	.22	.35			-.13	.17	-.15		

Note. [†] $p < .10$, * $p < .05$

Table 4. *Linear Regression for Stress for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Stress T1	-.16	.21	-.18	.03	.59	-.56	.15	-.60***	.36	14.79***
Step 8										
Stress T1	-.12	.24	-.14	.10	.40	-.59	.16	-.64***	.40	3.79*
Times	-.13	.25	-.16			-.03	.20	-.02		
Minutes	-.15	.49	-.09			-.40	.47	-.14		
Weeks	-.21	.45	-.13			-.25	.30	-.14		

Note. * $p < .05$, *** $p < .001$

Table 5. *Linear Regression for Positive Interactions for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Pos. Interact. T1	-.62	.21	-.62**	.39	8.80**	-.40	.12	-.57**	.33	10.66**
Step 8										
Pos. Interact. T1	-.56	.17	-.56**	.71	6.82**	-.46	.13	-.65**	.41	3.29*
Times	-.07	.10	-.16			-.04	.11	-.08		
Minutes	.54	.17	.62**			-.26	.31	-.18		
Weeks	.17	.16	.18			.12	.13	.17		

Note. * $p < .05$, ** $p < .01$

Table 6. *Linear Regression for Negative Interactions for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	<i>R</i> ²	F for change in <i>R</i> ²	<i>B</i>	<i>SE B</i>	β	<i>R</i> ²	F for change in <i>R</i> ²
Step 1										
Neg. Interact. T1	-.42	.24	-.40†	.16	3.06†	-.78	.10	-.83***	.69	55.84***
Step 2										
Neg. Interact. T1	-.37	.28	-.35	.23	.98	-.78	.11	-.83***	.71	13.26***
Times	.01	.08	.04			.04	.06	.08		
Minutes	-.05	.17	-.08			-.08	.13	-.07		
Weeks	-.15	.15	-.26			-.07	.08	-.10		

Note. †*p*<.10, ****p*<.001

Table 7. *Linear Regression for Depressive Symptoms for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Dep. Sxs. T1	-.26	.21	-.29	.08	.16	-.61	.09	-.79***	.62	44.69***
Step 8										
Dep. Sxs. T1	-.32	.23	-.35	.11	.48	-.64	.09	-.82***	.70	13.81***
Times	-.03	.08	-.10			-.03	.06	-.06		
Minutes	-.06	.17	-.09			-.19	.13	-.16		
Weeks	.06	.15	.11			.12	.08	.17		

Note. *** $p < .001$

Table 8. *Linear Regression for Individual Empowerment for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Individ. Emp. T1	-.09	.13	-.15	.02	.41	-.86	.15	-.73***	.54	32.40***
Step 8										
Individ. Emp. T1	-.06	.16	-.11	.15	.64	-.85	.17	-.72***	.55	7.53***
Times	-.02	.07	-.06			-.04	.08	-.08		
Minutes	-.10	.17	-.18			.13	.20	.09		
Weeks	-.15	.14	-.26			.03	.13	.03		

Note. *** $p < .001$

Table 9. *Linear Regression for Confidence for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Confidence T1	-.33	.16	-.46†	.21	4.21†	-.14	.14	-.20	.04	1.02
Step 8										
Confidence T1	-.37	.18	-.50†	.42	2.31	-.19	.16	-.28	.12	.69
Times	-.06	.08	-.20			.00	.09	.00		
Minutes	.01	.16	.02			-.09	.20	-.10		
Weeks	.26	.13	.43†			.15	.12	.26		

Note. † $p < .10$, * $p < .05$, ** $p < .01$

Table 10. *Linear Regression for Couple Quality for Males and Females.*

	Males					Females				
	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2	<i>B</i>	<i>SE B</i>	β	R^2	F for change in R^2
Step 1										
Couple Qual. T1	-.27	.09	-.61**	.37	9.57**	-.21	.09	-.44*	.19	5.85*
Step 8										
Couple Qual. T1	-.31	.11	-.71*	.41	2.22	-.14	.10	-.30	.39	3.49*
Times	-.04	.09	-.11			.21	.11	.38 †		
Minutes	.16	.19	.23			.04	.23	.03		
Weeks	-.01	.15	-.01			.20	.15	.25		

Note. † $p < .10$, * $p < .05$, ** $p < .01$

Table 11.

<i>Demographics of CCM Participants</i>		
	N	Percent
Marital Status		
Married	32	56%
Significant Relationship	18	31%
Single	4	7%
Ethnicity		
European American	38	66%
African American	11	18%
Hispanic/Latino	1	2%
Asian-American	5	9%
Another Racial Composition	2	4%
Educational Attainment		
Post-college	19	33%
College	13	21%
Associate's technical/vocational	5	9%
Some college	1	2%
High school/GED	16	28%
4	7%	
Income		
less than \$7,000	4	7%
\$7,000 and \$13,999	2	4%
\$14,000 to 24,999	9	15%
\$25,000 and 39,999	15	26%
\$40,000 to \$74,999	17	30%
\$75,000 and \$99,999	2	4%
over \$100,000	9	15%
Employment		
Full time	30	52%
Part time	9	16%
Retired	8	14%
Unemployed	2	4%
Gender		
Female	34	58%
Male	24	42%

Table 12.

Descriptive Statistics and T-test Results for Males for all Outcomes

Outcome	Pretest		Posttest		n	95% CI for Mean Difference	t	df
	M	SD	M	SD				
Mindfulness	4.16	0.82	4.29	0.79	20	-0.42, 0.14	-1.01	19
Stress	4.10	1.41	4.00	1.70	19	-0.49, 0.70	0.37	18
Positive Int.	2.88	0.69	3.02	0.60	16	-0.51, 0.23	-0.82	15
Negative Int.	1.96	0.42	1.90	0.47	18	-0.17, 0.27	0.48	17
Dep. Sxs.	0.48	0.49	0.49	0.13	20	-0.22, 0.20	-0.08	19
Ind. Empower	3.71	0.73	3.94	0.79	20	-0.42, -0.29	-2.4**	19
Confidence	4.42	0.64	4.51	0.59	18	-0.32, 0.14	-0.82	17
Couple Qual.	5.54	1.23	5.76	0.99	18	-0.50, 0.03	-1.85†	17

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 13.

Descriptive Statistics and T-test Results for Females for all Outcomes

Outcome	Pretest		Posttest		n	95% CI for Mean Difference	t	df
	M	SD	M	SD				
Mindfulness	3.80	0.75	4.23	0.80	29	-0.67, -0.18	-3.50**	28
Stress	4.36	1.50	4.04	1.29	28	-0.22, 0.86	1.22	27
Positive Int.	3.12	0.86	3.27	0.72	24	-0.41, 0.11	-1.20	23
Negative Int.	2.14	0.60	1.93	0.34	27	-0.01, 0.43	1.94†	26
Dep. Sxs.	0.87	0.71	0.48	0.08	29	0.18, 0.60	3.84***	28
Ind. Empower	3.85	0.60	3.97	0.09	30	-0.39, 0.14	-0.96	29
Confidence	4.42	0.72	4.38	0.78	26	-0.16, 0.23	0.38	25
Couple Qual.	5.54	0.26	5.67	1.24	27	-0.40, 0.13	-1.03	26

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Appendix A: Change in Mindfulness Item

Please fill in the bubble for your response to each of the following statements:

		Almost always	Very frequently	Somewhat frequently	Somewhat infrequently	Very infrequentl y	Almo st never
A.	I could be experiencing some emotion and not be conscious of it until sometime later.	①	②	③	④	⑤	⑥
B.	I break or spill things because of carelessness, not paying attention, or thinking of something else	①	②	③	④	⑤	⑥
C.	I find it difficult to stay focused on what's happening in the present.	①	②	③	④	⑤	⑥
D.	I tend to walk quickly to where I'm going without paying attention along the way.	①	②	③	④	⑤	⑥
E.	I tend to not notice feelings of physical tension or discomfort until they really grab my attention.	①	②	③	④	⑤	⑥
F.	I forget a person's name almost as soon as I've been told it for the first time.	①	②	③	④	⑤	⑥
G.	It seems I'm "running on automatic" without much awareness of what I'm doing.	①	②	③	④	⑤	⑥
H.	I rush through activities without being really attentive to them.	①	②	③	④	⑤	⑥
I.	I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.	①	②	③	④	⑤	⑥
J.	I do jobs or tasks automatically, without being aware of what I'm doing.	①	②	③	④	⑤	⑥
K.	I find myself listening to someone with one ear, doing something else at the same time.	①	②	③	④	⑤	⑥
L.	I drive places on "automatic pilot" and then wonder why I went there.	①	②	③	④	⑤	⑥
M.	I find myself preoccupied with the future or the past.	①	②	③	④	⑤	⑥
N.	I find myself doing things without paying attention.	①	②	③	④	⑤	⑥
O.	I snack without being fully aware that I'm eating.	①	②	③	④	⑤	⑥

Appendix B: Global Stress Level

For the *past month*, how would you rate your overall level of stress, on a scale from 1 to 7?

No Stress

①

②

③

Moderate

④

⑤

⑥

High Stress

⑦

Appendix C: Positive and Negative Interactions

18	On average, how often do you:	Never	Sometimes, but not every day	Once or twice a day	Often	Always
A.	Say “I love you” to your spouse/significant other	①	②	③	④	⑤
B.	Do something nice for your spouse/significant other	①	②	③	④	⑤
C.	Initiate physical affection with your spouse/significant other (e.g., kiss, hug)	①	②	③	④	⑤
D.	Share emotions, feelings, or problems with your spouse/significant other	①	②	③	④	⑤
E.	Show anger or impatience toward your spouse/significant other	①	②	③	④	⑤
F.	Criticize or complain to your spouse/significant other	①	②	③	④	⑤
G.	Turn down or avoid sexual advances from your spouse/significant other	①	②	③	④	⑤
H.	Fail to do something your spouse/significant other asked	①	②	③	④	⑤
I.	Do things that annoy (e.g., habits) your spouse/significant other	①	②	③	④	⑤

Appendix D: Depression

How often have you felt or behaved in each of the following ways *in the last week?*

		Rarely or none (less than 1 day)	Some or a little (1-2 days)	Occasionally or moderately (3-4 days)	Most of the time (5-7 days)
A.	I felt sad that I could not shake off the blues even with the help from my family and friends.	①	②	③	④
B.	I felt depressed.	①	②	③	④
C.	I felt sad.	①	②	③	④
D.	I could not get “going.”	①	②	③	④
E.	I felt that everything I did was an effort.	①	②	③	④

Appendix E: Individual Empowerment

	Please fill in the bubble for your response to each of the following statements.	I have not thought about this.	I have thought about this, but that's all.	I need help to do (or make) this happen, or to do it better.	I can and do this OR I have started doing this.	I do this on a regular basis
A.	I express myself clearly and without fear.	①	②	③	④	⑤
B.	I have the power to manage the challenges in my life.	①	②	③	④	⑤
C.	I ask for help from others for my family.	①	②	③	④	⑤
D.	I don't stay in a relationship when it is unhealthy and unsafe.	①	②	③	④	⑤
E.	I recognize my strengths.	①	②	③	④	⑤
F.	I manage the stress in my life.	①	②	③	④	⑤

Appendix F: Confidence and Commitment Items

Please use the following scale to FILL IN ONE circle for the answer that best describes your relationship:		Not Committed At All		Committed		Completely Committed
A.	How committed are <i>you</i> to maintaining your current romantic relationship?	①	②	③	④	⑤
B.	In your opinion, how committed is <i>your romantic partner</i> to maintaining your current romantic relationship?	①	②	③	④	⑤

Please tell us about your couple relationship by filling in the bubble for your response to each of the following statements.		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
A.	I feel good about our chances to make this relationship work for a lifetime.	①	②	③	④	⑤
B.	I am very confident when I think about our future together.	①	②	③	④	⑤
C.	We have the skills a couple needs to make a marriage last.	①	②	③	④	⑤

Appendix G: Couple Quality Items

Please FILL IN ONE circle per question about your current romantic relationship.		Very Strongly Disagree	Strongly Disagree	Disagree	Mixed	Agree	Strongly Agree	Very Strongly Agree
A.	We have a good relationship.	①	②	③	④	⑤	⑥	⑦
B.	My relationship with my romantic partner is very stable.	①	②	③	④	⑤	⑥	⑦
C.	Our relationship is strong.	①	②	③	④	⑤	⑥	⑦
D.	My relationship makes me happy.	①	②	③	④	⑤	⑥	⑦
E.	I really feel like part of a team with my romantic partner.	①	②	③	④	⑤	⑥	⑦

Appendix H: Weekly Surveys

Participant ID: _____

Date: _____

Alabama Healthy Marriage and Relationship Education Initiative

Weekly Questionnaire: WEEK 2

We understand that learning a new skill takes time and incorporating the new skill into the hustle and bustle of everyday living can be difficult. Remember that the purpose of this questionnaire is for program evaluation, not individual evaluation, so please be as honest as possible. Please think back to your experience participating in last week's homework while responding to the questions below.

1. How many times did you do the assigned homework (awareness of breath)?

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

2. On average, how long did you spend on the homework (awareness of breath) each day?

- | | | | |
|---------------------|------------|------------|----------------------|
| Less than 5 minutes | 10 minutes | 15 minutes | More than 15 minutes |
| ① | ② | ③ | ④ |

3. Did you complete the activity with your partner?

- | | |
|-----------------------|-----------------------|
| Yes | No |
| <input type="radio"/> | <input type="radio"/> |

4. On a scale from 1 to 5, how do you feel that the mindfulness activities you participated in benefitted:

Your health?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

Your relationship?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

Your stress level?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

5. Please use the space below to comment (about any other areas of your life that mindfulness practices may have affected, or what we can do to better support you).

Participant ID: _____

Date: _____

Alabama Healthy Marriage and Relationship Education Initiative
Weekly Questionnaire: WEEK 3

We understand that learning a new skill takes time and incorporating the new skill into the hustle and bustle of everyday living can be difficult. Remember that the purpose of this questionnaire is for program evaluation, not individual evaluation, so please be as honest as possible. Please think back to your experience participating in last week's homework while responding to the questions below.

1. How many times did you do the assigned homework (body scan)?

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

2. On average, how long did you spend on the homework (body scan) each day?

- Less than 15 minutes 15 minutes 20 minutes More than 20 minutes
- ① ② ③ ④

3. Did you complete the activity with your partner?

- Yes No Sometimes
-

4. You may have integrated multiple forms of mindful activities into your week. Please check which mindfulness activities you participated in this week?

- Awareness of Breath Body Scan
-

5. On a scale from 1 to 5, how do you feel that the mindfulness activities you participated in benefitted:

Your health?

- Negatively Somewhat Negatively Neutral Somewhat Positively Positively
- ① ② ③ ④ ⑤

Your relationship?

- Negatively Somewhat Negatively Neutral Somewhat Positively Positively
- ① ② ③ ④ ⑤

Your stress level?

- Negatively Somewhat Negatively Neutral Somewhat Positively Positively
- ① ② ③ ④ ⑤

6. Please use the space below to comment (about any other areas of your life that mindfulness practices may have affected, or what we can do to better support you).

6. Please use the space below to comment (about any other areas of your life that mindfulness practices may have affected, or what we can do to better support you).

Participant ID: _____

Date: _____

Alabama Healthy Marriage and Relationship Education Initiative
Weekly Questionnaire: WEEK 5

We understand that learning a new skill takes time and incorporating the new skill into the hustle and bustle of everyday living can be difficult. Remember that the purpose of this questionnaire is for program evaluation, not individual evaluation, so please be as honest as possible. Please think back to your experience participating in last week's homework while responding to the questions below.

1. How many times did you do the assigned homework (partner connect/loving kindness)?

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

2. On average, how long did you spend on the homework (partner connect/loving kindness) each day?

- | | | | |
|----------------------|------------|------------|----------------------|
| Less than 15 minutes | 15 minutes | 20 minutes | More than 20 minutes |
| ① | ② | ③ | ④ |

3. Did you complete the activity with your partner?

- | | | |
|-----------------------|-----------------------|-----------------------|
| Yes | No | Sometimes |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. You may have integrated multiple forms of mindful activities into your week. Please check which mindfulness activities you participated in this week?

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| Awareness of Breath | Body Scan | Yoga | Loving Kindness |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. On a scale from 1 to 5, how do you feel that the mindfulness activities you participated in benefitted:

Your health?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

Your relationship?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

Your stress level?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

6. Please use the space below to comment (about any other areas of your life that mindfulness practices may have affected, or what we can do to better support you).

Participant ID: _____

Date: _____

Alabama Healthy Marriage and Relationship Education Initiative
Weekly Questionnaire: WEEK 6

We understand that learning a new skill takes time and incorporating the new skill into the hustle and bustle of everyday living can be difficult. Remember that the purpose of this questionnaire is for program evaluation, not individual evaluation, so please be as honest as possible.

Please think back to your experience participating in last week's homework while responding to the questions below.

1. How many times did you do the assigned homework (partner connect/loving kindness)?

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

2. On average, how long did you spend on the homework (partner connect/loving kindness) each day?

- | | | | |
|----------------------|------------|------------|----------------------|
| Less than 15 minutes | 15 minutes | 20 minutes | More than 20 minutes |
| ① | ② | ③ | ④ |

3. Did you complete the activity with your partner?

- | | | |
|-----------------------|-----------------------|-----------------------|
| Yes | No | Sometimes |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. You may have integrated multiple forms of mindful activities into your week. Please check which mindfulness activities you participated in this week?

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Awareness of Breath | Body Scan | Yoga | Partner Connect | Loving Kindness |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. On a scale from 1 to 5, how do you feel that the mindfulness activities you participated in benefitted:

Your health?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

Your relationship?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

Your stress level?

- | | | | | |
|------------|---------------------|---------|---------------------|------------|
| Negatively | Somewhat Negatively | Neutral | Somewhat Positively | Positively |
| ① | ② | ③ | ④ | ⑤ |

6. Please use the space below to comment (about any other areas of your life that mindfulness practices may have affected, or what we can do to better support you).
