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A Short Form of the Revised Conflict Tactics Scales, and Typologies for Severity and Mutuality

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The revised Conflict Tactics Scales (CTS2) is the most widely used instrument for measuring intimate partner violence. This article presents a short form to enable the CTS2 to be used when testing time is very limited. It also presents procedures that can be used with either the full test or the short form to classify individuals on the basis of severity of behavior toward a partner or by a partner, and to classify couples on the basis of mutuality or symmetry in the behaviors measured by the CTS2. The results indicate that the short form is comparable in validity to the full CTS2. Although the short form does not identify as many cases of partner violence as the full scale, it does identify a large number of cases and if there is insufficient time for the full scale, can be a useful screening instrument.

The Conflict Tactics Scales (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) is the most widely used instrument in research on family violence. The instrument includes scales to measure three tactics used when there is conflict in the relationships of dating, cohabiting, or marital couples: Negotiation, Physical Assault, and Psychological Aggression. In addition, there are two supplemental scales: Injury from Assault and Sexual Coercion. More than 200 papers and many books reporting results based on administration of the CTS have been published (for bibliographies see Straus, 2004; Yodanis, Hill, & Straus, 1997), and between 5 and 10 papers are currently being published each month. The purpose of this article is to further extend the utility of the CTS by making available a short form of the Revised Conflict Tactics Scales (the CTS2) and by providing procedures for use with both the short form and the full CTS2 to classify individuals on the basis of severity of behavior toward a partner or by a partner, and to classify couples on the basis of mutuality or symmetry in the behaviors measured by the CTS2.

Need for a Short Form and Typologies

Short Forms. The CTS2 short form (hereafter, the CTS2S) was created in response to many requests since the CTS2 was introduced because the CTS2 is much longer than the original CTS. The full CTS2 consists of 39 items, each of which is first asked for the behavior of the respondent and then repeated for the behavior of the respondent's partner, making a total of 78 questions. The test administration time of 10 to 15 minutes is not a

508 Straus and Douglas

problem in many clinical and research applications, but there are also many applications where this amount of time is not available. For example, most survey research is now conducted by telephone. The recommended maximum length for a phone interview is 30 minutes. If, as is usually the case, many other aspects of family relationships must be measured, it is not possible to devote a third to half of the interview time to the variables measured by the CTS2. The research reported in this article was undertaken to create and evaluate a 20-question short form which would take approximately 3 minutes to administer.

Severity Level. The severity of aggression against a partner is a critical issue that needs to be addressed in research on family violence. The CTS2 has separate subscales for minor and severe levels of the Physical Assault, Injury, Psychological Aggression, and Sexual Coercion scales. However, the minor subscale scores are confounded with the severe subscale scores because almost everyone who engages in the more severe behavior also engages in the less severe behavior. Partners who kick or punch are also likely to slap and shove. The Severity Levels measure described in this article avoids this problem by classifying respondents into three mutually exclusive types: none, minor only, and severe. These categories can be used as the dependent variable in multinomial logistic regression or discriminate analysis. The severity level variable can also be used as a three-category ordinal measure of each of the behaviors measured by the CTS2.

Mutuality Types. Another critical issue in measuring partner violence is the mutuality of the abusive behavior. The CTS2 obtains data on the use of physical and psychological aggression by both parties in a relationship. However, until now there has not been a standardized procedure to take into account the mutuality of violence. This article describes a method of doing this by creating mutuality types. The need for such a typology is based on the assumption that most research and clinical work on partner violence will benefit from taking into account the behavior of both partners in a relationship. This applies even when it might seem that only information on the behavior of one of the partners is needed, such as when the CTS2 is used to measure progress in a treatment program for male batterers. Research has shown that the cessation of violence by one partner is highly dependent on whether the other partner also stops hitting (Feld & Straus, 1989; Gelles & Straus, 1988). Thus, when monitoring a treatment program, it is crucial to know the extent to which the partner has also ceased acts of psychological and physical aggression. The mutuality types provide one way to investigate this issue. They obtain the scores for each partner to classify couples into three categories: male partner only, female partner only, and both aggressive.

METHOD

Sample

The sample consists of students enrolled in introductory sociology and psychology courses at a New England university in 1998, 1999, and 2000. The procedures to ensure informed consent, privacy, and safety were reviewed and approved by the Institutional Review Board of the University of New Hampshire. The questionnaires were distributed in class to all students present. They were told that the questionnaire asked about beliefs and experiences they may have had in a dating relationship. They were informed that the questionnaire included questions on sensitive issues such as sex. The written and oral instructions emphasized that answering the questionnaire was entirely voluntary, and that they could also skip any question that they did not wish to answer. The students were instructed to put

Short Form of CTS2 509

their completed questionnaires in a slot in a box near the exit door and leave. Those who did not wish to participate put a blank questionnaire in the box and were indistinguishable from students who completed the questionnaire. Only 1 or 2 students out of each class of 50 to 80 students did not complete the questionnaire.

The questionnaire included the full CTS2 scale (not a short form) and a number of other scales in addition to the CTS2. Most students completed the questionnaire in 40 to 45 minutes. Questionnaires for students who had not been in a dating relationship of at least 1-month duration in the past 12 months were excluded from the analyses reported in this article. Married students were not included because there were not enough in these groups to analyze separately. The resulting sample consisted of 1,157 cases (347 males and 810 females).

Procedure to Create the CTS2S

The following steps were followed to create the short form of the CTS2 (see the Appendices for sample items).

- For each of the five scales, 2 items were selected from the full scale. One of the 2 items was
 chosen from the severe behavior subscale, and the other from the less severe behavior subscale. (For the Negotiation scale, 1 item was chosen from the Cognitive subscale and the
 other from the Emotional subscale.) When these 10 items are repeated for behavior of the
 respondent and the partner, it results in an instrument with 20 questions, compared to 78
 questions in the CTS2.
- 2. The specific minor and severe items were selected by computing the correlation of the items in each scale with the total scale score. The item with the highest correlation with the total scale score was chosen. When there were items with approximately equal correlations, the item with the higher prevalence rate was chosen.
- 3. The CTS2 items ask about only one specific act, such as punching, which is an item in the Severe Assault scale. This is an appropriate strategy for an instrument that uses multiple items. However, when there is only one item to measure severe assaults, it will underestimate the prevalence of this behavior. Consequently, the items selected by steps 1 and 2 were augmented by adding behaviors measured by the unselected items in the scale. For example, the Severe Assault scale item "Beat up my partner" was changed to make it "Punched or kicked or beat up my partner." It is usually desirable to avoid double-barreled questions like this because it is impossible to know which of the behaviors in the question occurred. However, in this context, the need to tap as many aspects of the domain as possible took precedence.

There are several ways to score the CTS2, including annual prevalence rate, "ever prevalence," and annual chronicity for those who experienced partner violence (Straus, 2000a; Straus et al., 1996). The annual prevalence method of scoring was used for four of the five scales, and the yearly frequency method was used for the Negotiation scale because these are the recommended and most widely used methods of scoring these CTS scales (see section on "Scoring" in Appendix B).

Procedure to Create Severity Level Variable

Scores on the Minor Assault scale of the CTS2 overlap with Severe Assaults because people who severely attack a partner almost always also engage in less severe attacks. The severity level variable deals with this problem by classifying respondents into three mutually exclusive categories: 0 = no violence, 1 = minor only, and 2 = severe. The respondents in

the minor only category are those who reported one or more acts of minor violence and no instances of severe violence. The severity level variable can be used as a three-category typology or as a 3-level ordinal scale.

Procedure to Create Mutuality Types

The mutuality types can be created because the CTS2 repeats each item for the behavior of the respondent toward the partner and for the behavior of the partner toward the respondent. Because the CTS2 measures behavior, not attitudes or motives, the respondent has full knowledge of the partner's behavior. This permits classifying couples into three mutuality types even though only one partner is the respondent. For example, the three mutuality types using the Physical Assault scale are 1 = male partner only, 2 = female partner only, 3 = both. Because this typology is intended to aid research on the dynamics of maltreatment, it is not scored if there was no maltreatment of the type measured by a CTS2 scale. Therefore, among a clinical sample such as men in a batterer treatment program or women in a shelter, all the subjects are classified according to the mutuality of assault, but for a nonclinical sample the typology for physical assault is scored only for the relatively small part of the sample in which a physical assault occurred.

Other Measures

Risk Factors For Partner Violence. The questionnaire included scales from the Personal And Relationships Profile (Straus, Hamby, Boney-McCoy, & Sugarman, 1999; Straus & Mouradian, 1999) to measure risk factors for partner violence. The five scales used for this study, with their alpha coefficients of reliability, and an example of an item from each scale are listed below. Additional psychometric data for these scales can be found in Straus and Mouradian.

Anger Management (.66): "When I feel myself getting angry at my partner, I try to tell myself to calm down"

Couple Conflict (.82): "My partner and I disagree about my friends and family"

Criminal History (.83): "Since age 15, I stole or tried to steal something worth more than \$50.00"

Negative Attribution (.74): "When my partner is nice to me I wonder what my partner wants"

Violence Approval (.72): "A man should not walk away from a physical fight with another man"

Socioeconomic Status (SES). An SES scale was computed by summing items that measure the education of the student's father and mother (score range 1–7 for both variables) and the parents' combined income (score range 1–9). The resulting scale has an alpha coefficient of .68.

Social Desirability Scale. A modification of the Reynolds (1982) 13-item social desirability scale was included in the questionnaire. This scale measures the degree to which respondents tend to avoid disclosing socially undesirable behavior. The need to control for social desirability is indicated by the following correlations with the above risk factor variables: Anger Management r = .49, Couple Conflict r = .47, Criminal History r = 35, Negative Attribution r = .41, and Violence Approval r = .39.

Data Analysis

Use of An Approximation Version of the CTS2S. A subset of the items from the full CTS2 was used to approximate the short form given. Therefore, the results presented in

this article refer to what will be called an "approximation" of the CTS2S, not to the CTS2S. The reason it is an approximation, as explained previously, is because some of the items in the short form have been augmented by adding behaviors from full CTS2 items that are not in the short form. Because the CTS2S includes more of the behaviors in the full CTS2, the construct validity coefficients based on the approximation of the CTS2S can be thought of as lower-bound estimates. If that is correct, use of the short form would show stronger correlations between the short form and the full CTS2 than are reported in this article.

Reliability and Validity Estimates. Internal consistency reliability is usually one of the first ways of evaluating an instrument. However, this could not be done for the CTS2S because there is no total score. The instrument consists of five separate scales that are not intended to be summed to obtain a total score. It would be desirable to compute reliability coefficients for each of the five scales, but this is also not appropriate because each scale consists of only two items.

Concurrent Validity. The correlation of the approximation version of the CTS2S (see above) with the full CTS2 was used to measure concurrent validity. However, as suggested previously, because some items were augmented by adding behaviors (see step 3 above), the results of using the approximation of the CTS2S can be considered as lower bound estimates of what might be obtained using the actual CTS2S.

Construct Validity. Preliminary data on the construct validity of the CTS2S was obtained by correlating four risk factor scales listed in the Other Measures section with the short form scales. These four risk factors were also correlated with the full CTS2. To the extent that the short form is conceptually equivalent to the full CTS2, it should have the same pattern of correlation with these variables as the full scale. Because the data on risk factors for partner violence were obtained only for the respondent, the construct validity correlations were performed only for perpetration of the behaviors measured by the CTS2. Partial correlation, controlling for scores of socioeconomic status and social desirability scales and for gender, was used because of possible confounding of these variables with the risk factor and the CTS2 variables.

RESULTS

Concurrent Validity

Partial correlation of the short form scales with the corresponding full CTS2 scales, controlling for scores on the SES and social desirability scales and for gender of the respondent, resulted in the following correlations between the short form and the full scale.

Negotiation. r = .89 for Negotiation by the respondent, and r = .88 for Negotiation by the partner *Physical Assault.* r = .72 for Assaults by the respondent on the partner, and r = .69 for Assaults by the partner on the respondent

Injury. r = .94 for Injuries to the respondent, and r = .94 for Injuries to the partner as reported by the respondent

Sexual Coercion. r = .65 for Sexual Coercion by the respondent, and r = .67 for Sexual Coercion by the partner

Psychological Aggression. r = .77 for Psychological Aggression by the respondent, and r = .69 for Psychological Aggression by the partner.

These coefficients indicate that measuring the five constructs by the CTS2S results in scores that are highly correlated with the measures of these constructs using the full CTS2.

Construct Validity

Partial correlations of five risk factors for partner violence with the short form CTS2 scales and the full CTS2 scales are given in Table 1. These correlations controlled for scores on the socioeconomic status and social desirability scales. The issue investigated by the correlations in Table 1 is not the strength of the correlation between the risk factors and the CTS2 variables but rather whether the results from using the short form parallel the results when the full scale is used. This was evaluated by computing a test of the significance of the differences between the short and long form for each of the pairs of correlations in Table 1. Of the 25 pairs of correlations in Table 1, only one revealed a statistically significant difference in the results from using the short form and full scale versions of the CTS2. That was for the correlation between negative attributions about the partner and psychological aggression against the partner. The short form resulted in a significantly lower correlation (r = .04) than the full scale (r = .19) at the .001 level. These results indicate that, with one exception, the short form scales produce the same results as the full scale.

Prevalence Rates

One way of evaluating the validity of scales intended to measure illegal or reprehensible behavior is the degree to which the instrument is successful in obtaining disclosure of these behaviors. The rates for the short-form and the full CTS2 for the four reprehensible behavior scales are given in Table 2. The full CTS2 results in prevalence rates that are from 20% greater to about double the rate obtained using this version of the short form. These

TABLE 1. Partial Correlation of CTS2 Short Form and Full CTS2 Scales With Five Risk Factor Variables, Controlling for Social Desirability Response Set (N = 1,160)

CTS Scale	Anger Management	Couple Conflict	Criminal History	Negative Attributions	Violent Approval
Assault					
Short	18**	.16**	.05	.13**	.11**
Full	21***	.17**	.07*	.14**	.12**
Injury					
Short	08*	.13**	.10**	.15**	.12**
Full	09*	.15**	.13**	.19**	.14**
Psych. Aggression					
Short	16**	.12**	02	.04	.00
Full	21**	.16**	.05*	.19**	.07*
Sexual Coercion					
Short	09**	*80.	.13**	.13**	.17**
Full	11**	.14**	.14**	.15**	.22**
Negotiation					
Short	04	.04	02	02	13**
Full	02	.01	03	05	12**

^{*} $p \le .05$, ** $p \le .01$, one-tailed partial correlation coefficients.

Short Form of CTS2 513

TARIF 2	Prevalence	Pates.	of Short-Form	and Full	CTS $(N = 1.160)$
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	Preva	lence		
CTS Scale Short Full		Percentage Point Difference	Full Exceeds Short By	
Assault				
By partner	14.7	28.1	13.4	91.2
By respondent	16.7	29.6	12.9	77.2
Injury				
By partner	6.6	8.0	1.4	21.2
By respondent	7.1	8.5	1.4	19.7
Psychological Aggression				
By partner	55.7	76.7	21.0	37.7
By respondent	57.5	79.1	21.6	37.6
Sexual Coercion				
By partner	13.0	25.6	12.6	97.0
By respondent	12.1	20.1	8.0	66.1

results are consistent with the principle that, for behavioral measures, the more different forms of the behavior for which there are items in the scale, the higher the prevalence rate (Straus, 1990).

Severity Levels

The comparison of the short and long form results for the severity level variables in Table 3 can be considered an extension of the comparison of prevalence rates for the short and full scales in Table 2. The results extend those results by showing that the lower prevalence rates from using the short form also apply to both the minor only and severe violence categories. All 12 of the comparisons in the column headed minor only show lower rates for the short form, although often not much lower. The same applies to the comparisons in the column for severe behavior.

Mutuality Types

The mutuality types provide a way for researchers and clinicians to identify "gender symmetry" or asymmetry in abusive relationship behavior. In general, Table 4 shows that the short form produced distributions of mutuality types that were similar to the full scale. For example, for all four of the CTS2 scales in Table 4, when there was maltreatment of a partner, the most prevalent pattern was for both partners to engage in the behavior. However, for physical assault, the short form produced higher percentages in the "male only" and "female only" categories.

DISCUSSION

This article makes available a 20-question short form of the CTS2. The article also provides procedures for using either the short form or the full CTS2 to classify respondents into (a) mutually exclusive categories according to the severity of maltreatment of

TABLE 3. Severity Level of Perpetration By Gender (N = 1,069)

	Pe	evel		
Scale	None	Minor Only	Severe	
Assault				
All respondents				
Short	81.9	13.0	5.1	
Full	70.8	19.6	9.6	
Males				
Short	85.0	10.6	4.4	
Full	73.2	18.9	7.9	
Females				
Short	82.1	13.3	5.5	
Full	69.7	19.9	10.4	
Injury				
All respondents				
Short	92.4	5.9	1.8	
Full	91.5	6.1	2.4	
Males				
Short	92.8	5.6	1.6	
Full	92.0	5.7	2.2	
Females				
Short	92.6	5.7	1.7	
Full	91.7	6.0	2.3	
Psychological aggression				
All respondents				
Short	37.7	55.5	6.8	
Full	39.7	62.7	16.5	
Males				
Short	39.7	52.0	8.2	
Full	23.4	60.6	15.9	
Females				
Short	38.0	55.1	6.9	
Full	20.8	61.7	17.5	
Sexual coercion				
All respondents				
Short	86.9	10.8	2.3	
Full	79.9	15.5	4.6	
Males	, , , ,	15.5	,,,	
Short	86.6	11.4	2.0	
Full	74.6	20.0	5.4	
Females	7.7.0	20.0	٥,٦	
Short	86.6	11.4	2.0	
Full	80.1	15.5	2.0 4.4	

a partner or by a partner, and (b) categories to identify whether there was asymmetry or mutuality in violence. Administration time for the short form is about 3 minutes, which makes this version of the CTS2 suitable for situations where the time available for clinical screening or research interview is not sufficient for the full 78-item CTS2, which takes 10 to 15 minutes.

TABLE 4. Mutuality Types, by Severity and Gender

			Percent in Each Type						
		n^{a}	Male Only	Female Only	Both				
Assault									
Total	Short	223	9.4	27.8	62.8				
	Full	361	8.9	19.7	71.5				
Severe	Short	71	15.5	33.8	50.7				
	Full	134	14.9	36.6	45.8				
Injury									
Total	Short	95	15.8	16.8	67.4				
	Full	107	15.9	18.7	65.4				
Severe	Short	20	5.0	5.0	90.0				
	Full	28	10.7	10.7	78.6				
Psycholog	gical aggression								
Total	Short	680	2.1	4.9	93.1				
	Full	869	1.7	4.9	93.3				
Severe	Short	110	32.7	19.1	48.2				
	Full	231	19.0	26.0	55.5				
Sexual co	ercion								
Total	Short	177	17.5	18.1	64.4				
	Full	305	29.2	10.5	60.3				
Severe	Short	29	27.6	27.6	44.8				
	Full	68	27.9	13.2	58.8				

^aThe *n*s are lower than for the other analyses, because mutuality types are computed only for cases where there is at least one violent incident.

Comparison of Short and Full Scale

Concurrent Validity. Concurrent validity, as measured by the correlation between the short form and full scales, ranged from .77 to .89 for perpetration of the behavior measured by each scale, and from .65 to .94 for being victimized by a partner who engaged in these behaviors. These are inflated concurrent validity coefficients because the items for the short form were selected by taking the items that had the highest correlation with the total scale and because they are part-whole correlations (Cohen, Cohen, West, & Aiken, 2003). Nevertheless, they indicate that the part does reflect the whole, even though the precise degree cannot be estimated using the current data.

Construct Validity. Given the high correlation between the short and long form version of each CTS2 scale, it is not surprising that the construct validity analyses found that the correlations of five risk factors for partner violence with the maltreatment of a partner measured by the CTS2S scales were generally parallel to the correlation of these risk factors with maltreatment measured by the full CTS2.

Sensitivity. While there is strong evidence indicating the concurrent and construct validity of the CTS2S, the short form has a much lower sensitivity, as evidenced by lower estimates of the prevalence of each of the five behaviors measured by the CTS2. This occurs because the CTS2 is a behavioral measure, as compared, for example, to an attitude measure. For this type of measure, each additional behavior in the scale results in an increase

516 Straus and Douglas

in the percentage meeting the criterion of having experienced the behavior (Straus, 1990). The lower sensitivity of the short form is a serious deficiency. Thus, users of the CTS2S need to recognize that there may be significantly lower estimates of partner violence than would be found with the full CTS2.

If there is insufficient time for the full CTS2 and estimating prevalence is crucial, a possible alternative is to use *all* the questions for the scale for which prevalence estimates are most needed and omit the questions for the other scales. This, however, raises the question of the extent to which asking only the questions for one scale, when they *are* not embedded in random order with the questions for the other scales, is equivalent to the results from the full CTS2.

Severity Levels and Mutuality Types

Severity Level. The severity level variable classifies cases as none, minor only, and severe. These categories provide a way of avoiding the confounding of minor and severe acts of maltreatment that occurs because some of the respondents who used or experienced minor forms of maltreatment also experience or perpetrate more severe forms of that type of maltreatment.

Mutuality Types. The CTS2 asks respondents about their own behavior and the behavior of their partner. Usually, asking a respondent about the behavior of someone else is a doubtful procedure unless the focus is on the respondent's perception. However, in the case of the CTS2, the questions ask about the behavior of the partner toward the respondent. Thus, except for the injury scale, the respondent has full knowledge of each behavior in the CTS2 by the partner. This makes it possible to classify the couples into mutuality types. The mutuality types provide an elementary but important way of taking into account the fact that behaviors measured by the CTS2 are embedded in a system of interaction. The mutuality types classify couples into the following categories for each CTS2 scale: male partner only, female partner only, both. The percentage of the sample classified into these three categories by the short form and the full CTS2 is similar.

A problem with this method of obtaining mutuality types is that, unless the CTS2 is administered to both partners, the validity of the classification depends on the accuracy of one partner's report. Moreover, the possible bias is confounded with the gender of the respondent. Most studies have shown little difference in prevalence rates reported by males and females (Archer, 2000). However, enough studies have shown a tendency for males to underreport both perpetration and victimization to make it desirable to test both partners or, if that is not possible, to exercise caution in conclusions based on the report of only one partner. Although administering the CTS2 to both partners is desirable, it also requires a procedure to use when the reports of the partners disagree. One approach is to use the higher of the two reports.

Limitations

A major limitation is that in order to avoid having to obtain data for an entirely new sample, the study analyzed a version of the short form that was computed from existing data. Consequently, the results are only an approximation of what might be obtained using the short form. We believe that the results based on this approximation of the short form are lower-bound estimates. This is because the approximation to the short form lacked the additional behaviors that are included in the augmented short form items. If the version of the CTS2S using the items that have been augmented to include more of the behaviors that are in the

full scale is used, it may result in greater correspondence with the full CTS2 than was found using the approximation items. However, even if that proves to be correct, the short form is very likely to still have a lower sensitivity because the augmented items could not include all the behaviors in the full CTS2.

Another limitation of the study is that the data refer entirely to the behavior toward a partner by university students. This problem is mitigated somewhat by the fact that studies of students have generally found results that are parallel to the results of studies of general population samples, with the important exception that, because of their youth, student samples always have much higher scores on the Physical Assault scale.

A potential problem from using the approximation CTS2S, consisting of a subset of items answered as part of the full scale, is the possibility that results from using the CTS2S, which consists of only 20 items, will be different because respondents may react differently when the items are not in the context of the larger set of items in the full CTS2.

CONCLUSIONS

Despite these limitations, the results are sufficiently promising to make it appropriate to investigate the validity of the short form using nonstudent and clinical samples. Because the short form has much lower sensitivity than the full CTS2, use of the short form results in a much higher rate of false negatives. Nevertheless, because of the high sensitivity of the full CTS2 (Straus, 1990, 1999), if the full CTS2 cannot be used, the short form is likely to identify a large number of cases of partner violence.

For research focused on testing theories, such as testing the hypothesis that a certain risk factor is associated with one or more of the aspects of partner maltreatment measured by the CTS2, the concurrent and construct validity analyses in this article suggest that the short form is likely to produce results that are sufficiently parallel to the results from the full CTS2 to consider using the short form when using the full CTS2 is not possible.

Regardless of whether the full scale or the short form is used, the severity level types are recommended because partners who engage in the less severe forms of maltreatment may also engage in more severe forms. The severity level types avoid this confounding. The mutuality types are recommended because at least half of the victims of maltreatment are also perpetrators. The mutuality types enable identification of cases of mutual violence, male-only violence, and female-only violence, and thus enable a first step in investigating the dynamics of partner violence.

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APPENDIX A: THE CTS2S SHORT FORM

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Couple Conflicts

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please mark how many times you did each of these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, mark a "7" for that question. If it never happened, mark an "8."

How often did this happen?

1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year
4 = 6-10 times in the past year
5 = 11-20 times in the past year
6 = More than 20 times in the past year
7 = Not in the past year, but it did happen before
8 = This has never happened

I explained my side or suggested a compromise for a disagreement with my partner	1	2	3	4	5	6	7	8
9. I pushed, shoved, or slapped my partner	1	2	3	4	5	6	7	8
10. My partner pushed, shoved, or slapped me	1	2	3	4	5	6	7	8
11. I punched or kicked or beat-up my partner	1	2	3	4	5	6	7	8
12. My partner punched or kicked or beat-me-up	1	2	3	4	5	6	7	8

THE COMPLETE INSTRUMENT IS APPENDED TO THIS ARTICLE

APPENDIX B: SCORING AND TRANSFORMING THE CTS2 SHORT FORM

Scoring Method

Scoring the short form is identical to scoring the full CTS2. There are many ways to score the CTS2. These are described in Straus et al., 1996 and Straus, 2000b. The optimal method depends on the characteristics of the sample and the purpose for which the scales will be used. The most usual and recommended scoring method for the Physical Assault, Injury, and Sexual Coercion scales is to create a dummy variable for "prevalence" by assigning a score of 1 if one or more instances of the items were reported to have occurred in the past year and 0 if no instances were reported. For the Negotiation scale, the recommended scoring method is to sum the number of times each behavior was reported. To do this, the answer categories must be converted from 0 to 7 to the midpoint of the range of scores in each category (Straus et al., 1996).

Transforming the CTS2 or CTS2S Scores to Compute Severity Levels

The procedure to create severity types uses the prevalence scoring (0 = no instance of the behavior measured by the scale; 1 = one or more instances). The procedure is illustrated by the following syntax to compute severity types for assaultive behavior by male respondents:

```
IF (MaleMinor = 0 AND MaleSever = 0) MaleSeverityTyp = 0.
```

IF (MaleMinor = 1 AND MaleSever = 0) Male SeverityTyp = 1.

IF (MaleSever = 1) MaleSeverityType = 2.

VAR LABELS MaleSeverityType 'SHORT FRM ASSAULT BY MALE-SEVERITY TYPE.'

VALUE LABELS MaleSeverityType 0 'NO VIOL' 1 'MINOR ONLY' 2 'SEVERE.'

Where:

MaleMinor = Minor assault by male partner

MaleSever = Severe assault by male partner

MaleSeverityLevel = Assault severity level by male partner

Syntax following the above pattern should be used to create Assault Severity Levels for the female partner. Severity levels can also be computed for Injury, Psychological Aggression, and Sexual Coercion by male and female partners—a total of eight Severity Level variables.

Transforming the CTS2 or CTS2S Scores to Compute Mutuality Types

Below is the syntax that can be used to compute "Mutuality Types", which allows researchers to determine gender symmetry among violent relationships.

IF (SevereMale LE 0 AND SevereFemale LE 0) SevereCouple = SYMIS.

IF (SevereMale GE 1 AND SevereFemale GE 1) SevereCouple = 3.

IF (SevereMale GE 1 AND SevereFemale = 0) SevereCouple = 1.

IF (SevereMale = 0 AND SevereFemale GE 1) SevereCouple = 2.

VAR LABELS SevereCouple 'ASSAULT SEVERE, MUTUALITY TYPES'.

VALUE LABELS SevereCouple 1 'Male Only' 2 'Female Only' 3 'Both'.

THE CTS2S SHORT FORM

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COUPLE CONFLICTS

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please mark how many times you did each to these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, mark a "7" on your answer sheet for that question. If it never happened, mark an "8" on your answer sheet.

How often did this happen?

1 =Once in the past year

2 =Twice in the past year

3 = 3-5 times in the past year

4 = 6-10 times in the past year

5 = 11-20 times in the past year

6 =More than 20 times in the past year

7 =Not in the past year, but it did happen before

8 =This has never happened

 I explained my side or suggested a compromise for a disagreement with my partner My partner explained his or her side or suggested a compromise for a disagreement 	1	2	3	4	5	6	7	8
with me	1	2	3	4	5	6	7	8
3. I insulted or swore or shouted or yelled at my partner	1	2	3	4	5	6	7	8
4. My partner insulted or swore or shouted or yelled at me	1	2	3	4	5	6	7	8
5. I had a sprain, bruise, or small cut, or felt pain the next day because of a fight with								
my partner	1	2	3	4	5	6	7	8
6. My partner had a sprain, bruise, or small cut or felt pain the next day because of a								
fight with me	1	2	3	4	5	6	7	8
7. I showed respect for, or showed that I cared about my partner's feelings about an issu	ue							
we disagreed on	1	2	3	4	5	6	7	8
8. My partner showed respect for, or showed that he or she cared about my feeling								
about an issue we disagreed on	1	2	3	4	5	6	7	8
9. I pushed, shoved, or slapped my partner	1	2	3	4	5	6	7	8
10. My partner pushed, shoved, or slapped me	1	2	3	4	5	6	7	8
11. I punched or kicked or beat-up my partner	1	2	3	4	5	6	7	8
12. My partner punched or kicked or beat-me-up	1	2	3	4	5	6	7	8
13. I destroyed something belonging to my partner or threatened to hit my partner	1	2	3	4	5	6	7	8
14. My partner destroyed something belonging to me or threatened to hit me	1	2	3	4	5	6	7	8
15. I went see a doctor (M.D.) or needed to see a doctor because of a fight with								
my partner	1	2	3	4	5	6	7	8
16. My partner went to see a doctor (M.D.) or needed to see a doctor because of a fight								
with me	1	2	3	4	5	6	7	8
17. I used force (like hitting, holding down, or using a weapon) to make my partner								
have sex	1	2	3	4	5	6	7	8
18. My partner used force (like hitting, holding down, or using a weapon) to make me								
have sex	1	2	3	4	5	6	7	8
19. I insisted on sex when my partner did not want to or insisted on sex without a								
condom (but did not use physical force)	1	2	3	4	5	6	7	8
20. My partner insisted on sex when I did not want to or insisted on sex without a								
condom (but did not use physical force)	1	2	3	4	5	6	7	8