

# **Stages of Change and the Group Treatment of Batterers: A Randomized Clinical Trial**

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A stages-of-change motivational interviewing (SOCMI) treatment approach was compared with a standard cognitive behavioral therapy gender reeducation (CBTGR) approach in a sample of 528 English-speaking and Spanish-speaking male batterers who were randomly assigned to 49 26-week groups in either condition. Blind ratings of therapist adherence differentiated the two conditions. Language spoken neither predicted outcome nor interacted with treatment. The SOCMI curriculum led to significant reductions in female partners' reports of physical aggression at follow-up, but not to changes in self-reported aggression. Men who were initially less ready to change benefited more from the SOCMI approach while men who were more ready to change benefited more from the CBTGR approach. Results suggest the importance of tailoring abuser intervention programs to individuals' initial readiness to change.

**Keywords:** batterer treatment; stages of change; motivational interviewing; intimate partner violence; ethnicity

The two primary models of abuser intervention programs in North America are the feminist educational approach (the Duluth model) and the cognitive-behavioral model. In the Duluth model (Pence & Paymar, 1993), intimate partner violence (IPV) is seen to result from a man's attempt to reestablish his power when he feels his dominance is threatened (Healey, Smith, & O'Sullivan, 1998). The cognitive behavioral therapy (CBT) approach focuses on the abuser's beliefs and assumptions that lead to his misinterpretation of his partner's behavior and to his justification of his own violent behavior. Confrontation of batterers is an essential component of both models (Healey et al., 1998; McCloskey, Sitaker, Grigsby, & Malloy, 2003), and "some semblance of convergence currently exists in what might be termed a gender-based, cognitive-behavioral modality" (Gondolf, 1997, p. 85). Thus, distinctions in principle between these two perspectives are not nearly so apparent in their practice (Babcock, Green, & Robie, 2004).

In a meta-analysis of 22 studies, Babcock et al. (2004) concluded that the success rate of current batterer treatment programs is more similar to the very modest success rates of rehabilitation of adult prisoners than to psychotherapy in general. However, a failure to consider individual differences affecting batterers' response to treatment may be contributing to these relatively poor success rates (cf., Brannen & Rubin, 1996; Saunders, 1996). One such individual difference is the degree to which batterers deny or minimize their violent behavior (Malloy, McCloskey, & Monford, 1999; Scalia, 1994). Although patient compliance is a problem for most forms of therapy, treatment programs for male batterers face special concerns, given that the motivation for batterers to attend treatment is usually external (e.g., court-order or pressure from one's partner; Cadsky, Hanson, Crawford, & Lalonde, 1996). Even many batterers who acknowledge abuse frame it as a normal reaction to their partner's provocative behavior, thus obviating their ability or willingness to benefit from traditional group approaches.

Unfortunately, therapists' use of confrontation inadvertently "reinforce(s) the client's view that relationships are inevitably grounded in coercion and control, rather than in understanding, trust, and support" (Murphy & Baxter, 1997, p. 609). In fact, research with other populations concludes that, in addition to being ineffective, confrontation frequently leads to other negative outcomes, especially among individuals with low self-esteem and social status (Gurman & Kniskern, 1978; Lambert & Bergin, 1994; Miller, 1985). One of these negative outcomes for batterers, of course, may be increased retribution against their partners. While CBT tends to be more collaborative in its stance toward the batterer, its use of skills-training and other techniques assumes a well-motivated client (Daniels & Murphy, 1997). Conversely, the transtheoretical model, developed for understanding the change process in substance abusers (another group characterized by denial), may be especially applicable to IPV offenders.

As articulated by Prochaska and DiClemente (1984), the transtheoretical model (TTM) assumes that most individuals go through a series of stages before a change in behavior is accomplished. Individuals in a stage of *precontemplation* deny or minimize the behavior or attribute its cause to someone else (Prochaska, DiClemente, & Norcross, 1992). In the *contemplation* stage, they begin to acknowledge the problem's existence, but are still not actively trying to change the behavior. In the *preparation* stage, they are thinking more clearly about what they can do to alter the behavior. In the *action* stage, they are actually focused on taking active steps to alter the behavior. Finally, in the *maintenance* stage, they are actively monitoring themselves to assure that the problematic behavior does not resume. This model assumes that change is not usually linear, but is often characterized by relapse, with individuals in an earlier stage of change more responsive to consciousness raising and experiential interventions, and individuals in a later stage of change more responsive to behavioral processes (Prochaska, Velicer, DiClemente, & Fava, 1988). Indeed, engaging in experiential process activities during contemplation and preparation stages and shifting to behavioral process activities when in action has been found to predict successful stage transition (Perz, DiClemente, & Carbonari, 1996).

Recently, the TTM has been used to conceptualize the process of violence cessation among batterers (Begin, Shelley, & Strodthoff, 2002; Daniels & Murphy, 1997; Levesque, Gelles, & Velicer, 2000). Scott and Wolfe (2003) found that batterers' self-report on the University of Rhode Island Change Assessment (URICA) predicted men's outcome in batterer treatment, with precontemplators showing less positive change in empathy, communication, and abusive behavior as compared to men in the contemplation and action stages. Attrition was not predicted by URICA scores, but was predicted by counselors' ratings of

the men's stage of change (Scott, 2004). Conversely, Alexander and Morris (2008) found that two clusters of batterers (earlier and later in their stage of change) differed in their self-report of anger and violence perpetrated, degree of disparity from their partners' report of violence, and response to treatment. Thus, it appears possible to empirically identify those individuals less ready to change who are significantly less likely to benefit from standard abuser intervention programs.

How to engage precontemplators in treatment remains a challenge. Daniels and Murphy (1997) noted that interventions for men in an earlier stage of change need to help them find reasons to change that will meet their own needs, rather than to simply avoid punishment. Thus, motivational discussions such as those developed by Miller and Rollnick (2002) for engaging substance abusers are particularly germane to batterers in this stage. The focus of motivational interviewing (MI) is to create a discrepancy or cognitive dissonance within the client as to the target behavior, such as IPV, and other desired goals, such as seeing himself as a good father or having a wife who cares about him (Miller & Rollnick, 2002). As such, the therapist needs to use reflective listening, expression of acceptance, affirmation of the client's freedom of choice and self-direction, and attention to the client's readiness to change. Motivational techniques are particularly effective among the least motivated clients (Rollnick, Heather, & Bell, 1992) and those at the greatest risk for relapse (Handmaker, Miller, & Manicke, 1999).

Therefore, techniques that enhance motivation and encourage contemplation of the IPV for one's own personal reasons are particularly appropriate for individuals who are less ready to change (Daniels & Murphy, 1997). These strategies are the least likely to be found in standard batterer treatment programs, even though precontemplators and contemplators comprise a significant proportion of abusers referred for treatment. Conversely, motivational strategies may be less effective for the individual in the action stage. In other words, the individual's readiness to change could be hypothesized to moderate the effectiveness of the proposed treatment format.

One other individual difference that may be relevant to batterer intervention is ethnicity. Higher rates of IPV among minority ethnic groups have been consistently observed (Caetano, Schafer, & Cunradi, 2001; Kessler, Molnar, Feurer, & Appelbaum, 2001), with a greater risk of injury from IPV by Latinos than non-Latinos (Duncan, Stayton, & Hall, 1999). Moreover, the lower rate of partner concordance about the occurrence of IPV within Latino than non-Latino couples (Caetano, Schafer, Field, & Nelson, 2002) suggests an even higher prevalence of precontemplation within this group. Therefore, this project also presented an opportunity to explore whether a treatment designed for individuals who are less motivated to change would be particularly relevant for the important but understudied group of Latino batterers.

In conclusion, given the limited effectiveness of existing treatments to successfully engage batterers who are less ready to change, the purpose of this study was to compare the efficacy of a 26-week stages-of-change motivational interviewing (SOCMI) group intervention with a standard 26-week cognitive behavioral therapy gender reeducation (CBTGR) group intervention. Outcomes included self-report of violence and readiness to change at posttreatment and partner report of violence at follow-up. The effect of an interaction between an individual's initial readiness to change and the treatment protocol on outcomes was assessed. All analyses controlled for the language spoken in the group. Blind ratings of audiotapes of treatment sessions provided the basis for assessing therapist adherence to their respective treatment conditions. Finally, an assessment of the effectiveness of an intervention often utilizes an "intention to treat" approach (comparing men who were

assigned to a treatment condition whether or not they attended even one session). However, as Gondolf (2001) has noted, attributing the reassault rate of men who never even attended a single session to that type of treatment is highly misleading. Therefore, the current study compared the outcomes (including partner reports of men at follow-up, whether or not the men completed treatment) of individuals who attended at least one session of either the SOCMI or CBTGR intervention.

## METHOD

### Sampling Plan

Adult male clients ( $N = 528$ ) who were referred to the Montgomery County, Maryland Abused Persons Program (96.1% court-ordered) and who were appropriate for participation in either the English-speaking or Spanish-speaking 26-week group were randomly assigned to one of the group treatment conditions described next. Clients were excluded from group treatment if they were unable to communicate in English or Spanish. Clients who were actively abusing alcohol or other drugs were enrolled in substance abuse programs and were required to have 1 month of sobriety before they were eligible to begin group treatment.

As described earlier, this sample consisted of men who had attended at least one session. Analyses of attrition are described elsewhere (Alexander & Morris, 2009). Briefly, 78.6% of men who attended at least one session completed treatment (defined as attending at least 75% of sessions). There was no significant effect of treatment condition on attendance. The number of sessions attended was modestly correlated with initial underlying readiness to change, but treatment completion as a dichotomous variable was not.

Female victim partners were contacted and followed by the agency for information regarding the batterer's behavior, were informed that their participation and responses to all questions and questionnaires would remain confidential, were interviewed for the purpose of arranging detailed safety plans, and were otherwise given support by agency interviewers, both initially and during follow-up interviews. If the woman made it clear that she no longer wished to be contacted, the agency immediately complied with her request. Women gave verbal assent for their anonymous data to be used as part of this study.

### Data Collection Procedures and Measures

Data collection from batterers consisted of intake interviews as well as questionnaires completed at intake and at posttreatment. Data collection from partners consisted of initial telephone interviews and telephone-based follow-up information at 6 and 12 months postintake.

**Batterer Data Collection.** At the initial intake interview, the abuser completed the following measures: The *Conflict Tactics Scales-Revised* (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) eight-item Psychological Aggression and 12-item Physical Assault subscales asked participants whether or not they had engaged in each of the behaviors at least once during the most recent 6 months and over the course of the entire relationship. These "variety" scores are less skewed and more reliable than frequency scores (Moffitt et al., 1997); they range from 0 to 8 and from 0 to 12 for these two subscales. Good internal consistency and construct and discriminant validity exist for all subscales (Straus et al., 1996). The *University of Rhode Island Change Assessment* (URICA; McConaughy,

DiClemente, Prochaska, & Velicer, 1989) is a 32-item scale with subscales for precontemplation, contemplation, action, and maintenance, completed with respect to one's violence against one's partner. Internal consistency ( $\alpha$ ) is good for all scales. At posttreatment, batterers completed both the CTS2 and the URICA with respect to the previous 6 months.

**Victim Partner Data Collection.** The victim completed the following measures: The CTS2 Psychological Aggression and Physical Assault subscales inquired about the batterer's behavior in the previous 6 months and over the course of their relationship (i.e., lifetime variety scores). The *Danger Assessment Scale* (DAS; Campbell, 1986, 1995) used for this study was a 12-item version of Campbell's IPV risk assessment measure (Goodman, Dutton, & Bennett, 2000). Test-retest reliability ranges from .89 to .94 and Cronbach's  $\alpha$  from .60 to .86 (Campbell, 1995). The DAS significantly predicts reabuse over a 3-month period (Goodman et al., 2000). The victim was contacted again at 6 and 12 months following the initial interview, completing the CTS2 with regard to her partner's behavior toward her in the previous 6 months.

## Procedure

**Stage of Change Treatment Format.** The first 14 sessions of the SOCMI approach developed for this intervention relied upon experiential change processes more apropos for the precontemplation and contemplation stages, and the final 12 sessions focused on behavioral change processes (including stimulus control, counter conditioning, reinforcement management, self-efficacy, self-liberation, and the use of helping relationships to maintain one's change in behavior). The therapist stance for the SOCMI treatment format relied upon MI principles (Miller & Rollnick, 2002), such as asking open-ended questions, exploring both positive and negative aspects of the problem, listening reflectively and guessing verbally as to the meaning and emotions behind a client's statements, being willing to revise these reflections upon clarification from the client, affirming the client's efforts to change, and summarizing to prepare the client to reflect on his ambivalence around a given issue (Miller & Rollnick, 2002; Velasquez, Maurer, Crouch, & DiClemente, 2001). Emphasis was placed on nurturing the group as a whole and on facilitating the establishment of norms (e.g., acceptance of others, maintaining confidentiality, group cohesiveness, willingness to self-disclose and to accept feedback, mutual respect, and an emphasis on the "here and now") known to be curative effects in groups (Yalom, 1995).

**Cognitive Behavioral Gender Reeducation Format.** This standard abuser intervention program used behavioral techniques (e.g., time out strategies, anger journal) to reduce the risk of continued abuse. It also immediately addressed the minimization and denial that surround IPV by working to have clients directly acknowledge their use of abuse in the first session and to engage in a meaningful discussion of pros and cons of abuse by the second session.

**Training of Group Leaders.** Group leaders consisted of 28 experienced masters-level mental health professionals who received approximately 8 hr of training in their respective treatment formats prior to the onset of this study as well as biweekly supervision with respect to their assigned treatment formats.

**Random Assignment of Men to Groups.** Men were randomly assigned to one of the two group conditions within the constraints of their work schedules, although groups in both conditions were regularly scheduled at a variety of times. In order to assure maximal adherence to a particular group condition, separate pairs of group leaders led groups in only one condition. While assignment to English-speaking groups was only minimally affected by

this procedure (given that more English-speaking therapists were available), assignment to Spanish-speaking groups was affected in that the therapists conducting the CBTGR groups had more time available to run groups than did the therapists conducting the SOCMI groups. As a consequence, a total of 19 English-speaking groups were conducted in the SOCMI condition (with a total of 200 men), 16 English-speaking groups in the CBTGR condition (with a total of 175 men), 4 Spanish-speaking groups in the SOCMI condition (with a total of 47 men), and 10 Spanish-speaking groups in the CBTGR condition (with a total of 106 men). Groups in both conditions ranged from 10 to 12 men per group, with an overall average of 10.8 men per group. Neither the men nor their group leaders were blind to treatment condition, although research assistants making partner follow-up phone calls were.

**Therapist Adherence.** To assure that group therapists were indeed using only those interventions prescribed by their particular treatment approach (Waltz, Addis, Koerner, & Jacobson, 1993), a rater who was blind to the treatment condition listened to randomly selected audiotapes from each 26-week group for which audiotapes were available. The audiotapes were rated on general but unique counselor behaviors associated with the SOCMI treatment approach (encouraging reflection, focusing on clients' values and motivations, expressing empathy for clients' experience, using open-ended questions, summarizing clients' responses and exploring further, and making reflective statements) as well as general but unique counselor behaviors presumed to be associated with the CBTGR treatment approach (adopting the expert role, confronting clients about abusive behavior, presenting reasons why clients should change, appealing to external authority as to why clients should change, focusing on client behaviors, and encouraging a change of abusive behavior). Items were interspersed from both conditions into 12-item scales, with a Cronbach's alpha of .89, and were rated as to their presence on a scale from 1 to 5. On the basis of 36 coded audiotapes, the two treatment conditions were significantly differentiated by the scale ratings,  $F(1, 34) = 7.20, p = .011$ .

### **Modeling of Underlying Readiness to Change**

Questions persist as to whether stages of change are truly distinct or instead comprise a continuum (Scott & Wolfe, 2003; Sutton, 2001). Therefore, the URICAs collected from a sample of 1,554 men in treatment for IPV (consisting of the 528 batterers participating in this study and 1,026 batterers from other treatment programs in Maryland) provided the basis for testing whether the four subscales of the URICA could be modeled as a continuous underlying model of change, generally referred to as "readiness to change." The Mplus structural equation modeling software (Version 4.2; Muthén & Muthén, 1998-2006) was used for this analysis. First, confirmatory factor analysis performed on the four subscales showed increasingly advanced stages of change and good reliability estimates. Second, latent variable mixture modeling demonstrated a solution reflecting progression in URICA subscale scores consistent with the stage of change model. Finally, the position of individuals along an underlying continuous-level latent change process variable was predicted, using both estimated class membership probabilities and item response theory-based mapping of class membership on the continuous change process. Men's post-treatment responses on the URICA were then compared to their position on the initial continuous-level variable in order to assess their movement from intake to posttreatment with respect to their underlying readiness to change. Their initial readiness to change was also used in subsequent analyses assessing the interaction of readiness to change with

treatment condition in predicting outcomes, as described next (see Tracy & Alexander, 2009, for more details).

## RESULTS

### Initial Comparisons of Sample

**Demographics.** Table 1 shows the means and standard deviations for demographic variables of men in this program as well as their female partners. Comparisons were made between English- and Spanish-speaking men, and then within English-speakers and within Spanish-speakers, between men assigned to the two treatment conditions. Spanish-speakers were younger, less educated, less likely to be employed, more likely to be Latino, and more likely to be an immigrant, with younger and less educated partners. Spanish-speaking couples were more likely to have children, but did not differ from English-speaking couples either with respect to whether or not they were currently in a relationship with each other or marital status. English- and Spanish-speaking men also did not differ with respect to their referral source or demographic characteristics as a function of their assignment to the two group conditions, with one exception. Spanish-speaking men in the SOCMI condition were somewhat less likely to have been court-mandated and somewhat more likely to have been self-referred. Overall, however, men in the two treatment conditions were comparable with respect to demographics.

**Lifetime Intimate Partner Violence.** Spanish-speakers reported having perpetrated significantly less psychological and physical aggression against their partners than did English-speakers (see Table 2). Conversely, partners of Spanish- and English-speakers did not differ with respect to their report of lifetime psychological and physical aggression by their partner. Similarly, Spanish-speakers were more likely to be discrepant from their partners with respect to lifetime physical aggression,  $F(1, 79) = 4.95, p < .03$ . On the other hand, female partners of English-speakers and Spanish-speakers did not differ with respect to their perceptions of the dangerousness of the men on the DAS. Finally, neither English- nor Spanish-speakers in the two treatment conditions differed initially on their level of IPV severity or perceived dangerousness.

### Desistance From Violence as a Function of Treatment

**Self-Report.** Posttreatment data existed only for men who completed posttreatment measures. Given that CTS2 responses were low frequency behaviors and highly skewed at posttreatment (even with the use of variety scores), men's CTS2 responses were categorized as either acknowledging or denying the use of psychological and physical aggression toward their partner during the preceding 6 months. Logistic regression analyses were then used to assess the effect of type of treatment and language on these outcomes. As can be seen in Table 3, there was no effect of treatment type or language spoken on men's self-reported aggression at posttreatment.

**Victim Report at Follow-Up.** A total of 118 victims were contacted at follow-up (6 and/or 12 months following intake). Because of variability in the length of time between intake dates and either a man's assignment to a group or successful attempts to contact victims, 6- and 12-month victim follow-ups were combined, covarying for the length of time between the man's actual start-date for a group and when the victim follow-up was conducted. When both 6- and 12-month follow-ups were available for the same victim, the longer-term

**TABLE 1. Demographic Characteristics**

	English-Speaking			Spanish-Speaking			English vs. Spanish
	CBT (N = 175)	SOCMI (N = 200)	Test Statistic	CBT (N = 106)	SOCMI (N = 47)	Test Statistic	Test Statistic
	M (SD)	M (SD)	F	M (SD)	M (SD)	F	F
Age	35.4 (10.4)	36.6 (9.9)	1.08	33.3 (8.4)	31.4 (7.0)	1.33	9.90**
Education	13.0 (3.3)	12.5 (4.1)	1.88	8.22 (4.8)	8.9 (4.8)	0.57	114.10***
Victim's age	32.9 (10.2)	34.2 (9.6)	0.96	31.9 (7.3)	28.6 (6.6)	4.89*	6.29*
Victim's education	13.4 (2.4)	13.7 (2.3)	0.65	9.4 (4.2)	10.0 (3.5)	0.52	118.81***
	%	%	$\chi^2$	%	%	$\chi^2$	$\chi^2$
% court-mandated	97.1	93.3	2.81	100	95.3	4.67*	3.33
% employed	45.9	55.8	3.01	28.0	30.8	0.08	8.55**
Men's ethnicity			2.64			5.16	303.58***
White	29.9	29.6		2.0	0		
African American	45.5	45.5		0	0		
Latino	14.4	11.1		96.0	93.0		
Other	10.2	13.3		2.0	7.0		
% immigrants	23.4	27.5	0.81	76.4	72.3	0.29	111.26***
% currently in relationship	48.2	43.9	0.52	69.8	30.2	1.77	0.21
Marital status			5.17			2.34	4.17
Never married	25.6	20.4		22.2	26.2		
Married/separated	28.7	32.3		36.4	23.8		
Married/living together	28.7	31.7		29.3	38.1		
Not married/living together	9.1	5.9		7.1	7.1		
Divorced	6.7	5.9		5.1	4.8		
Widowed	1.2	3.8		0	0		
% with children	73.4	66.5	1.67	79.0	82.9	0.23	4.57*

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

follow-up was used, always referring to aggression experienced in the previous 6 months. Follow-up reports from 91 women constituted the basis for the logistic regression analyses described below. (A total of 27 victim follow-ups were considered unusable because the date when they were obtained was not recorded or because the follow-ups were conducted shortly after the partner had been assigned to a group and therefore could not be used to evaluate the effectiveness of that group.) Victim follow-up reports were obtained as often

**TABLE 2.** Lifetime Intimate Partner Violence

	English-Speaking		Spanish-Speaking		English vs. Spanish	
	CBTGR	SOCMI	CBTGR	SOCMI	F	
	M (SD)	M (SD)	F	M (SD)	M (SD)	F
Men's CTS2	(N = 164)	(N = 182)		(N = 88)	(N = 37)	
SP Psyc. Agg.	3.54 (1.95)	3.82 (1.85)	1.83	2.72 (2.04)	2.54 (2.02)	0.20
SP Phys. Agg.	2.36 (2.40)	2.30 (2.24)	0.06	1.39 (1.64)	1.41 (1.95)	0.00
Women's CTS2	(N = 42)	(N = 42)		(N = 17)	(N = 4)	
PS Psyc. Agg.	5.65 (2.89)	6.24 (2.98)	0.84	6.80 (2.53)	4.00 (4.08)	3.17
PS Phys. Agg.	6.34 (5.21)	7.35 (5.22)	0.58	10.06 (3.62)	7.33 (5.47)	1.70
DAS	(N = 58)	(N = 65)		(N = 20)	(N = 10)	
	4.66 (3.51)	4.83 (2.92)	0.09	4.65 (3.51)	3.00 (3.20)	1.56
						0.96

Note. SP = self-to-partner; PS = partner-to-self; Psyc. Agg. = psychological aggression; Phys. Agg. = physical aggression; DAS = Danger Assessment Scale.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

on treatment drop-outs as on treatment completers (21.4% vs. 22.8%;  $\chi^2[1, N = 524] = .10, ns$ ), as often on men in the SOCMI condition as on men in the CBTGR condition (20.7% vs. 23.8%;  $\chi^2[1, N = 527] = .73, ns$ ), and as often on English-speakers as on Spanish-speakers (21.9% vs. 23.5%;  $\chi^2[1, N = 527] = .16, ns$ ). Thus, whether or not a partner had been contacted for follow-up did not differ as a function of treatment completion, treatment type, or language spoken.

As with the men's data, victims' follow-up CTS2 responses were categorized into whether psychological and physical aggression had occurred during the previous 6 months. As can be seen in Table 3, results of logistic regression analyses suggested that treatment type was not significant in predicting victim report of psychological aggression at follow-up, but did predict victims' report of physical aggression. Treatment type and length of time between group start-date and follow-up were both significantly predictive of victim report, while language spoken was not. Namely, SOCMI treatment was associated with significantly less physical aggression at follow-up, as was a greater length of follow-up time.

### Readiness to Change

**Change in URICA.** Given that the change in URICA was modeled with the use of structural equation modeling and was, by definition, a normally distributed variable, a two-way analysis of variance was used to assess the effect of treatment type and language spoken on change in URICA. Neither treatment type, language spoken, nor the interaction of these two variables predicted change in growth from intake to posttreatment.

**Interaction of Treatment and Initial Readiness to Change on Desistance From Violence.** In order to assess whether the SOCMI curriculum was especially effective for individuals less ready to change, logistic regression analyses were conducted to assess the effects of treatment type, language spoken, initial level of readiness to change, and the interaction

**TABLE 3. Effect of Treatment Type on Desistance From Violence**

Outcome	Variable	B (SE B)	Exp (B)	NR <sup>2</sup>	-2LL	Model χ <sup>2</sup> , df	% Cor.
XPOPSY (N = 294)	Treatment	0.05 (.25)	1.05	.002	399.2	0.45, 2	58.2
	Language	0.18 (.26)	1.20				
XPOPHY (N = 297)	Treatment	0.03 (.32)	1.03	.004	283.94	0.69, 2	81.5
	Language	-0.25 (.33)	0.78				
VFUPSY (N = 90)	Treatment	0.86 (.48)	2.36	.05	109.88	3.25, 3	67.8
	VFUTIME	-0.01 (.06)	0.99				
	Language	0.31 (.54)	1.36				
VFUPHY (N = 88)	Treatment	1.50* (.74)	4.50	.215	65.31	11.81**, 3	84.0
	VFUTIME	-0.24* (.11)	0.78				
	Language	1.30 (.85)	3.66				

Note. NR<sup>2</sup> = Nagelkerke R-squared; -2LL = -2 log likelihood; % Cor. = percentage correctly classified; XPOPSY, XPOPHY = man's CTS2 self-report at posttreatment of any psychological or physical aggression, respectively, toward his partner in previous 6 months; VFUPSY, VFUPHY = victim's CTS2 report at follow-up of any psychological or physical aggression, respectively, experienced in previous 6 months; VFUTIME = length of time in months between onset of group and victim follow-up; Treatment = CBTGR (1) or SOCMI (0); Language = English (1) or Spanish (0).

\* $p < .05$ . \*\* $p < .01$ .

between treatment type and initial readiness to change on desistance from violence. There was no evidence of an interaction between treatment type and readiness to change on either self-reported psychological or physical aggression at posttreatment or on victim report of psychological aggression at follow-up. However, as noted in Table 4, in addition to an effect of treatment type, there was a significant interaction between treatment type and initial readiness to change on victim report of physical aggression at follow-up. Namely, partners of men who were less ready to change reported less physical aggression at follow-up when the men were in the SOCMI condition whereas partners of men who were more ready to change reported less physical aggression at follow-up when the men were in the CBTGR condition. Using a median split to illustrate low versus high initial readiness to change, an approximation of this relationship is depicted in Figure 1.

### Generalizability of Victim Follow-Up Findings

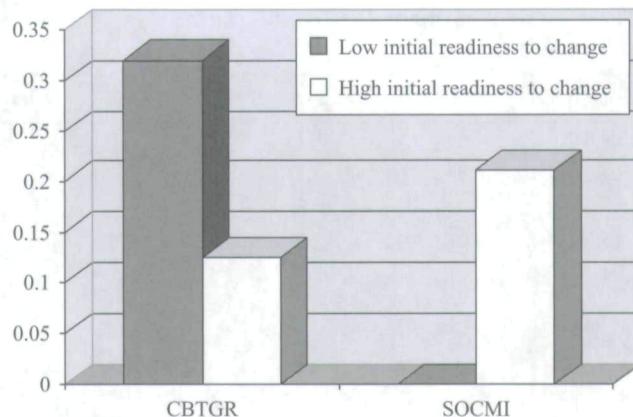
In an effort to assess how generalizable these findings were to the whole sample, comparisons of intake information were made between couples on the basis of whether or not the female partners were successfully contacted for follow-up. As mentioned previously, rates of partner follow-up did not differ as a function of treatment condition, language spoken, or treatment completion. Men whose partners were contacted were somewhat older,  $F(1, 430) = 4.30$ ,  $p < .04$ , as were their partners,  $F(1, 336) = 10.12$ ,  $p = .002$ , were less likely

**TABLE 4.** Interaction of Treatment Type and Readiness to Change on Desistance From Violence

Outcome	Variable	B (SE B)	Exp (B)	NR <sup>2</sup>	-2LL	Model $\chi^2$ , df	% Cor.
XPOPSY (N = 262)	Treatment	0.42(0.85)	1.23	.005	354.85	0.93, 4	58.4
	Language	0.21 (0.30)	1.53				
	Readiness	-0.20 (0.41)	0.82				
	Readiness × Tx	0.12 (0.26)	1.13				
XPOPACY (N = 265)	Treatment	0.13(1.12)	1.13	.003	250.34	0.41, 4	81.9
	Language	-0.07 (0.38)	0.93				
	Readiness	0.06 (0.52)	1.06				
	Readiness × Tx	0.01 (0.33)	1.01				
VFUPSY (N = 81)	Treatment	2.36 (1.77)	10.64	.06	96.86	3.26, 5	67.9
	VFUTIME	-0.02(0.06)	0.98				
	Language	-0.14(0.62)	0.87				
	Readiness	-0.80 (0.82)	0.45				
	Readiness × Tx	0.52 (0.51)	1.67				
VFUPACY (N = 79)	Treatment	9.17 (3.72)*	9584.52	.37	53.53	20.28**, 5	83.5
	VFUTIME	-0.25(0.12)	0.78				
	Language	0.77 (0.94)	2.16				
	Readiness	-3.21 (1.24)	0.04				
	Readiness × Tx	2.26 (0.96)*	9.58				

Note. Readiness = man's readiness to change at Time 1; Tx = Treatment type (1 = CBTGR; 0 = SOCM).  
 \* $p < .05$ . \*\* $p = .001$ .

to be African American,  $\chi^2(2, N = 451) = 9.84, p < .01$ , and reported a longer relationship time,  $F(1, 393) = 15.78, p < .001$ , although marital status or whether or not they were currently in a relationship did not differ on this basis. A higher percentage of female immigrants was contacted at follow-up,  $\chi^2(1, N = 240) = 15.32, p < .001$ . Couples with and without follow-up data did not differ in education, referral source, or the woman's ethnicity. Differences in rates of partner follow-up did not emerge with respect to either the man's or the partner's report of his previous lifetime violence toward her, her perception of his dangerousness, number of sessions attended, his initial readiness to change, or his change in URICA scores. Therefore, based on intake data gathered from both men and



**Figure 1.** Percentage of victims reporting physical aggression at follow-up by treatment type and men's initial readiness to change.

women, the absence of any apparent selection biases characterizing women contacted for follow-up argues for the generalizability of findings from partner follow-up data.

## DISCUSSION

This study's purpose was to compare the efficacy of a batterer group treatment curriculum based on the stages of change model and motivational interviewing with a standard treatment curriculum based on cognitive behavioral therapy and Duluth-model premises. While many research studies have compared batterer intervention to no treatment, few comparisons have been made of different types of treatment (Sartin, Hansen, & Huss, 2006). One strength of this study was its use of randomized assignment, the success of which was indicated by the lack of differences at intake between men in the two treatment formats with respect to demographics, referral source, IPV severity (based on self- and partner-report), and perceived dangerousness. Another strength was the use of victim follow-up reports, considered the gold standard of evaluation studies of batterer intervention in that they are a much more conservative measure of recidivism (Babcock et al., 2004). Moreover, the inclusion of victim follow-up reports on program drop-outs as well as completers allowed a more thorough evaluation of the interventions. In spite of limited numbers of partner follow-up reports, a comparison of couples with and without follow-up data suggested that these partner follow-ups were notably representative of the full sample. Finally, the use of an empirically derived continuous measure of readiness to change bypassed the need to interpret discrepancies between different cluster solutions (cf., Eckhardt, Babcock, & Homack, 2004; Levesque et al., 2000) and permitted an analysis of the full range of the measure.

Differences between the two treatment conditions did not emerge with respect to men's self-reports of violence at the end of treatment, but did emerge in partners' reports of physical aggression at follow-up. Overall, significantly fewer partners of men assigned to the SOCMI treatment condition as opposed to the CBTGR condition reported having experienced physical aggression at follow-up. The fact that reports of physical aggression decreased as time went on suggests that the reported changes in behavior were not merely an

artifact of the monitoring of behavior that occurs during program attendance. On the other hand, the two treatment conditions did not differ with respect to partner follow-up reports of psychological aggression. The continuing occurrence of psychological aggression is troubling and typical of batterer treatment outcome studies (Johannson & Tutty, 1998).

That the SOCMI and CBTGR conditions were operating in ways consistent with their respective theoretical underpinnings was suggested by evidence on therapist adherence as well as a significant interaction between initial readiness to change and treatment condition. Namely, men who were less ready to change at intake were more likely to benefit from the SOCMI condition (as indicated by partner reports of physical aggression at follow-up) while men who were more ready to change at intake were more likely to benefit from the standard CBTGR condition. Therefore, consistent with other research on motivational interviewing (Hettema, Steele, & Miller, 2005), the SOCMI condition was not as effective for men who initially were more ready to change. Men who are highly motivated are probably seeking explicit strategies for controlling their behavior and do not need the consciousness-raising characteristic of the earlier portion of the SOCMI curriculum. Possible alternatives for these men might include the use of shorter-term groups focusing on specific anger-management and conflict resolution skills, or therapists' descriptions of strategies without necessarily promoting those strategies.

In fact, one goal of a stages of change treatment format is to match men's readiness to change with the appropriate intervention (Eckhardt et al., 2004; Levesque, Velicer, Castle, & Greene, 2008). The logistics of accomplishing this goal can be daunting, especially at smaller agencies with few simultaneous groups. One option would be a treatment format with different phases (cf., Gerlock, 2001) based on men's readiness to change. Scott's (2004) evidence of the validity of therapists' ratings of men's stage of change suggests that such a strategy could be clinically feasible. Alternatively, there may be benefits of having men with a range of stages of change within any group in order to allow precontemplators to compare their experiences and perceptions regarding IPV with men in a later stage of change. However it might be accomplished, this issue of client/treatment matching deserves further attention.

Differential growth in men's self-reported readiness to change was not observed between treatment conditions. Although perhaps simply reflective of a statistical regression to the mean (also observed by Scott and Wolfe, 2003), both treatment formats may have facilitated an increase in the assumption of responsibility for IPV, a worthy goal of any batterer intervention program (Brownlee & Chlebovec, 2004). Musser, Semiatin, Taft, and Murphy (2008) similarly found no significant effect in self-reported readiness to change as a function of participation in a pregroup motivational interviewing intervention, but did find a marginal effect of the intervention on partner reports of aggression at 6-month follow-up. Conversely, Kistenmacher and Weiss (2008) found that motivational interviewing was associated with pre-to-post improvements on stages of change subscales, albeit in a very small sample and without access to partner reports. The failure in this study and in Musser et al. (2008) to find changes in self-report may have been due in part to the intervention's impact on the distorted perceptions observed in men who are less motivated to change. Any change in self-report may thus have been nullified, even though partners described changes in the men's behavior. In any case, it is not yet clear whether changes in behavior as reflected by partner reports are mediated by changes in batterers' actual readiness to change.

Cultural background (i.e., language spoken in the group) did not appear to affect treatment outcomes, even though initial differences between Spanish speakers and English speakers

could be presumed to have affected their behavior within the groups. Consistent with the observations of Caetano et al. (2002), Spanish speakers in this study exhibited significantly more denial of their behavior, as seen by decreased levels of interpartner agreement about the IPV. Perhaps due to a lack of awareness of the cultural unacceptability of IPV within this country, the minimization of their violent behavior is undoubtedly a challenge in their treatment.

The diversity of batterers seen in this study suggests an opportunity to look at the role of group composition on outcomes, a variable emphasized by group therapists but seldom researched (cf., Yalom, 1995). One exception is a study conducted by Taft, Murphy, Elliott, and Keaser (2001) in which racial composition (percentage of African Americans within each group) was found not to predict attendance for either African Americans or Whites. However, the effect of other factors such as percentage of immigrants, age and education of group members, and readiness to change of group members on treatment outcomes should be assessed.

In spite of promising results, this study needs to be viewed within the context of its limitations. First, the number of partner follow-ups obtained was low at less than 25%. On one hand, the lack of any noticeable differences between women who were and were not contacted for follow-up argues for the representativeness of the findings. On the other hand, the limited number of follow-up reports precluded the exploration of interactions between treatment and other conditions that would have permitted a more nuanced evaluation of the use of the SOCMI curriculum. Second, the relatively low number of group therapists who regularly audiotaped their sessions (and the technical problems of others who did) precluded an analysis of the differential impact of therapist adherence on the effectiveness of any particular group. Third, mediators of treatment outcomes should be explored, ranging from therapeutic alliance to group cohesion to the acquisition of other behaviors integral to the eventual desistance from violence (e.g., increased empathy and improved communication skills; cf., Scott & Wolfe, 2003). Finally, a longer duration of follow-up is necessary to evaluate the persistence of change.

In conclusion, counselors in the SOCMI condition were almost universally enthusiastic about its use. They liked that it was less didactic and that it gave them more latitude in responding to the individual needs of men in the group and to the group overall. They reported encountering much less resistance by group members. The emphasis on men's values throughout the SOCMI curriculum allowed the counselors to continually highlight the personal and individualized discrepancies between those values and men's behavior in a way that challenged them without appearing confrontational. The convergence between counselors' impressions and victims' reports at follow-up of less aggression by men who participated in this curriculum justifies its further development and use, especially for men who are initially less motivated to change their abusive behavior.

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