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MOTIVATIONAL INTERVIEWING AS AN INTERVENTION FOR AT-RISK COUPLES

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Thirty-one couples participated in a pilot, motivational interviewing, intervention for at-risk couples called the Marriage Checkup (MC). The MC consisted of thorough relationship assessment and individualized feedback. It attracted substantial numbers of at-risk couples who were not otherwise seeking treatment. Partners' marital satisfaction improved significantly from pre- to postcheckup and remained improved at 1-month follow up. Partners were no longer significantly different from a nondistressed comparison group following intervention. Although not addressing the efficacy of the MC, this study supports its viability as an indicated preventive intervention with couples at-risk for severe marital distress by addressing its attractiveness, tolerability, and safety.

Severe and chronic marital distress takes a dramatic toll on the health, welfare, and quality of life of distressed partners and their children. It has been estimated that at any one time, approximately 20% of all marriages are experiencing some significant level of distress (Beach, Arias, & O'Leary, 1987) and that between 40% and 50% of first marriages can be expected to end in divorce (U. S. Bureau of the Census, 1992). In addition, the risk of having a major depressive episode has been estimated to be 25 times higher for both men and women in discordant marriages (Weissman, 1987). Chronic marital distress has been reported to be the most frequent precipitant to depression in women (Paykel et al., 1969), has been associated with poor treatment response (Rounsaville, Weisman, Prusoff, & Herceg-Baron, 1979), and has been implicated in depressive relapse (Hooley & Teasdale, 1989). In addition, many individuals seeking marital therapy report high levels of substance abuse (Halford & Osgarby, 1993), and chronic marital distress has been reported to frequently precipitate problem drinking (Maisto, O'Farrell, Connors, McKay, & Pelcovits, 1988). Maritally distressed couples are at greater risk for marital violence with its substantial physical and mental health risks, particularly to women and children (Holtzworth-Munroe, Smutzler, Bates, & Sandin, 1997). Marital discord has also been shown to directly affect the immune system of individuals (Newton, Kiecolt-Glaser, Glaser, & Malarkey, 1995) and to affect adherence to medical treatment regimens (Schmaling & Sher, 1997). Furthermore, research has demonstrated significant effects on the children of distressed couples, including poorer school performance, more behavioral problems, and a greater incidence of physical illness (Cherlin, Furstenberg, Chase-Lansdale, & Kiernan, 1991; Emery, 1988). In short, there is good evidence to support the argument that preventing severe and chronic marital distress and deterioration may have a positive effect on a range of psychological, behavioral, and physical disorders.

Unfortunately, most interventions for marital distress have traditionally been limited to marital therapy (although for an example of premarital distress prevention see Gordon & Durana, 1999). As a result, professional help has typically been available only after relationships have significantly deteriorated and, even

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then, it has only been available to that small percentage of distressed couples that are willing to seek professional counseling. Most couples do not consider therapy an option, especially during the early stages of developing marital distress. Instead, even those couples that do seek treatment often put it off until it is too late for marital interventions to be effective. Finally, most distressed couples seek no help whatsoever and those that do primarily consult medical doctors and clergy, rather than professionals trained in couple therapy (Doherty, Lester, & Leigh, 1986; Veroff, Douvan, & Kulka, 1981). One explanation for this reluctance to seek marital therapy may be the substantial investment of time and money that is required. In addition, the social stigma associated with psychotherapy and with self-identifying as distressed enough to seek outside help may prevent couples from seeking treatment. Thus, professional marital therapy may be seen as an option of last resort, even for those few willing to seek it. Because marital therapy is often too little, too late, preventing marital distress in the first place may be a more effective strategy.

Because of the limitations of marital treatments, universal preventive intervention programs have been designed and tested. Such programs target premarital and newlywed couples and teach couples the communication and problem-solving skills that are believed to be the essential tools necessary for the long-term health of a marriage (Markman, Floyd, Stanley, & Storaasli, 1988; Markman, Renick, Floyd, Stanley, & Clements, 1993). These interventions, however, are only available to a small percentage of the couples that could benefit from intervention. They do not address the needs of already established couples that may be at risk for developing severe and chronic distress.

Universal preventive interventions for established couples have primarily been the domain of marital enrichment programs (for review, see Alexander, Holtzworth-Munroe, & Jameson, 1994). Marital enrichment is designed to prevent marital deterioration by intervening with established happily married couples and providing them with the skills and experiences believed useful for both enriching their marriages and preventing later distress (e.g., Giblin, 1986). Enrichment programs, however, are explicitly intended for primarily well-functioning couples and are not intended to target established couples that are at risk for marital deterioration.

It is quite likely that before becoming severely distressed, most couples pass through an "at-risk" stage in which they are experiencing only one or two problems that have not yet caused any irreversible damage. In fact, while passing through this at-risk stage, couples may continue to evaluate their relationships as satisfying overall. Such at-risk couples are the natural targets of an indicated preventive intervention program. However, in contrast to the attention that has been paid to treatment and universal preventive intervention programs, there has been no attempt to develop indicated preventive intervention programs for marital distress.

In response to the need for indicated prevention programs for marital distress, we have developed an intervention called the "Marriage Checkup" (MC)[1]. Our intent was to develop an intervention capable of attracting couples that might be regarded as at risk for marital deterioration and yet unlikely to spontaneously seek a full course of marital treatment. Our assumption is that couples that are passing through an at-risk stage on their way to becoming severely distressed will not be actively seeking any type of intervention and, indeed, may not conceive of their relationship as needing help. Therefore, it is essential that the design of an indicated prevention intervention specifically address the challenge of attracting such couples. Thus, the design and outreach of the MC are specifically intended to be inviting to all couples and not just to couples that believe they have serious problems and are actively seeking to address them. One of the primary goals of this pilot study is to test the theory that a check-up type of intervention will attract at-risk couples in large enough percentages to be useful as an indicated preventive intervention.

The design of the MC, detailed below, consists of a two-session, professional assessment and feedback of the strengths and weaknesses of a couple's relationship. The advertised service is designed to be attractive to most couples regardless of their distress level, but it is specifically intended to attract couples that are experiencing difficulties but not seeking therapy. The brief information-based assessment and feedback format of the MC is designed to be fast, educational, inexpensive, nonthreatening, and motivating.

The MC employs the motivational interviewing approach developed by Miller and Rollnick (1991). Motivational interviewing is a therapeutic approach that is designed to help people increase their intrinsic motivation to work toward change. It is believed to be particularly useful in those situations in which clients

have not yet begun to consider change necessary or are ambivalent about change. This may be particularly true for those couples with significant problems that have not yet become distressed enough to contemplate change or have become stuck and do not know how to proceed toward change. Such couples may enter a "wait and see" stage, hoping that the mere passage of time will resolve their problems. Motivational interviewing is uniquely suited to help such couples resolve ambivalence and begin acting toward change. It is our assumption that for many couples this will be all that is needed. Once the initial move toward changing has begun, the naturally occurring contingencies are theorized to maintain partners' momentum toward action and maintenance. The goal of the MC is to nudge couples out of the ruts leading them toward distress and dissolution. We are testing the assumption that doing so will often be enough to energize the couple to take active charge of their own relationship health (whether on their own or with the help of further counseling). Many couples may only need a relatively brief motivational boost to get them unstuck and they will then use their own skills and strengths to improve their relationship and keep it on track (Miller & Rollnick, 1991). Others will use the momentum from that boost to get themselves into couple therapy, motivated to work with a therapist toward improving their relationship. This movement in the direction of change can be conceptualized as proceeding through several stages of change.

In Prochaska and DiClemente's (1984) stages of change model, people who change a problem (on their own or with help) pass through several stages: (1) Precontemplation, (2) contemplation, (3) determination, (4) action, (5) maintenance, and either (6) relapse (at which stage they cycle through again) or (7) permanent exit. The basic idea in this context is that the MC is designed not necessarily to move clients from sick to well or from distressed to nondistressed but, rather, to help them make progress through the stages of change. If they are precontemplative, then facilitating the move to the contemplative stage may create momentum for the clients to continue into the determination, action, and maintenance stages. If they are in the contemplation stage, then the MC may facilitate the move to the determination stage. For example, people in the precontemplation stage may have a relationship problem that requires change, but have neither identified the problem nor recognized that they may benefit from change. A motivational interviewing approach would provide informational feedback promoting recognition of the problem and its potential solutions as a means of facilitating the move from precontemplation to contemplation, determination, and so on.

The strategies of motivational interviewing are intended to be persuasive and encouraging, not argumentative. The mechanism of change is believed to involve the presentation of objective assessment information as a means of educating the couple about potential relationship problems identified during the assessment session. Such information is provided in a way that communicates that the couple is free to choose whether to act on that information or not. Motivation is promoted by simply providing the information in contrast to the couple's assumed ideals of relationship satisfaction and stability. In other words, partners are informed of the indicators of relationship deterioration that have been identified in their relationship, and it is assumed that such information in and of itself should be sufficient to motivate efforts to address those potential problems. A more detailed explication of motivational interviewing can be found in Miller and Rollnick (1991).

Brief marital interventions have been tested in the past and have demonstrated surprising effectiveness as therapies for distressed couples actively seeking treatment and as marital enrichment experiences for already well-functioning couples. For example, Halford and Osgarby (1996) compared a three-session assessment/feedback protocol to standard 12–15 session traditional behavioral couple therapy with distressed couples presenting for therapy. They found that both treatments resulted in significant increases in relationship satisfaction and that neither treatment outperformed the other. Davidson and Horvath (1997) also investigated a three-session marital intervention with distressed couples that were actively seeking therapy. Their intervention focused on the paradoxical interventions of reframing and restraining, and their results revealed that treatment couples' marital satisfaction, target complaints, and self-reported conflict resolution improved significantly and remained improved at 6-week follow up compared to a wait-list control group. Finally, Worthington et al. (1995) studied the effects of a three-session assessment and feedback intervention as a relationship-enrichment procedure with well-functioning student couples. Their results showed that the intervention had a small positive effect on the dyadic satisfaction and commitment

of participant couples compared with an assessment-only condition. Thus, there is some evidence that brief assessment and feedback interventions can have significant effects on couples' relationships. However, these studies have not examined the potential utility of such interventions as indicated prevention programs that are capable of attracting and successfully intervening with at-risk couples that are not otherwise seeking therapy.

Given that the MC is intended as an intervention for at-risk couples that are assumed to be reticent about engaging in an identified marital intervention, we were interested in demonstrating participant couples' tolerance for the MC by examining treatment refusal and treatment completion rates. These aspects of treatment response are important to assess early in treatment development. First, it is important to know what percentage of couples that express an interest in the program based on the advertisement refuses to participate after receiving a more detailed description. Second, it is important to know what percentage of couples that begins an intervention actually completes it. Previous studies of marital therapy dropout have reported rates ranging from 15% to 58% (Allgood & Crane, 1991; Anderson, Atilano, Bergen, Russell, & Jurich, 1985; Boddington, 1995). The MC may have an advantage in this regard because of its brevity and its focus on building couples' motivation to pursue change.

In addition, we were interested in demonstrating that the MC is safe and does no harm to couples' relationships before proceeding with randomized trials and long-term follow up. There is some possibility that a short-term intervention, such as the MC, used with genuinely at-risk couples could "stir things up" without providing the length and depth of treatment necessary to resolve identified relationship problems. Although previous studies of short-term marital interventions have shown positive outcomes, these studies have been done with already distressed couples that referred themselves for therapy. Because it cannot be initially ruled out that the at-risk couples attracted by the MC might be particularly vulnerable and that the MC might actually exacerbate their difficulties by drawing their attention to their problems without providing therapy, it is necessary as part of early treatment development to demonstrate that at-risk couples do not deteriorate in response to the MC.

METHODS

Participants

Thirty-one couples participated in the MC. Couples who were currently in or seeking a full course of couple therapy or who were living apart were excluded from participation. Almost all of the participants were Caucasian (92.2%); the mean age for husbands was 42 years (SD = 12.17) and the mean age for wives was 39 years (SD = 10.33). Mean length of marriage was 11.3 years (range = 6 months–40 years; SD = 11.46). Completed education averaged 16.9 years for husbands and 16.3 years for wives. Twenty-seven wives and 26 husbands participated in the 1-month follow up.

Thirty-seven cohabiting married couples, not currently in couple therapy, were recruited to serve as a nondistressed comparison group. Comparison couples were recruited via newspaper advertisements asking couples to participate in a questionnaire-based study of marriage in exchange for being placed in a drawing for one of three cash prizes. Advertisements asked for couples that were interested in participating in a study that required them to complete a set of questionnaires twice over the course of 1 month. Each couple received a battery of questionnaires in the mail. Approximately 1 month later they completed the same battery of questionnaires. The timing of the two assessments approximated the time between completing the first and second battery of questionnaires for the MC couples. All respondents were accepted into the comparison group regardless of relationship satisfaction levels. Apart from average level of marital distress, MC and comparison couples did not differ significantly on any of the measured demographic variables.

Procedures

The MC. The MC is a two-session intervention that consists of a thorough relationship assessment and individually tailored feedback. As noted above, this format was inspired by the motivational interviewing program developed at the University of New Mexico for use with alcoholics who are not seeking treatment (Miller & Sovereign, 1989; Miller, Sovereign, & Krege, 1988). Dubbed the "Drinker's Checkup," Miller and colleagues developed an assessment and feedback program designed to assess individuals' alcohol

usage and provide them with educational feedback regarding the known effects of that usage. In two controlled studies, these investigators found that people who referred themselves were, almost without exception, significantly impaired by their alcohol usage and had rarely, if ever, considered treatment. These studies also revealed that individuals who participated in the checkup demonstrated significant improvements in their drinking patterns. This format was chosen for the MC because of its success at attracting a non–treatment seeking, but at-risk population and its success as an intervention.

The MC as an indicated prevention program begins with an advertising strategy designed to be nonthreatening and attractive to couples that might not perceive themselves as particularly distressed. It was advertised as a service available to any couple that wished to learn more about the health and quality of their marriage through a professional evaluation. The advertisement stated that feedback would be objective and professionally delivered, and that the couple would be free to do as they pleased with the feedback. To address possible apprehensions about marital therapy, advertisements made it clear that the MC was not therapy. Finally, the ad stated that the MC required only two appointments, one to gather information and one to provide feedback. Efforts were not made to screen out nondistressed couples given the theoretical assumption that an unknown percentage of at-risk couples will continue to self-evaluate as nondistressed.

Before their initial visit to the lab, couples were mailed a packet of questionnaires selected to assess each partner's marital satisfaction and marital adjustment overall. Assessment questionnaires included the Marital Satisfaction Inventory (MSI; Snyder, 1979), the Conflict Tactics Scale (Straus, 1979), the Beck Depression Inventory (Beck, Steer, & Garbin, 1988), the Marital Status Inventory (Weiss & Cerreto, 1980), and the Commitment Inventory (Stanley & Markman, 1992). Questionnaire packets were accompanied by a cover letter asking each partner to complete his or her own questionnaires alone without discussing answers with each other. Couples were assured of confidentiality. Informed consent documents were also enclosed and reviewed at the initial lab visit.

The lab visit began with a conjoint oral history interview about the couple's early relationship. The Oral History Interview (OHI; Buehlman, Gottman, & Katz, 1992) is a semistructured interview that is designed to elicit information about the evolution of the couple's relationship, including how they met, their courtship, significant events in their relationship, and its current status. Responses to the OHI have been shown to be predictive of marital deterioration and divorce (Buehlman et al., 1992). Following the OHI, each partner was prepared to discuss a current relationship problem with his/her spouse. Partners were interviewed separately to facilitate identification of the issue of most importance to him or her without influence or interruption from the other partner. One spouse remained in the room with the primary interviewer, while the other spouse was interviewed elsewhere by a second research associate (either a trained graduate or advanced undergraduate student). The assignment of spouses to the primary interviewer was counterbalanced by the gender of spouse. Participants completed the Knox Problem Inventory (Knox, 1971), a self-report questionnaire that assesses the severity and chronicity of a variety of common marital problems. The most severe problem identified on this measure was selected for further exploration and clarification by the interviewer. Once the issue was defined, spouses were reunited and given instructions to work toward some resolution of the problem for 15 min while being videotaped. Each partner was given a separate 15-min period for the discussion of his/her identified problem; the order (i.e., husband or wife's problem presented first) was counterbalanced across couples. The marital quality questionnaires and the problem-solving interactions were the primary materials used in preparing couples' feedback. Additional questionnaires and interviews were conducted as part of another study. We conducted the majority of the laboratory assessments (94%). One was conducted by another trained doctoral student and one by a trained advanced undergraduate student.

Approximately 4 weeks after the lab session, couples returned to receive the results of their MC. Miller and Rollnick (1991) identify six active ingredients for effective brief motivational interviewing. These include providing structured feedback of current status, highlighting clients' personal responsibility for change, providing clear advice, offering a menu of alternative choices, demonstrating appropriate empathy, and emphasizing the clients' self-efficacy or capacity to pursue change on their own. Feedback reports were written and delivered adhering to these six ingredients.

The primary interviewer provided both partners with a written copy of the feedback report describing their relationship. All feedback reports were written in the following standardized format modified from that

described by Worthington (Worthington et al., 1995). Note, however, that although the format was standardized, the actual content of feedback given to couples was individualized according to their identified issues. Thus, the feedback of more distressed versus less distressed couples varied in content and recommendations according to the specifics of each situation.

Reports began with a demographic description of the couple and the purpose of the assessment (to provide useful feedback about their relationship). Information from the OHI was then used to summarize the development of the couple's relationship from first meeting to current status and to highlight those historical characteristics that attracted the partners to each other as well as to set a positive emotional tone for the feedback session.

Interview, questionnaire and communication assessment data were then used to formulate a description of the relationship's strengths to serve as the foundation for pursuing change. Any questionnaire scores that indicated high levels of satisfaction within any relationship domain were highlighted, as were scores indicating high commitment and the absence of physical or psychological aggression. Strengths detected during the OHI were also included in this section (e.g., "we-ness," husband fondness, glorifying the struggle; Buehlman et al., 1992). Strengths detected during the couple's problem-solving interactions were also highlighted in this section of the feedback report (e.g., clear communication, active listening, effective problem solving, respect, humor, affection, active engagement). Efforts were made to make the strengths section longer than the weaknesses section to emphasize the positive aspects of the relationship. The following is a brief excerpt from the strengths section of a fictionalized couple:

> One of the main strengths of this relationship is the joy Bob and Mary get out of the time they share together. In fact, this relationship is characterized by Mary and Bob's deep sense of friendship. Bob and Mary have a very emotionally close relationship and rely easily on each other for emotional support and comfort. This is a substantial strength because it has been found again and again that partners that are good sources of social support for each other are not only happier within their relationships, but healthier physically and better able to cope with the stresses of daily life.

The same data were also used to highlight the couple's most pressing problems in a section entitled "areas for potential improvement." Efforts were made to limit the number of problems discussed in order not to overwhelm the couple. Scores from questionnaires that indicated dissatisfaction with specific areas of the relationship were highlighted as were any indications of low commitment, physical or psychological aggression, or depressive symptoms. The issues discussed during the couples' problem solving interactions were also reiterated within this section. In keeping with the techniques of motivational interviewing, this information was presented in an objective fashion and partners were asked to respond to each presented item. Any statements by the partners indicating motivation to attend to and address that problem were reinforced by the therapist, and a menu of suggestions was then offered advising the couple of the ways in which they might utilize their strengths to address the identified problems and highlighting their personal responsibility and freedom to pursue change. Suggestions were derived based on the treatment philosophy of Integrative Behavioral Couple Therapy (e.g., Christensen & Jacobson, 1991; Cordova, Jacobson, & Christensen, 1998; Jacobson & Christensen, 1996; Jacobson, Christensen, Prince, Cordova, & Eldridge, 2000). Finally, the potential consequences of both addressing and not addressing current relationship problems were highlighted, and a list of referrals was provided for couples that might have become interested in pursuing more extensive treatment. The following is a brief excerpt from the "areas for potential improvement" section for a fictionalized couple:

> Another issue raised by this couple involves their sexual relationship. Both report being concerned about a decrease in frequency over the course of their relationship. Both report missing the affection and closeness and both appear worried about the meaning of this decline to their marriage. Research on the development of couples' relationships over time has shown that the decrease that Mary and Bob are experiencing is perhaps one of the most common developmental occurrences in marriage. Despite the fact that decreases in frequency and priority are normal and predictable, they are also very often a source of distress to partners. Often the distress caused by this issue is related to partners' desire for affection and intimacy throughout the relationship as

well as busy schedules and long, tiring days. Many couples have found that consciously setting aside regular time for being emotionally and physically close is an easy and effective solution and often these times become the sort of emotional haven that both partners look forward to throughout the week. Keep in mind that these times need not always involve sex, as long as they are times of attentiveness and affection. Other couples find that the intensity of their sexual relationship ebbs and flows with time. These couples often learn to "ride the waves" of their relationship, enjoying and appreciating both those times when sex is more frequent and those times when it is less frequent, while maintaining satisfying levels of affection and intimacy in other areas of the relationship.

Interviewers reviewed the written reports carefully with the couples at their second lab visit, elaborating on them and actively working with the couples in a collaborative manner to meet their needs and individualized goals. Following the presentation of the feedback, couples were asked to discuss it together and comment on its usefulness while the interviewer was out of the room and while they were being videotaped. At the end of the session, couples were asked to complete the postfeedback questionnaires. These questionnaires were provided immediately postfeedback because we were interested in capturing any change resulting from changes in the partners' perceptions of their relationship in general. Four weeks after their feedback session, couples were sent a final questionnaire packet and asked to return it within 1 week.

Nondistressed community couples. As an additional means of exploring any iatrogenic effects resulting from the MC, couples were compared before and after the intervention to the nondistressed comparison group. Hypothetically, if the MC is working as intended, couples' satisfaction scores should increase from precheckup and, following the MC, they should be comparable to the nondistressed community couples. If the MC is having iatrogenic effects, then MC couples' satisfaction scores should deteriorate from precheckup, and they should look less like the nondistressed community sample.

Measures

The MSI. The MSI (Snyder 1979) is a 280-item (true/false), self-report measure of marital satisfaction. This multidimensional questionnaire provides subscale T-scores reflecting partners' level of relationship satisfaction within each of several domains of the marital relationship. The subscales measure global distress, problem-solving communication, disagreement about sex, disagreement about finances, time together, and conflict over childrearing. Based on the provided T-scores (Snyder, Wills, & Keiser-Thomas, 1981), individuals can be classified as severely distressed, moderately distressed, or nondistressed on each subscale. The internal consistency of the subscales (range = .80–.97) and test–retest reliability (range = .84–.94) of the MSI have been demonstrated (Scheer & Snyder, 1994; Snyder, et al., 1981). The Global Distress Scale (GDS) will be the principal measure considered in this article.

RESULTS

At-Risk Couples

First, we tested our hypothesis that a substantial percentage of the couples that self-referred for the MC could be reasonably classified as at risk. Although the MC is intended to be useful for all couples, its principal targets are those couples that are suffering from the early symptoms of marital distress and those that are already significantly distressed, but that are not actively seeking intervention. Thus, we operationally defined at-risk couples as those in which at least one partner scored in the moderately to severely distressed range on the GDS or scored in the severely distressed range on any of the other relevant subscales of the MSI. This definition allowed us to include as at-risk those partners who were: (1) Severely globally distressed, (2) moderately globally distressed, or (3) globally satisfied but severely distressed in at least one area of their relationship. Individuals who did not meet any of these criteria were classified for these purposes as nondistressed. Using these criteria, 61% of the couples that self-referred to the MC (n = 19) could be classified as at risk. Thirty-nine percent of the couples (n = 12) were classified as nondistressed. Of the at-risk individuals, 71% did not meet conventional severe distress criteria as measured by the GDS (>65). No significant differences were found between the at-risk and nondistressed groups on the measured

demographic variables.

To test our contention that the MC would attract at-risk couples, we compared the distress scores of MC couples to the sample of nondistressed community couples (NC). Using the above operational definition of at-risk, only 27% of the NC sample ($n = 10$) could be classified as at risk. The remaining 73% were classified as nondistressed. Further analyses revealed that NC husbands and wives were, on average, significantly less distressed than MC husbands and wives before receiving the MC (t (30) = –2.01, $p < .05$; t (30) = –2.52, $p < .05$, respectively). Thus, on average, the MC is attracting a more distressed group of couples than those we recruited through newspaper advertisements to participate in basic couple research.

Tolerance for the Intervention

Of the 49 couples calling to express interest in the MC in response to the advertisements, 16 (33%) refused to participate after receiving a more detailed description of the program. Of those 16, seven reported being no longer interested for unspecified reasons, four stated that they did not have enough time, or that the MC sounded like too much work, three wives said that their husbands refused to participate, and two could not participate because they were already divorced.

In addition, only one of the 32 couples (3%) that initiated the MC dropped out between receiving the first packet of questionnaires and completing the feedback session. The one that dropped out did so because of scheduling difficulties. Thus, almost all of the couples that began the intervention completed it.

Iatrogenic Effects

To test for possible iatrogenic effects of participation in the intervention, MC couples' GDS scores were compared pre- to postcheckup and postcheckup to 1-month follow up. Analyses revealed that both MC husbands' and wives' marital satisfaction scores improved significantly from pre- to postcheckup (see Table 1). In addition, MC husbands' and wives' GDS scores did not change significantly from postcheckup to 1-month follow up (t (26) = –81, n.s., d =.07; t (27) = .30, n.s., d = .01, respectively). Thus, MC couples' marital satisfaction increased from pre- to postcheckup and remained steady through the 1-month follow up.

In addition, we compared MC couples both pre- and postintervention with the NC couples. As noted above, NC husbands and wives were, on average, significantly less distressed than MC husbands and wives before receiving the MC. At feedback, however, there were no longer any significant differences between the MC and NC husbands or MC and NC wives (see Table 2). In short, MC couples' GDS scores were more similar to a nondistressed research sample following the MC than they were before the MC.

TABLE 1
Change on the Global Distress Scale from Pre- to Postcheckup

Group	Precheckup		Postcheckup				
	M	*(SD)*	*M*	*(SD)*	*t*	*df*	*d*
MC ($N = 31$)							
Wives	54.16	(10.66)	50.55	(8.99)	3.78***	30	.38
Husbands	52.87	(10.53)	50.77	(9.51)	2.87**	30	.21

**$p < .01$; ***$p < .001$; d = effect size.

TABLE 2
Comparison of Marriage Checkup to Community Couples on the Global Distress Scale at Pre- and Postcheckup

	MC group	Community group		
	M (*SD*)	*M* (*SD*)	*t*	*df*
Precheckup				
Wives	54.16 (10.66)	47.97 (9.32)	−2.52*	66
Husbands	52.87 (10.53)	48.11 (8.72)	−2.01*	66
Postcheckup/ Time 2				
Wives	50.55 (8.99)	47.05 (9.80)	−1.53	66
Husbands	50.77 (9.51)	46.81 (9.01)	−1.75	66

*$p < .05$. Note for comparison couples, the Time 2 represents their scores on questionnaires completed one month following their original assessment, a time period consistent with the time between pre- and postcheckup for the MC couples.

DISCUSSION

We have described the rationale for developing an indicated preventive intervention for at-risk couples called the Marriage Checkup. This study provides evidence suggesting that the MC is capable of attracting a substantial percentage of couples that can be objectively considered to be at risk for further marital deterioration. First, the results provide evidence that a population of at risk, but non–treatment seeking couples does exist in the community. This provides some support for our supposition that deteriorating couples will pass through an at-risk stage before becoming severely maritally distressed. Second, the study provides evidence that partners that are severely distressed within specific relationship domains (e.g., sexual or emotional communication) may still self-identify as globally maritally satisfied or only moderately distressed. In other words, couples can still consider themselves to be happy even while they are suffering from serious problems. Lastly, this study provides evidence that supports our contention that a nonthreatening, brief, informational marital health service such as the MC can attract at-risk couples that might not otherwise ever seek treatment, much less seek early intervention. This finding is important given prior evidence that the vast majority of distressed couples will never seek any type of treatment regardless of the severity of their distress. In addition, early intervention with these couples may prevent their further deterioration into chronic marital distress and eventual dissolution. That such couples were attracted to participate in the MC means that this service-delivery format can be utilized for the prevention of marital deterioration with at-risk populations of couples. Even if further research does not support the efficacy of the current intervention protocol, the format appears to be effective for engaging couples that may otherwise not be reachable.

In addition, the current study provides data that supports couples' tolerance for the procedures of the MC. Only one of the couples (3%) dropped out in contrast to estimates of 15%–58% dropout rates in traditional marital therapy (Allgood & Crane, 1992; Anderson et al., 1985; Boddington, 1995). In addition, two-thirds of the couples that responded to ads continued the MC to completion, in contrast to the refusal-to-proceed rate of 50% reported for the universal prevention program PREP (Markman et al., 1993). Thus, there is evidence that the MC is well tolerated and participants are motivated to complete the process once

they have started it.

Finally, our data demonstrate that the MC does not produce iatrogenic effects and that the effect of the intervention appears to be in the predicted direction. The marital dissatisfaction scores (GDS) of MC participants, both husbands and wives, decreased significantly from pre- to postcheckup, and remained lower 1 month later. In addition, following the intervention, MC couples' marital dissatisfaction scores were no longer significantly higher than those of the NC couples. These, however, are not efficacy data and should not be interpreted as such. Instead, they are intended, as part of intervention development, to demonstrate the feasibility and safety of the intervention.

The primary goals of this report have been to argue the necessity of developing indicated prevention programs capable of attracting couples that are at risk for severe marital distress and dissolution, to describe the development and structure of the MC as an indicated preventative, and to provide preliminary evidence for the feasibility, attractiveness, client tolerance, and safety of the MC. The next step in this research program will be to conduct a randomized clinical trial and thus begin to answer questions about the efficacy of the MC both as an intervention for relationship dysfunction and as an indicated prevention service. Ultimately, the MC is intended to reverse early marital deterioration and to prevent further relationship erosion. Therefore, future trials will include extensive and repeated follow-up assessments of couple functioning and treatment seeking. In addition, differences in how couples respond to the feedback provided and the effect those differences have on outcome also remains to be studied. These analyses are currently underway in our laboratory. Limitations of the current study include its small sample size and lack of diversity, the lack of longer-term follow-up evaluations, and the lack of multiple methods of measuring marital quality.

Reaching out to at-risk couples should be a higher priority within the couple treatment community. Given the negative implications of severe and chronic marital distress for both adults and their children, it is paramount that we identify couples at risk for marital decay and develop effective prevention programs for this underserved population.

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NOTE

1. Note that the term "Marriage Checkup" has previously been used by Powell (1991). This work and Powell's are independent of one another.