A Randomized Controlled Trial of the Marriage Checkup Adapted for Private Practice

Tea Trillingsgaard, Hanne N. Fentz, Matt Hawrilenko, and James V. Cordova


CITATION
BRIEF REPORT

A Randomized Controlled Trial of the Marriage Checkup Adapted for Private Practice

Tea Trillingsgaard and Hanne N. Fentz
Aarhus University

Matt Hawrilenko and James V. Cordova
Clark University

Objective: This study examined the effectiveness of the Marriage Checkup (MC), adapted for independent practice. Method: A total of 233 couples were recruited from 2 metropolitan areas of Denmark and randomized to the MC adapted for independent practice (MC-P, n = 116) or a waitlist condition (WL, n = 117). Self-report measures of relationship health were obtained online at 3 (WL) or 6 (MC-P) time points across 54 weeks. MC-P couples received 2 checkups (Week 7 and 51). WL couples received tickets to a movie night (Week 10). Data were analyzed using multilevel growth models. Results: Following the first checkup, small intervention effects were found on 3 of 4 outcome measures. Between the checkups, the effects on 2 of 3 measures first leveled off then reappeared. Following the second checkup, intervention effects in the small to medium range were found on all 4 measures including the Brief Marital Satisfaction Inventory (Cohen's $d = 0.48$), the Couple Satisfaction Index ($d = 0.20$), the Responsiveness and Attention Scale ($d = 0.43$), and the Intimate Safety Questionnaire ($d = 0.21$). Conclusion: Couples receiving 2 annual checkups across 54 weeks experienced small to medium intervention effects on relationship health when compared to controls. These findings were obtained with a manual adapted to match constraints of independent practice (MC-P). Effects were comparable in size to those found in previous efficacy studies of the Marriage Checkup.

What is the public health significance of this article?
There is a high need for disseminating preventive interventions that lower the barriers for couples who do not seek traditional forms of couple therapy. In this effectiveness study, couples who received two annual relationship health checkups experienced small to medium intervention effects on relationship health when compared to couples receiving movie tickets. These findings were obtained with a manual adapted to match constraints of independent practice (MC-P). Effects were comparable in size to those found in previous efficacy studies of the Marriage Checkup.

Keywords: couples, relationship satisfaction, brief intervention, feedback, marriage checkup

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For adults and children, marital discord and divorce are significant sources of stress. In Denmark, as in the United States, nearly half of all marriages end in divorce (48%, Danish Statistics, 2015), and distress in family relationships is ranked as the most frequent reason for seeing a independent practice psychologist (Carl, 2008).

Family scholars highlight that marital therapy, despite its demonstrated efficacy, is limited by couples’ general reluctance to seek therapy until their problems become severe (e.g., Doss, Atkins, & Christensen, 2003). It follows that prevention of couple distress requires efforts across the continuum of universal, selective, and indicated prevention. Yet barriers of access, costs, and stigma are often high. During the years 2010–2015, the program PREP (Stanley, Blumberg, & Markman, 1999) was made widely available to Danish couples as universal prevention.1 The evaluation report from Center for Family Development (2016) concluded that couples overall ben-
efitted from the program. It also showed that 77% of the participating
couples already were distressed at baseline and that couples with
higher distress levels benefitted less than couples with lower levels of
distress. The Danish initiative marks a significant step forward in
terms of reaching couples nationwide, yet also highlights the remain-
ing issues of reaching couples early and bridging the gap between
universal prevention (i.e., PREP) and more intensive services like
therapy for distressed couples.

The Marriage Checkup

The Marriage Checkup (MC; Cordova, 2014) was designed as an
indicated prevention and aimed to lower the barriers for help
seeking in couples. By offering brief regular contacts with a
professional, like annual physical checkups, the MC increases
access to relationship health care and incorporates both educa-
tional elements (e.g., knowledge about relationship health) and
therapeutic strategies (e.g., eliciting self-disclosure and compas-
sionate partner response). The primary goal of the MC is to foster
intimacy and acceptance by eliciting more adaptive narratives and
activating couples in improving relationship health between
sessions (Hawrilenko, Eubanks Fleming, Goldstein, & Cordova,
2016). The MC is expected to help couples repeatedly turn toward
each other and attend to issues before they lead to irreversible
relationship deterioration. The MC is presented to couples as an
informational, brief, and easily accessible intervention, not being
therapy. Though brief, the individual format provides the confi-
dentiality of a therapeutic setting, makes it possible to address each
couple’s unique strengths and concerns, and allows referral of
couples needing more intensive interventions.

The MC has shown positive effects in a randomized controlled
trial at 1- and 2-year follow-up in a variety of areas, including
relationship satisfaction, intimacy, and acceptance (Cordova et al.,
2014). Previous results are supportive of the efficacy of the MC,
yet generalizability to established real-world therapeutic settings
still needs to be demonstrated.

Exporting the MC Manual From Lab to
Independent Practice

The authors of this study joined with the Center for Family
Development, Denmark, to develop a format for the MC applica-
table to independent practice (MC-P). The adaptation focused on
two central demands on the private practitioner: time use and
specialization demand. Private practitioners often work in a one-
person organizational setting, and their time use must be paid by
the hour by clients or covered by contracts with municipalities,
national health services, or insurance companies. Compared to the
university setting, no secretary or research assistant is available to
make reminders, schedule visits, or advertise for the MC and no
time is available for writing the feedback report. To adapt the MC
to meet these demands, we reduced the format from two 2-hr
sessions to two 90-min sessions (standard duration of couple
consultations in the current setting) and we developed a nonprofit
online platform applicable for private practitioners. This platform
automatizes the advertisement of the program and sends out elec-
tronic questionnaires, reminders, and meeting times. It also auto-
matically generates a feedback report in PDF file format to be
printed and handed to couples based on their questionnaire re-
sponses. In contrast to highly specialized university clinics, the
demand on private practitioners is to hold a range of therapeutic
methods in their repertoire, and some practitioners may view the
task of providing assessment and feedback to couples as a special-
list skill. To support clinicians in structuring the MC sessions and
applying the intended techniques, we developed an automatically
generated therapist report to accompany each download of the
couple feedback report. The therapist report guides the MC-P by
providing target information from the couple questionnaire (i.e.,
each partner’s priority concerns to address during the session),
brief instructions for linking the unique couple’s score to the
research literature, preprinted note sheets to fill in during the
session, and preprinted handouts with images supporting the ther-
apapeutic techniques used during the feedback session (sample cop-
ies of feedback and therapist report can be obtained from the first
author). In addition, two exercises on couple strengths were de-
veloped specifically for the MC-P and added to the MC manual.

The full description of the MC-P is presented elsewhere (Trillings-
gaard, Due, Fentz, & Steenberger, 2016). The aim of the current
study was to investigate the effectiveness of the MC-P.

Method

Participants

Participants were 233 couples from two metropolitan areas of
Denmark, Copenhagen and Aarhus (see Table 1). Couples were to
be living together (not necessarily married), above 18 years old,
and with at least one child below the age of 18 at the same address.
These criteria correspond to criteria for receiving couple education
with public aid in Denmark. To avoid confounding study results
neither partner could be attending psychotherapy or using psycho-
tropic medication. A power analysis showed that a minimum
sample size of 100 couples per group was needed to detect an
effect size (ES) of 0.4, similar to effects found in previous studies.
We estimated an attrition rate of 15% across the 2-year study
period and aimed at an initial sample of 115 couples per group.

Inclusion Procedure

Couples were recruited via newspapers, online advertisement,
social media, broadcast, and flyers. The two conditions were
outlined as (a) a 2-year MC-P program with a checkup immedi-
ately after sign-up and another checkup after 1 year, and (b) a
2-year online MC-P (assessment and written feedback, no consul-
tations) preceded by a 1-year waitlist (WL) period. Couples in the
WL condition were compensated for the waiting time with movie
tickets. No monetary incentives were used to retain couples in the
study. The flow of participants is shown in Figure 1. The study was
conducted in compliance with standards from the regional ethical
committee and approved by the Danish Data Protection Agency.
Participants were randomized to either the MC-P (n = 116) or the
WL (n = 117), using sequentially numbered, opaque, sealed
envelopes. Randomization was conducted within two strata de-
fining by the couple’s address within the region of Copenhagen

2 Many Scandinavian couples live in highly committed but nonmarital
relationships; thus, in Danish we refer to the MC-P as Par-tjek, which
translates to Couple Check-up.
(n = 112 couples) or Aarhus (n = 121 couples). Couples assigned to different conditions were linked in pairs sequentially (one MC-P couple with one WL couple) to ensure identical time lapse between the pre- and postmeasurements. In the MC group, online assessments were obtained at baseline and at Week 10, 21, 34, 47, and 54 (these were couples’ average response times). The first checkup was scheduled to begin in Week 7 and the second in Week 51. In the WL group, measures were obtained online at baseline, Week 10 and 54.

**Measures**

We measured relationship satisfaction using the Marital Satisfaction Inventory—Brief (10 items; MSI; Whisman, Snyder, & Beach, 2009) and the Couple Satisfaction Index-16 (CSI; Funk & Rogge, 2007). In the current study the CSI cut score of 51.5 was used as an indicator of distress. The Intimate Safety Questionnaire (ISQ; Cordova, Gee, & Warren, 2005) measured the degree of comfort with sharing emotions and being emotionally vulnerable with an intimate partner in the following referred to as intimacy. The Responsiveness and Attention Scale (RAS; Trillingsgaard & Fentz, 2016) measured the couples’ responsiveness to each other’s bids for attention in everyday situations (e.g., arriving home, initiating conversation). Client evaluation of the MC-P was measured by ratings of four statements of client satisfaction (from 0 = completely disagree to 4 = completely agree). Manual adherence was coded on 20% of all videotaped sessions with an adherence scale developed for the current study following the same procedure as Cordova et al. (2014).

**Intervention Procedures**

The MC-P was conducted as a two-session assessment and feedback intervention. We refer to (Trillingsgaard et al., 2016) for details on the Danish manual. The two first authors and four independent practice therapists conducted the MC-Ps. To ensure therapist competence, therapists received 1 hour of small-group Skype supervision for every four MC-Ps throughout the intervention period.

**Data Analysis**

Analyses were performed in SPSS version 23. To evaluate treatment outcomes, we built a three-level multilevel model that nested time within individuals and individuals within couples. Preliminary analyses revealed that Level 2 variance (between-partners within the couple) was minimal, which caused empirical underidentification and indicated that the variability in these data was driven by differences between couples and across time, but not differences between partners. To resolve the empirical underidentification, we omitted Level 2 random effects from subsequent models. To examine the pattern of change over time, we tested various functional forms of the data (available in online supplemental material S1). We chose a model that constrained a random linear slope equal across the treatment and control groups and parameterized the treatment effect as a categorical departure from the linear slope at each time point, enabling us to estimate contrasts at assessment points where the treatment group was measured but the control group was not. The combined equation for the final model is also available (see online supplemental material S2). We calculated Cohen’s d ESs by dividing the treatment effect at each time point by the pooled baseline standard deviation from the raw data. We conducted an additional analysis of clinical significance using the Reliable Change Index (Jacobson & Truax, 1991). We calculated changes in couple averages of the CSI and MSI between baseline and 54 weeks and categorized couples as reliably improved, deteriorated, or unchanged. Scores were calculated using couple averages and only included if both couple members reported a score. Dropouts were excluded from this analysis. To examine whether attrition influenced estimates of the treatment effect, we used pattern mixture models (Hedeker & Gibbons, 1997). Because pattern mixture models would be empirically unidentified using the dummy coding in our final model, we used the best fitting polynomial trajectories after validating that they produced similar estimates to the final model presented here. All couples where both members dropped out before the final time point were coded as dropouts, and dropout status was interacted with intervention arm and trajectory. A significant Treatment × Time × Dropout interaction would indicate that attrition biased estimates of the treatment effect. Analyses of client attraction, evaluation and feasibility were conducted by simple count approaches. We counted the number of couples in distress by use of the definition: at least one partner scoring <51.5 on the CSI.³

**Results**

**Intervention Effects**

No significant group differences were found at baseline between the two conditions or between the two sites with regard to age, education, relationship length, country of origin, or marital status. Means and standard deviations for study variables are presented in Table 2. Results for the four outcome models are presented in

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³ This estimate should be interpreted with caution because Danish norm data are not available for the measure.
Table 3 and Figures 2a–d. ESs with 95% confidence intervals are presented in Table 4. Fit statistics are presented as online supplemental material (see S1). Baseline contrasts between treatment and control groups were nonsignificant for three of the four outcome variables, validating the random assignment, but MC-P couples scored significantly higher on the CSI at baseline ($d = 0.28$) than WL couples. The analytic strategy ensured that baseline differences did not bias ES estimates.

**Relationship satisfaction.** We used two variables to measure couples’ relationship satisfaction. For both variables, the control group’s average trajectory was flat. The two relationship satisfaction variables produced a different pattern of treatment effects. Whereas the MSI showed small and statistically significant effects across the first year that increased to a medium effect after the second check-up, the CSI showed initially small effects that eroded through 3 and 6 months but improved again at the 1 year point, prior to the second checkup, and maintained that gain immediately after the checkup. After the second checkup, the effect on the MSI was in the medium range ($d = 0.48$) and the effect on the CSI was in the small range ($d = 0.20$).

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**Figure 1.** Consort diagram.
Intimacy. The control group’s trajectory was flat. The treatment effect for intimacy was nonsignificant throughout the first year of follow-up, increased at the 1-year point, and crossed the threshold to statistical significance with a small effect ($d = 0.21$) after the second checkup.

Table 2

Descriptive Statistics for Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseline</th>
<th>Week 10</th>
<th>Week 21</th>
<th>Week 34</th>
<th>Week 47</th>
<th>Week 54</th>
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<tbody>
<tr>
<td>Marital Satisfaction Inventory–B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>5.36 (2.22)</td>
<td>6.00 (2.40)</td>
<td>5.92 (2.58)</td>
<td>6.00 (2.50)</td>
<td>6.24 (2.23)</td>
<td>6.67 (2.38)</td>
</tr>
<tr>
<td>Control</td>
<td>5.04 (2.31)</td>
<td>5.27 (2.53)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>5.40 (2.53)</td>
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<tr>
<td>Couples Satisfaction Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>58.11 (13.31)</td>
<td>59.83 (13.46)</td>
<td>56.98 (15.47)</td>
<td>57.39 (15.39)</td>
<td>60.98 (12.40)</td>
<td>61.56 (13.48)</td>
</tr>
<tr>
<td>Control</td>
<td>54.46 (15.59)</td>
<td>53.84 (15.62)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>55.50 (16.38)</td>
</tr>
<tr>
<td>Responsiveness and Attention Scale</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>78.14 (13.37)</td>
<td>80.03 (13.00)</td>
<td>79.44 (14.40)</td>
<td>79.58 (15.52)</td>
<td>83.08 (13.68)</td>
<td>84.74 (13.84)</td>
</tr>
<tr>
<td>Control</td>
<td>77.29 (14.53)</td>
<td>76.39 (14.68)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>77.21 (15.68)</td>
</tr>
<tr>
<td>Intimate Safety Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>3.17 (.41)</td>
<td>3.18 (.42)</td>
<td>3.14 (.50)</td>
<td>3.16 (.51)</td>
<td>3.24 (.42)</td>
<td>3.27 (.45)</td>
</tr>
<tr>
<td>Control</td>
<td>3.11 (.50)</td>
<td>3.10 (.53)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3.12 (.52)</td>
</tr>
</tbody>
</table>

Note. SDs are in parentheses.

Table 3

Multilevel Estimates of Treatment Effects

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Satisfaction Inventory–B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>5.11</td>
<td>.19</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Weeks</td>
<td>0.00</td>
<td>.00</td>
<td>.426</td>
</tr>
<tr>
<td>Tx</td>
<td>0.25</td>
<td>.28</td>
<td>.363</td>
</tr>
<tr>
<td>Tx →10 weeks</td>
<td>0.62</td>
<td>.14</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Tx →21 weeks</td>
<td>0.52</td>
<td>.16</td>
<td>.001</td>
</tr>
<tr>
<td>Tx →34 weeks</td>
<td>0.58</td>
<td>.18</td>
<td>.001</td>
</tr>
<tr>
<td>Tx →47 weeks</td>
<td>0.70</td>
<td>.21</td>
<td>.001</td>
</tr>
<tr>
<td>Tx →54 weeks</td>
<td>1.09</td>
<td>.23</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Couples Satisfaction Index–16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>54.09</td>
<td>1.20</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Weeks</td>
<td>0.00</td>
<td>.02</td>
<td>.869</td>
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<tr>
<td>Tx</td>
<td>4.02</td>
<td>1.73</td>
<td>.021</td>
</tr>
<tr>
<td>Tx →10 weeks</td>
<td>1.83</td>
<td>.81</td>
<td>.024</td>
</tr>
<tr>
<td>Tx →21 weeks</td>
<td>−.89</td>
<td>.88</td>
<td>.314</td>
</tr>
<tr>
<td>Tx →34 weeks</td>
<td>−.56</td>
<td>1.01</td>
<td>.581</td>
</tr>
<tr>
<td>Tx →47 weeks</td>
<td>2.35</td>
<td>1.18</td>
<td>.047</td>
</tr>
<tr>
<td>Tx →54 weeks</td>
<td>2.89</td>
<td>1.28</td>
<td>.025</td>
</tr>
<tr>
<td>Responsiveness and Attention Scale</td>
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<tr>
<td>Intercept</td>
<td>76.83</td>
<td>1.09</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Weeks</td>
<td>−.01</td>
<td>.02</td>
<td>.753</td>
</tr>
<tr>
<td>Tx</td>
<td>1.32</td>
<td>1.60</td>
<td>.412</td>
</tr>
<tr>
<td>Tx →10 weeks</td>
<td>1.98</td>
<td>.96</td>
<td>.039</td>
</tr>
<tr>
<td>Tx →21 weeks</td>
<td>1.54</td>
<td>1.02</td>
<td>.130</td>
</tr>
<tr>
<td>Tx →34 weeks</td>
<td>1.52</td>
<td>1.12</td>
<td>.173</td>
</tr>
<tr>
<td>Tx →47 weeks</td>
<td>4.65</td>
<td>1.26</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Tx →54 weeks</td>
<td>6.07</td>
<td>1.35</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Intimate Safety Questionnaire</td>
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</tr>
<tr>
<td>Intercept</td>
<td>3.10</td>
<td>0.04</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Weeks</td>
<td>0.00</td>
<td>0.00</td>
<td>.612</td>
</tr>
<tr>
<td>Tx</td>
<td>0.07</td>
<td>0.05</td>
<td>.182</td>
</tr>
<tr>
<td>Tx →10 weeks</td>
<td>0.02</td>
<td>0.03</td>
<td>.630</td>
</tr>
<tr>
<td>Tx →21 weeks</td>
<td>−.02</td>
<td>0.03</td>
<td>.589</td>
</tr>
<tr>
<td>Tx →34 weeks</td>
<td>0.00</td>
<td>0.04</td>
<td>.917</td>
</tr>
<tr>
<td>Tx →47 weeks</td>
<td>0.00</td>
<td>0.04</td>
<td>.947</td>
</tr>
<tr>
<td>Tx →54 weeks</td>
<td>0.10</td>
<td>0.04</td>
<td>.207</td>
</tr>
</tbody>
</table>

Note. Tx = treatment.

Responsiveness. MC-P couples had statistically significant improvements 2 weeks after the MC-P. These gains dipped below statistical significance through 6 months, but saw a significant boost at the 1-year point, prior to the second checkup, and another boost after the checkup ending with an ES in the small to medium range ($d = 0.43$).

Reliable change. Results are presented in Table 5. The Reliable Change Index for the CSI and MSI were 5.95 and 3.50, respectively. More couples improved and fewer declined in the treatment condition for both measures, with a statistically significant difference for the MSI and a borderline significant difference for the CSI. Overall, more couples were classified as improved on the CSI than the MSI despite the ESs being larger for the MSI. This was due to the lower reliability of the MSI thus increasing the amount of change necessary to meet the criteria.

Attrition analyses. Treatment × Dropout × Trajectory interactions were nonsignificant for all outcome variables, suggesting that dropout status did not bias treatment effect estimates.

Moderators

We examined four moderators of relationship satisfaction (we chose, a priori, to use the CSI for the moderator analyses): sex, site, baseline distress on the CSI, and previous treatment experience. To control Type I error, we first entered the main effects into the model, then included Treatment × Moderator interactions and used a chi-square difference test to compare change in model fit. All four moderators were nonsignificant ($ps ≥ .20$).

Client Attraction, Evaluation, and Feasibility

According to the cut-off score for the CSI-16 (Funk & Rogge, 2007), 103 couples (44%) had at least one partner in the distressed range at baseline and were classified as distressed. Among participants across the two checkups, we found that 88–98% rated a 3 or 4 out of 4 (agreeing or completely agreeing) on each of the statements concerning satisfaction
with the MC-P. Ninety-seven percent of MC-P couples proceeded successfully through both questionnaires and consultations of the first checkup and of 110 couples invited to the second checkup, 93% did the same. In sum, rates of client satisfaction and study completion indicate that the intervention was relevant, recommendable, and tolerable for the vast majority of couples.

Therapist adherence was consistently high (first checkup: \( M = 4.63 \), range: 4.09–5.00; second checkup: \( M = 4.63 \), range: 3.20–5.00). Interrater reliability was also good; the two coders agreed within one level of the scale in 90.9% of their ratings. These findings indicate that it was feasible for the therapists to adhere to the MC-P manual while working in their usual setting.

**Discussion**

This study examined the effectiveness of the MC when adapted for use in independent practice settings (the MC-P). The intervention included two checkups over the course of 54 weeks. Following the first checkup, small effects were found on three of four outcome measures. Following the second checkup, small to medium intervention effects were found on all four measures.

Results on relationship satisfaction and responsiveness in the current study compare well with previous short and longer term effects of the MC in efficacy studies (Cordova, Scott, et al., 2005; Cordova et al., 2014) also reporting small to medium effects (in the range of \( d = 0.2–0.4 \)) on satisfaction, intimacy, and acceptance. This comparison should be seen in light of the transfer of the manual from the university setting to the everyday clinical setting, and the reduced time use in intervention and preparation. Intimacy levels showed a slow rate of change and somewhat smaller ESs than expected based on results from the previous MC efficacy studies. As we did not code therapist competence, we cannot determine whether the Danish therapists were slower than those trained in the original study in grasping the therapeutic technique of building intimacy bridges between

**Table 4**

<table>
<thead>
<tr>
<th>Variable</th>
<th>10 weeks</th>
<th>21 weeks</th>
<th>34 weeks</th>
<th>47 weeks</th>
<th>54 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Satisfaction Inventory–Brief</td>
<td>0.27 [0.15, 0.40]</td>
<td>0.23 [0.10, 0.37]</td>
<td>0.26 [0.10, 0.41]</td>
<td>0.31 [0.13, 0.49]</td>
<td>0.48 [0.29, 0.60]</td>
</tr>
<tr>
<td>Couples Satisfaction Inventory–16</td>
<td>0.13 [0.02, 0.23]</td>
<td>–0.06 [–0.18, 0.06]</td>
<td>–0.04 [–0.17, 0.10]</td>
<td>0.16 [0.09, 0.32]</td>
<td>0.20 [0.02, 0.37]</td>
</tr>
<tr>
<td>Responsiveness and Attention Scale</td>
<td>0.14 [0.01, 0.27]</td>
<td>0.11 [–0.03, 0.25]</td>
<td>0.11 [–0.05, 0.26]</td>
<td>0.33 [0.15, 0.50]</td>
<td>0.43 [0.24, 0.62]</td>
</tr>
<tr>
<td>Intimate Safety Questionnaire</td>
<td>0.03 [–0.10, 0.17]</td>
<td>–0.04 [–0.18, 0.10]</td>
<td>0.01 [–0.15, 0.16]</td>
<td>0.13 [–0.05, 0.31]</td>
<td>0.21 [0.02, 0.40]</td>
</tr>
</tbody>
</table>

*Figure 2.* Trajectories for outcome variables over 1-year 2-weeks of follow-up. Each of the y-axes is sized to 1 standard deviation. The x-axes are scaled with real amount of time from baseline.
the partners (i.e., eliciting self-disclosure and compassionate partner response). Alternatively, it could be that Danish couples were more avoidant and reached out for intimacy at a slower rate.

The increases in satisfaction (CSI) and responsiveness toward bids for attention (RAS) at week 47 for the MC-P group (prior to the second checkup) was an unexpected finding. On the one hand, this is in line with the notion that regular check-ups are a type of social control that promotes behavioral activation outside the direct intervention (Hawrilenko, Gray, & Cordova, 2016). Cordova (2014) illustrated this type of anticipation effect with the analogy of a dental checkup, in which the patient is encouraged to brush and floss every day, yet the most intensive flossing will occur in anticipation of and right after the checkup. On the other hand, it is a limitation of the current data that we are not able to disentangle the effect of social control or desirability (the wish to display health at the checkup) from genuine improvements, both of which may add to the finding. This effect of social control is a key out-of-session mechanism in checkup models that may have legitimately beneficial health effects, yet the current findings call for replication.

The current study relies upon a waitlist control condition and no follow up beyond one year, leaving important questions unanswered. First, receiving the MC-P was beneficial over and above receiving tickets to a movie night and filling in questionnaires, but we cannot conclude that the MC-P in particular, rather than therapeutic contact in general, drove the effect. Second, receiving the second checkup appeared to add to the effect of receiving the first in the current study, yet the cumulative effect and the potential need of booster checkups to maintain effects across several years ought to be examined through randomization. Third, we recruited from two university cities and attracted relatively well-educated couples. It will remain important to monitor the feasibility and effectiveness within future real-world contexts and populations, such as primary care, and with less educated or more disadvantaged couples.

This research was instigated by a real-world challenge of lowering barriers for Danish couples’ early help-seeking. The adapted MC-P manual has the advantage of being matched to the demands of the private practitioner, and these first and preliminary results lend optimism with regard to implementing a relationship health checkup model in this real-world setting. Future studies are needed to investigate the comparative and long-term effects of the approach.

### Table 5

<table>
<thead>
<tr>
<th>Scale</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deteriorated</td>
<td>Unchanged</td>
</tr>
<tr>
<td>CSI</td>
<td>12 (11.8)</td>
<td>56 (54.9)</td>
</tr>
<tr>
<td>MSI-B</td>
<td>0 (0.0)</td>
<td>80 (79.2)</td>
</tr>
</tbody>
</table>

Note. CSI = Couples Satisfaction Index; MSI-B = Marital Satisfaction Inventory–Brief. Chi-square tests compare the number of improved versus deteriorated/unchanged couples between intervention arms. The \( N \) for the MSI-B is lower by one couple in both groups because at the final time point, each group had one couple excluded for the MSI because it was completed by only one member of the couple.

References


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