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Measuring Intrafamily Conflict and Violence: The Conflict Tactics (CT) Scales*

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Development of research on intrafamily conflict and violence requires both conceptual clarity and measures of the concepts. The introduction to this paper therefore seeks to clarify and distinguish the concepts of "conflict," "conflict of interest," "hostility," and "violence." The main part of the paper describes the Conflict Tactics (CT) Scales. The CT Scales are designed to measure the use of Reasoning, Verbal Aggression, and Violence within the family. Information is presented on the following aspects of this instrument: theoretical rational, acceptability to respondents, scoring, factor structure, reliability, validity, and norms for a nationally representative sample of 2,143 couples.

Conflict theorists present a convincing case showing that conflict is an inevitable part of all human association (Adams, 1965; Coser, 1956; Dahrendorf, 1959; Scanzoni, 1972; Simmel, 1955; Sprey, 1969). They further hold that without the changes brought about by conflict, a social unit—be it a nation, an academic department, or a family—runs a high risk of collapse. If conflict is suppressed, it can result in stagnation and failure to adapt to changed circumstances and/or erode the bond of group solidarity because of an accumulation of hostility.

*The work reported in this paper is part of the Family Violence Research Program at the University of New Hampshire. A program bibliography listing available reprints may be obtained on request. The work has been supported by three NIMH grants since its inception in 1970. They are currently T32MH1516 and MH27557. The first draft of the CTS was developed in a seminar on intrafamily violence at the University of New Hampshire in 1971. Students (both undergraduate and graduate) in subsequent seminars on this topic in 1972 and 1974 also participated in the development of this instrument. The work of Richard Bulcroft was particularly important. I would also like to express appreciation to Herbert Abelson, Richard J. Gelles, Suzanne K. Steinmetz, and Susan Weisbrod for their contribution to the Form N revision.

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Despite the above, most people fear conflict and try to avoid it. Professionals concerned with the family also tend to take an almost opposite view to that of conflict theorists. They treat conflict as something to be avoided. Sociologists and psychologists do research to find out why conflict occurs, implicitly to be able to provide information which will enable people to avoid conflict. Marriage counselors, with a few exceptions such as Bach and Wyden (1968) and Shostrom and Kavanaugh (1971), focus much of their efforts on helping families avoid conflict.

There are a number of factors involved in creating this hiatus between the truths revealed to us by sociological conflict theorists and those revealed by our daily experience and emotional reactions to conflict. However, since this paper is concerned with methods of measuring conflict rather than with the important theoretical questions raised by this hiatus, the available space permits only a discussion of one of the factors. This is the conceptual confusion which characterizes analyses of conflict.

SOME CONCEPTUAL DISTINCTIONS

It is essential to distinguish between a series of closely related yet clearly different phenomena, all of which are called conflict.

For purposes of this paper, even this list must be confined to only three of these: "conflict of interest," "conflict," and "hostility" (further conceptual distinctions are discussed in Foss, 1979; Gelles and Straus, 1978).

Conflict of Interest

When conflict theorists talk about the ubiquity of conflict, they are referring to what is here called "conflict of interest;" that is, to the fact that members of a social group, no matter how small and intimate, are each seeking to live out their lives in accordance with personal agenda which inevitably differ. These differences range in importance. Which TV show will be watched at eight? Should money be saved or spent on a vacation? Which is more important to control: inflation or unemployment? There is no way to avoid such conflicts without running the risks to which conflict theorists have alerted us. However, there is a tendency among those writing from a conflict theory perspective to imply that "the more conflict the better," or at least not to discuss the question of how much conflict is necessary or desirable.

The question of how much conflict is desirable is also beyond the scope of a methodological paper such as this. But I would like to suggest that it is an important question for empirical research, and to further suggest the hypothesis that there is a curvilinear relationship between the amount of conflict and group well-being. That is, the absence of conflict (in the sense of conflict of interest) is theoretically impossible and (as noted in the introductory paragraph) even if it could be brought about, would be fatal for group well-being. But at the same time, very high levels of conflict can create such a high level of stress and/or such rapid change that group welfare is adversely affected.

Conflict

The second phenomenon which must be distinguished if we are to have any hope of doing sound theoretical or empirical research on intrafamilial conflict is the method used to advance one's own interest; that is, the means or the tactics used to resolve conflict. Two families can have the same level of conflict over the types of interests mentioned in the previous section. But even though conflict in that sense is identical, the two may differ vastly—and with profound consequences—in

respect to how they deal with these conflicts. One family might resolve the issue of which TV program to watch by rotation, another by a "first there" strategy, and another by a threat of force by the physically strongest.

Some conflict theorists have attempted to deal with the conceptual confusion by using the term "conflict" to refer to conflict of interest, and a different term to refer to the means of resolving such conflict. Dahrendorf (1959), for example, uses "conflict" to refer to conflict of interest, and "conflict management" to refer to the means of advancing one's interests. However, the situation remains confused because other theorists follow the opposite strategy. Coser (1956) uses "conflict" to refer to the means or behavior used to pursue one's interest rather than conflict of interest itself. So, when Coser and Dahrendorf use the term "conflict," they are often referring to quite different phenomena. There is no resolution in sight for this confusing state of affairs. The best that can be done is to make clear which usage one is following. Therefore, in the context of the present paper, Coser's usage will be followed: *i.e.*, "conflict" will refer to "conflict tactics" in the sense of the overt actions used by persons in response to a conflict of interest.

Hostility

When, for whatever reason, members of a group have a feeling of dislike or antipathy for each other, this fact is also often referred to as conflict. But, paradoxically, as conflict theorists have pointed out, hostility is likely to be extremely high when the existence of conflict (in the sense of conflict of interest) is denied. This is because such a situation prevents the actors from achieving ends which are important to them. Hostility develops out of this frustration. Of course, hostility can arise from other sources as well. However, that only highlights the need to keep distinct the phenomena of conflict of interest, conflict, and hostility. Therefore, in this paper, hostility will be restricted to refer to the level of negative cathexis between members of the family groups.

It follows from the previous discussion that further theoretical work on conflict in the family requires as a minimum first step that we avoid the all too common confusion of "conflict of interest," "conflict," and "hostil-

ity." Similarly, clear empirical work on intra-family factors also depend on having separate measures of these three variables. This paper is, therefore, devoted to describing a technique for measuring one of these: intrafamily conflict in the sense of the means used to resolve conflicts of interest.¹

THE CONFLICT TACTICS SCALES (CTS)

There is an almost infinite variety of techniques which members of a family can employ in a conflict. In principle, only open-ended free response methods can tap all of these. But, in practice, the way people deal with conflict is so much a part of the unrealized, "taken for granted," ongoing pattern of life that much will be missed unless the respondent is specifically asked. Other omissions occur because certain tactics, such as the use of physical force—although extremely common—may be pushed out of memory because they are unacceptable presentations of the self. Consequently, for any but the most lengthy and in-depth interviews carried out by a highly sensitive investigator, structured methods are needed. This means that some choice of conflict tactics must inevitably be made because one cannot include every possible act in such an instrument.

In the case of the Conflict Tactics Scales (CTS) described in this paper, the choice of the tactics to be measured was based on the fact that the following three modes of dealing with conflict are particularly important for testing the "catharsis theory" of violence control (Straus, 1974a):

1. The use of rational discussion, argument, and reasoning—an intellectual approach to the dispute, which for purposes of this instrument is called the "Reasoning" scale:²

¹Measures of "hostility" and "conflict of interest" are also being developed. These are not presented in this paper for the following reasons: (1) there are space limitations; (2) some measures for these variables are already available in the form of family problem check lists and measures of family disagreement (Straus and Brown, 1978), whereas there are almost no existing measures of "conflict" in the specific sense of the means of resolving conflicts of interest. It was, therefore, decided that the first priority in developing adequate instrumentation for research on intrafamily conflict should be on measures of "conflict" *per se*.

²In the first published data using these scales (Straus, 1974a), the Reasoning scale was called "Intellectualization." This was because the article was, in part, a criti-

2. The use of verbal and nonverbal acts which symbolically hurt the other, or the use of threats to hurt the other, which, for purposes of this instrument, are included in the "Verbal Aggression" scale.³
3. The use of physical force against another person as a means of resolving the conflict, which is called the "Violence" scale (see Gelles and Straus, 1978, for a more extended definition of violence as used in this statement).

When using Form N (see Appendix 2) it is also possible to obtain measures of Child Abuse, Wife-beating, and Husband-beating by summing items for violent acts which carry a risk of serious injury (items n through r). The Child Abuse score is especially useful because less severe violence toward children is so common that the total parent-to-child "Violence" score often produces zero or low correlations compared to the Child Abuse score.

As previously noted, the three tactics measured by the CT Scales are theoretically based, but still arbitrary, selections from a much larger (but as yet undefined) set. Even though Reasoning, Verbal Aggression, and Violence were chosen with a specific

cism of certain anti-intellectual tendencies of the "encounter group" movement. I wanted to show that opposing the intellect and the affect is a false dichotomy, and that the use of the intellect in family disputes is associated with a low level of physical violence (which is what the findings indicated). However, among therapists, "intellectualization" also has another meaning: a mechanism for *avoiding* dealing with a problem, of *hiding* behind intellectual issues. That use of intellectualization is almost exactly the opposite of what was intended! Instead of avoiding the issue, my use of "intellectualization" was meant to signify an active and assertive, but also a "civil" and nonaggressive (in the sense of non-malevolent) approach to conflicts in the family. For obvious reasons, then, "intellectualization" is not a satisfactory way of designating the first of the CT Scales. "Reasoning" was substituted even though there are also certain problems associated with its use. The main problem is that it does not adequately denote the active, problem-solving, getting-the-issues-on-the-table approach which is so crucial for conflict management.

³The concept of "aggression" is beset by even more conceptual confusion than is conflict. Space does not permit the kind of explication given in Gelles and Straus (1978). However, it is necessary to at least state the way the concept is used here: an act carried out with the intention of, or perceived as having the intention of, hurting another person. The injury can be either symbolic, material, or physical.

theoretical issue in mind, these three are so important that they are likely to be found useful in a wide range of investigations. But, of course, there will be research issues which require data on other conflict tactics. Even in such cases, the general strategy of measurement outlined in this paper might still be applicable.

Another aspect of the CT Scales which needs to be made clear is that this instrument does not provide information on the extent to which conflicts get resolved. In fact, as conflict theorists such as Dahrendorf (1959) and Sprey (1969) note, some conflicts are never resolved; they may be regulated, but they remain part of the system.

Factorial Design

The CT Scales were developed through the use of a model analogous to a 3 by 8 factorial design experiment (Straus, 1964:350-351). The three levels of the first factor are the conflict tactics: Reasoning, Verbal Aggression, and Violence. The 8-level factor corresponds to the nuclear family role structure: husband-to-wife, wife-to-husband, father-to-child, child-to-father, mother-to-child, child-to-mother, child-to-sibling, and sibling-to-child. There are therefore a total of $3 \times 8 = 24$ different CTS scores. In addition, one can combine the pairs of role scores to get four "role-relationship" scores; one each for the conjugal, father-child, mother-child and sibling relationships. Finally, all the role scores can be summed to obtain total family scores for Reasoning, Verbal Aggression, and Violence. However, not every investigation will need the full 3 by 8 matrix of questions. For example, a study focusing on the husband-wife relationship would only need to obtain data on the husband-to-wife and the wife-to-husband roles.

The Component Items

The CTS consists of a list of actions which a family member might take in a conflict with another member. The items start with those low in coerciveness (such as discussing the issue with the other) and become gradually more coercive and aggressive towards the end of the list (such as using slapping and hitting). The response categories ask for the number of times each action occurred during the past year, ranging from "Never" to "More than 20 times."

The husband's version of the original CTS (Form A) is shown in Appendix 1. The wife form is identical except "at my wife" is replaced by "at my husband" etc. Items a through d are summed to obtain the Reasoning score, items e through i give the Verbal Aggression score, and items j through o show the Violence score.⁴

The CTS items are usually presented with pairs of response categories (as in Straus, 1974a: Table 1) rather than the single column of response categories in Appendix 1. Thus, if the husband-wife relationship is the focus, respondents are asked to indicate how often they did each act in relation to their spouse in the past year, and how often the spouse carried out each action. Similar pairs can be presented for other "role-relationships" in the family, such as parent-child and the sibling-sibling roles.

A revised version of the CTS (Form N) was developed for a national interview survey. The page measuring conflict in the conjugal role is shown in Appendix 2. This version differs from Form A as follows: (1) it is for use in a face-to-face interview rather than as a self-administered questionnaire; (2) there is a greater focus on the Verbal Aggression and Violence modalities, brought about by dropping one Reasoning item and adding two Verbal Aggression and three Violence items; (3) the response category range is increased from 0 to 5 to 0 to 6; (4) use of a "response card" has been added; (5) wording changes have been made in some items; (6) a place to record if the act ever happened has been added.

Acceptability to Respondents

The husband-wife Verbal Aggression scales and, even more, the husband-wife Violence scales ask about highly sensitive and normatively deviant types of behavior. There

⁴The Verbal Aggression index might also be called a Symbolic Aggression index because it includes two items which best fit this concept: items h (stomping out of the room) and i (smashing or throwing something at an inanimate object). They are included in the Verbal Aggression index because the theory which this index was originally designed to test (see Straus, 1974a:16) emphasizes symbolic acts; because they are not indicators of either reasoning or interpersonal physical violence (as defined earlier in this paper); and because their inclusion is supported by the factor analysis presented later in the paper.

is, therefore, a corresponding risk of high refusal rates, arousal of antagonism in respondents and self-defensively distorted responses. All of these can result in invalid data. The question of validity is discussed in a later section. However, before one can even consider validity, the data must be obtained. Experience with the CTS indicates low refusal and antagonism rates. For example, in the national survey, a "completion rate" only slightly lower than is currently typical of such mass surveys was obtained (65 percent as compared to the now typical 70-75 percent). Four factors seem to account for the acceptability of the CTS.

First, the instrument is presented in the context of disagreements and conflicts between members of the family and the ways in which such conflicts are resolved. Since almost everyone recognizes that families have conflicts and disagreements this serves as the first step in legitimizing response.

Second, as previously explained, the items start with conflict tactics which most respondents positively value, and then gradually increase in coerciveness and social disapproval. The respondent is, therefore, given a chance to first present the "correct" things which he or she has done to resolve the conflict. In the context of a society in which there is widespread approval of violence "if all else fails," this serves to legitimize reporting the use of violence.

A third factor is the sequence in which the data on behavior in different family roles is obtained. The CTS begins with the items concerning parent-to-child relationships. This sequence was deliberately selected because the use of physical force between family members is most legitimate in the parental role, especially if everything else has been tried. Next, the CTS items are presented for conflicts between children in the family. Since fighting between children is also widely considered as normal, respondents are again being asked about behavior which, although not liked, is also not threatening to their self-esteem. The fact that they are describing the behavior of someone other than themselves also makes this cycle of the CTS more acceptable.

A final factor which seems to account for the willingness of respondents to provide data on acts of physical violence between

themselves and their spouse's is that, by the time the husband-wife cycle of items is reached, they are familiar with the questions which will be asked. Having responded to these questions previously, the strangeness of responding to a question about throwing things or hitting someone else has sharply diminished.

Although this practice effect seems, on the face of it, to be important, the evidence from the Bulcroft and Straus (1975) study shows that it is far from essential. In that study, mail questionnaire versions of only the spousal role section of the CTS were used. These were completed and returned by 72 percent of the parents of a sample of university students to whom questionnaires were sent.

SCORING

There are several methods of scoring the CTS:

1. The simplest method is to add the response category code values for the items making up each CT Scale. Thus, the Reasoning score for Form A can range from 0 to 20 because it consists of the sum of items a, b, c, and d, each of which is scored 0 to 5. For Form N, the Reasoning score is the sum of items a, b, and c. However, since the response categories for Form N were expanded to 0 to 6, the Form N reasoning scale has a range of 0 to 18.
2. The items in Form N can be weighted in accordance with the frequencies indicated by the response categories presented to the respondent. To do this, substitute for the 0 to 6 scale, 0, 1, 2, 4, 8, 15, and 25.
3. Each of the scales can be standardized on a 0 to 100 scale indicating the percentage of the possible total score. This is done by simply dividing the score for each respondent by the maximum possible score, multiplying by 100 and rounding to an integer. Thus, for the Reasoning scale, a respondent with a raw score (by method 1) of 9 would have a percentage score of 50, and a respondent with a raw score of 12 would have a percentage score of 67. The advantage of the percentage standardization is that it ex-

presses all scales in the same units and uses units that have meaning to the general public: *i.e.*, percentage of the maximum possible score (see Straus and Kumagai, 1977). However, there is no statistical advantage.⁵

4. Because this instrument has been administered to a nationally representative sample of couples, a final method of expressing CTS scores is available for Form N: percentiles of the norming population. Tables giving these norms are at the end of this article. The raw scores used to determine the percentile scores are those described as method 1 above.

The scores for Verbal Aggression and Violence are obtained in a similar way. For Verbal Aggression (Form A), add items e through i; for Form N, add items d, e, f, h, i, and j. Note that item g is omitted. This was included in the list of actions because pre-test interviewing showed it to be a frequent response and because respondents became uneasy if there was no place to record this. The Violence score in Form A consists of the sum of items j through p and, in Form N, items k through r.⁶

⁵There may also be situations in which it might be desirable to weight the items in accordance with factor loadings or factor scores. However, a recent methodological study of weighting and other aspects of index construction (Straus and Kumagai, 1977) suggests that little or nothing is likely to be gained by such weighting. Since the CTS items were selected to represent acts of increasing degrees of coerciveness, Guttman scaling is also an appropriate technique to apply to the CTS. This can be done as a means of determining the extent to which the items form a single hierarchical order. But Guttman scale scores are not recommended because the required dichotomization of the items results in an unnecessary loss of measurement precision (Straus and Kumagai, 1977).

⁶Item j (threatening physical violence) was included in the Form A Physical Aggression index because it was felt that since the other physical aggression items would not always be visible to the child, they would understate the amount of violence between husband and wife. It was assumed that if the child observed the parents threatening each other with physical violence, then some violence is likely to have occurred. This reasoning was supported by the results of an item analysis of the Physical Aggression indexes. The correlation of the threat item (j) with the Index is .86 for the husband and .87 for the wife. But since item-total correlations with only five items are inflated by the part-whole correlation problem, the correlation of item j with each of the other four physi-

The list of violent acts is longer than the list for the other two modalities in Form N of the CTS for two reasons. First, items q and r were included, even though they are relatively rare occurrences, because it was felt that inclusion of these two acts of extreme violence might make respondents more willing to describe the less extreme acts on the list. In practice, however, many instances of using a knife or gun were uncovered (Straus, 1977; Straus *et al.*, 1979). The second reason for the longer list of acts of physical violence is that the study for which this version of the CTS was developed had intrafamily physical violence as its primary focus.

The longer list of physical violence items in Form N of the CTS has been mentioned in some detail to point up the fact that it is not a necessary part of the instrument. If one wishes to use the CTS in the context of a study in which it is important to measure Reasoning with the same depth and reliability as Violence, then the Reasoning items cut from Form A can be restored.

ANALYSIS OF VIOLENCE SCORES

With the exception of the child-to-child violence score, the violence indexes produce extremely skewed distributions. Consequently, even "robust" statistics such as correlation often produce incorrect results. The most satisfactory procedure is to dichotomize the Violence indexes into violent and nonviolent categories, scored 0 and 1. This produces violence rates, as in Table 5, which can be analyzed using nonparametric statistics. Logit correlation may be particularly useful.

FACTOR STRUCTURE OF THE CTS

The three conflict tactics which served as the basis for selecting the items to be included in the CTS, and which form the basis for the

cal aggression items was also computed. For the husband, these coefficients (of item j with items k, l, m, and n, respectively) were found to be .69, .71, .68, and .57. For the wife, the parallel correlations are .68, .70, .71, and .60. See also the factor loadings for item j given later in this paper.

TABLE 1. FACTOR LOADINGS FOR FORM A (N = 385) AND FORM N (N = 2143) FOR HUSBANDS AND WIVES

CT Item	Form A Factors			CT Item	Form N Factors			
	I	II	III		I	II	III	IV
A. Husband-to-Wife Data								
a	-0.23127	-0.16161	0.83564	a	-0.06890	0.01893	-0.00307	0.53285
b	-0.18984	-0.29661	0.81986	b	0.00382	0.14771	-0.03153	0.70899
c	-0.07601	0.00055	0.59017	c	0.11212	0.20555	0.05850	0.26763
d	0.07920	0.12769	0.32877	d	0.15238	0.70421	0.03254	0.12480
e	0.10979	0.57488	0.19269	e	0.02572	0.55026	-0.00904	0.11673
f	0.19427	0.81668	-0.10098	f	0.13787	0.65913	-0.00774	0.06222
g	0.07886	0.61290	-0.07980	h	0.13075	0.72242	0.03044	0.12513
h	0.19864	0.63951	-0.11681	i	0.55660	0.49279	0.03155	-0.08034
i	0.71975	0.22022	-0.14915	j	0.40762	0.54265	0.05440	-0.00654
j	0.77915	0.25702	-0.13520	k	0.51970	0.25804	0.24833	-0.02459
k	0.92868	0.06955	-0.02819	l	0.71076	0.39624	-0.00907	0.00411
l	0.84875	0.17066	-0.12079	m	0.82132	0.16751	0.07995	0.00943
m	0.91708	0.13842	-0.05816	n	0.71760	0.06333	0.26939	0.04118
n	0.77411	0.04637	0.04205	o	0.65134	0.14028	0.31346	0.00192
				p	0.71374	-0.02460	0.41558	0.04791
				q	0.33765	0.02195	0.94048	0.00142
				r	0.29721	0.00532	0.90618	0.00924
B. Wife-to-Husband Data								
a	-0.06239	0.00694	0.88926	a	-0.05474	0.06215	-0.02890	0.44539
b	-0.08368	-0.18301	0.83287	b	0.03579	0.18549	0.04396	0.82394
c	-0.03935	0.20978	0.47796	c	0.16236	0.25549	0.02094	0.25851
d	0.05196	0.33520	0.17867	d	0.24794	0.65880	0.03380	0.14247
e	-0.01144	0.66145	0.12001	e	0.06504	0.55217	0.05199	0.10711
f	0.17023	0.76283	-0.11870	f	0.13298	0.71357	0.01530	0.03668
g	0.11717	0.58157	-0.03507	h	0.17225	0.67467	0.03792	0.15517
h	0.28972	0.63807	-0.07019	i	0.62976	0.43413	0.00662	0.00708
i	0.76279	0.19718	-0.03624	j	0.56102	0.44523	-0.06085	0.02812
j	0.76845	0.24701	-0.15485	k	0.73059	0.23559	0.04321	0.02580
k	0.91023	0.03394	0.00592	l	0.71399	0.24018	0.08635	0.01505
l	0.88562	0.13876	-0.01849	m	0.67712	0.13799	0.14229	-0.00261
m	0.90080	0.12058	-0.04682	n	0.82331	0.06968	0.18356	0.03150
n	0.85132	0.02678	-0.00676	o	0.77995	0.09681	0.14847	0.01605
				p	0.37491	0.03487	0.35559	0.00334
				q	0.32082	0.04788	0.38534	0.01858
				r	0.04023	0.03165	0.81766	-0.01388

scoring described in a previous section, are theoretical constructs. But to what extent do the CTS items actually group themselves into these three modalities? One method of providing empirical data on this issue is a factor analysis. Factor analyses were, therefore, computed for the spousal role, using Form A and the sample described in Straus, 1974a (N = 385) and replicated using Form N and the sample described in Straus, 1977 or Straus *et al.*, 1979 (N = 2143). The method used for these analyses is "Principal Factoring with Iteration" using a Varimax rotation, as computed by SPSS option PA2 (Nie *et al.*, 1975).

Husband-To-Wife Data

The results of these factor analyses correspond fairly closely with the theoretical grouping of the items explained previously. Specifi-

cally, the analysis of Form A produced three factors, each of which identifies one of the three CT Scales. Factor I clearly corresponds to the Violence scale (see factor loadings in Table 1), Factor II to the Verbal Aggression scale, and Factor III to the Reasoning scale.

Turning to Form N, Table 1 reveals the three factors postulated in the design of the CTS: Factor I is the Violence scale, Factor II is the Verbal Aggression scale, and Factor IV is the Reasoning scale. What then is Factor III? Inspection of the factor loadings shows that the core of this factor is the last two items. These items were added when Form N was designed, and refer to the use of a knife or a gun. The fact that they refer to potentially lethal acts, and the fact that the loadings on this factor decrease rapidly as the seriousness of the violence diminishes, suggests that Factor III represents the Wife-

beating subscore described earlier. The finding of a separate factor for "serious" violence also supports the notion of the marriage license as a hitting license (Straus, 1974a, 1974b), provided the violence is not "excessive." Even those who accept the legitimacy of violence in marriage (typically without realizing that they do) differentiate between a beating and the "ordinary" or "normal" use of force, and it is the former which manifests itself as Factor III.

Wife-To-Husband Data

The factor analysis of the conflict tactics used by wives produced very similar results to those just reported for the husbands. The most important difference is the last item of Factor I in the Form N data. Although Factor I is clearly a general violence factor (as it was for the husband-to-wife data) the item on using a knife or gun has almost zero loading. It seems as though, for wives, the use of a knife or a gun is even more a separate phenomenon, distinct from the "ordinary" violence of marriage, than it is for husbands.

The only other difference between factor analysis of the wife-to-husband and the husband-to-wife data is in Form A, item d. This refers to bringing in another person to help settle a conflict. For husbands, this loads most heavily on the Reasoning factor, as originally planned. But, for wives, the largest factor loading is on the Verbal Aggression factor. Perhaps when a wife seeks help in this way this is an aggressive act, but that does not seem likely. Instead, our speculation is that, given the privacy norms of the contemporary American nuclear family, it takes a conflict involving violent acts to make the partners desperate enough to be willing to (or to be forced to) breach this privacy by bringing in an outsider to help mediate the conflict.⁷

⁷It may not intuitively be clear why the high loadings of item d on the Violence factor does *not* warrant re-scoring the Violence scale to include them. The reason is that factor analysis, like all correlation techniques, indicates the amount of association, not the reason for

Jorgensen Factor Analysis

The CTS Form A items were included in a list of 28 conflict tactics used by Jorgensen (1977). He found three factors, which are labeled as high, medium, and low intensity factors. Jorgensen's "high intensity" factor consists entirely of items involving physical force, his "medium intensity" factor consists of acts of verbal or symbolic aggression (insulting, stomping out, etc.,) and his "low intensity" factor consists entirely of items involving reasoning and providing information. Jorgensen's factor analysis, therefore, produced a factor structure which directly corresponds to both the factor analyses just reported and to the CTS scores for Reasoning, Verbal Aggression, and Violence.

RELIABILITY

The internal consistency reliability of the CTS was examined by two techniques. For Form A, an item analysis was computed to determine the correlation of the items making up the CTS with the total score. The resulting correlations are summarized in Table 2, and indicate that Form A has an adequate level of reliability.

For Form N, the *Alpha* coefficient of reliability (Cronbach, 1970:160) was computed. These coefficients are given in Table 3. The reliability of coefficients are high for the Verbal Aggression and Violence scales and low for the Reasoning scale. This difference is largely a function of the small number of items (only three) making up the Reasoning scale. This emphasizes the point made earlier: that for research in which measurement of Reasoning is an important focus, the complete set of Form A items should be used.

the association. The two reasons for an association which concern us here are: (a) that the items being correlated are causally related, or (b) that they are manifestations of the same variable. In most instances, an index should be restricted to items which are taken as measures of the same variable.

TABLE 2. INTERNAL CONSISTENCY RELIABILITY OF HUSBAND-WIFE CONFLICT TACTICS SCALES, FORM A (N = 385)

Conflict Tactics Scale	Item-Total Correlations (<i>r</i>)			
	Range		Mean	
	Husband	Wife	Husband	Wife
Reasoning	.53 - .82	.52 - .78	.74	.70
Verbal Aggression	.47 - .85	.44 - .81	.73	.70
Violence	.79 - .91	.84 - .91	.87	.88

TABLE 3. COEFFICIENT OF RELIABILITY (*ALPHA*) FOR CONFLICT TACTICS SCALES, FORM N (N = 2,143)

Family Role	Conflict Tactics Scale		
	Reasoning	Verbal Aggression	Violence
Child to Child	.56	.79	.82
Parent to Child	.69	.77	.62
Child to Parent	.64	.77	.78
Husband to Wife	.50	.80	.83
Wife to Husband	.51	.79	.82
Couple Scores	.76	.88	.88

VALIDITY

It must be stated at the outset that there is no definitive evidence supporting the validity of the CT Scales. Neither, however, is there complete lack of evidence.

Concurrent Validity

Evidence of "concurrent validity" (Cronbach, 1970:122; Straus, 1964:365) is reported in a study by Bulcroft and Straus (1975). The CTS was completed by students in two sociology courses. The students responded for a referent period consisting of the last year they lived at home while in high school. They were asked to indicate, to the best of their knowledge, how often during that year their father and mother had done each of the items in the CTS.

Each student was also asked to fill in a separate form with the names and addresses of their parents so that a similar questionnaire could be sent to them. Participation was voluntary and students were assured that they would not be mentioned in the letter to the parents, and that as soon as the mailing was completed the names and addresses would be destroyed and all documents identified by a number only from then on. Of the 110 students present in these classes, 105 completed the questionnaire. Of the 168 questionnaires sent to the mothers and fathers (each was sent separately with its own return envelope) 121 or 72 percent returned the questionnaire. A comparison of parent reports with student reports in this study, and also with student reports from a previous study (Straus, 1974a), is given in Table 4.

The correlations shown in Table 4 are difficult to interpret. First, the pattern is varied. The correlations are low for the Reasoning scale and high (relative to typical concurrent validity results for most social

TABLE 4. CORRELATION OF SPOUSE REPORT CTS SCORES WITH STUDENT REPORT CTS SCORES

Conflict Tactics Scale	Correlation (<i>r</i>) for:	
	Husbands (N = 57)	Wives (N = 60)
Reasoning	.19	-.12
Verbal Aggression	.51	.43
Violence	.64	.33

psychological tests and scales) for the Verbal Aggression and Violence scales. An analysis by Bulcroft and Straus (1975) suggests that the higher correlations for the two aggressive modes of conflict are due to such acts being more dramatic and emotionally charged and, therefore, better remembered.

Another way of examining the concurrent validity of the CTS is to compare incidence rates for violence as reported by each spouse, and also as reported by students for their parents. The rates are shown in Table 5. For the Bulcroft and Straus (1975) study, the first two rows of the table show a tendency for the students to report somewhat more violence by husbands than the husbands themselves reported, but to report less violence by wives than the wives themselves reported. One does not know which data (the student report or the reports of the spouses themselves) is more accurate since each has its own potential source of bias. The last two rows of Table 5, however, suggest that these discrepancies might be the result of the small size or other characteristics of the sample used in that study, since the results obtained by student report for the larger sample in the Straus (1974a) study (third row) are almost identical with the violence rates reported by the nationally representative sample of spouses shown in the last row of Table 5.

Content Validity

Fortunately, it is not necessary to evaluate

TABLE 5. PERCENTAGE OF RESPONDENTS REPORTING ONE OR MORE ACTS OF PHYSICAL VIOLENCE

Source of Data	% Violent in Last Year	
	Husbands	Wives
Spouses*	9.1	17.9
Students*	16.7	9.5
Students**	11.3	11.4

*From Bulcroft and Straus, 1975 (Husband N = 57, Wife N = 60).

**From Straus, 1974a (N = 385).

TABLE 6. PERCENTILE EQUIVALENTS OF CONFLICT TACTICS SCALE RAW SCORES

Centile	Raw Scores for:																Centile								
	Husband-Wife				Wife-Husband				Couple				Child-Child					Father-Child				Mother-Child			
	RS		VB		VL		RS		VB		VL		RS		VB			VL		RS		VB		VL	
	RS	VB	VL	RS	VB	VL	RS	VB	VL	RS	VB	VL	RS	VB	VL	RS		VB	VL	RS	VB	VL			
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
5	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	-	-	2	-	-	-	-	5	
10	2	-	-	-	2	-	-	-	4	-	-	-	1	1	-	3	-	-	4	-	-	-	-	10	
15	3	-	-	-	3	-	-	-	6	-	-	-	2	3	-	-	-	-	5	-	-	-	-	15	
20	-	-	-	-	-	-	-	-	-	1	-	-	4	5	-	4	-	-	6	-	-	-	-	20	
25	4	-	-	-	4	-	-	-	7	2	-	-	5	6	1	5	-	-	-	-	-	-	-	25	
30	-	1	-	-	-	1	-	-	8	3	-	-	6	8	3	-	-	-	-	-	-	1	-	30	
35	5	2	-	-	5	2	-	-	9	4	-	-	-	10	4	6	-	-	7	1	2	3	-	35	
40	-	3	-	-	-	3	-	-	10	5	-	-	7	11	5	-	-	-	8	2	3	-	-	40	
45	6	-	-	-	6	4	-	-	11	7	-	-	8	12	6	-	1	2	9	3	-	-	-	45	
50	-	4	-	-	-	-	-	-	12	8	-	-	9	13	7	7	2	-	-	4	4	-	-	50	
55	-	5	-	-	-	5	-	-	-	10	-	-	-	14	8	8	3	3	10	5	-	-	-	55	
60	-	6	-	-	7	6	-	-	13	12	-	-	10	16	9	-	4	-	11	6	5	-	-	60	
65	7	7	-	-	8	7	-	-	14	14	-	-	11	18	10	9	5	4	12	-	6	-	-	65	
70	8	8	-	-	-	8	-	-	15	16	-	-	12	19	12	10	6	5	7	-	7	-	-	70	
75	9	9	-	-	9	9	-	-	16	18	-	-	-	21	14	11	-	-	-	8	7	-	-	75	
80	10	11	-	-	10	11	-	-	18	21	-	-	13	23	16	12	7	6	13	9	8	-	-	80	
85	11	13	1	-	11	13	1	-	20	25	1	-	14	25	19	13	9	8	15	12	9	-	-	85	
90	12	15	2	-	12	15	2	-	22	30	2	-	16	27	22	14	11	10	16	14	12	-	-	90	
95	13	19	4	-	13	20	4	-	24	36	5	-	17	30	26	16	14	12	18	18	14	-	-	95	
99	15	30	14	-	15	28	15	-	29	53	19	-	18	36	36	18	22	19	18	26	22	-	-	99	

RS = Reasoning, VB = Verbal Aggression, VL = Violence. These distributions are based on the following N's: Husband-Wife = 2105, Wife-Husband = 2114, Couple = 2088, Child-Child = 899, Father-Child = 521, Mother-Child = 620.

the validity of the CT Scales solely on the basis of the data just presented. First, the Violence items have a degree of "face" or content validity since they all describe acts of actual physical force being used by one family member on another.

Construct Validity

The results of a number of analyses using the CTS measure of violence may be taken as providing at least some evidence of "construct validity." The following are examples of the meaningful results obtained with CTS data:

1. There is a consistency between findings using the CT Scales and the large body of evidence concerning the "catharsis" theory of aggression control (Straus, 1974a).
2. The CTS are successful in obtaining high rates of occurrence for socially undesirable acts of verbal and physical aggression. These high rates are consistent with previous in-depth interview studies (Gelles, 1974).
3. The CTS data on the extent to which patterns of violence are correlated from one generation to the next (Steinmetz, 1977a, 1977b; Straus *et al.*, 1979) are consistent with previous empirical findings and theory on familial transmission of violent behavior (Carroll, 1977).
4. Numerous correlations exist between CTS scores and other variables in five independent studies (Bulcroft and Straus, 1975; Jorgensen, 1977; Mulligan, 1977; Steinmetz, 1977b; Straus *et al.*, 1979). although these are not replications of previous empirical findings, they are consistent with relevant theory. Examples include the repeated findings (using the CTS with different samples) of a negative correlation between socioeconomic status and violence (Straus, 1974a; Straus *et al.*, 1979); high violence when the conjugal power structure is either extremely husband-dominant or (especially) extremely wife-dominant (Straus, 1973; Straus *et al.*, 1979); and the finding that the lower a husband's economic and prestige resources relative to his wife, the greater his tendency to use physical violence to maintain a male-dominant power position (Allen and Straus, 1979).

NORMS

Percentile norms are given in Table 6, based on data obtained from the national probability sample mentioned earlier (described more fully in Straus *et al.*, 1979). Normative data of this type are sometimes useful for research purposes. For example, a researcher could compare the results for a specific population with these norms for the population in general. In addition, norms may be useful in marriage and family counseling since they enable the counselor to compare the scores of a person or family with those for a representative cross-section of the population.

SUMMARY AND CONCLUSIONS

The importance of the Conflict Tactics Scales (CTS) stems from the assumption that conflict is an inevitable part of all human association, including that of the family. A key factor differentiating what the public and many professionals regard as "high conflict families" is not the existence of conflict *per se*, but rather, inadequate or unsatisfactory modes of managing and resolving the conflicts which are inherent in the family. Therefore, research and professional services concerned with intrafamily conflict requires techniques for measuring the way in which families attempt to deal with conflicts. The CTS is a step in this direction. The evidence presented in this paper shows that the technique can be used under a variety of conditions, including personal interview and mail surveys. The CT Scales have moderate to high reliabilities, and there is evidence of concurrent and construct validity. It is hoped that the availability of this technique will encourage empirical research on one of the most central, yet neglected, aspects of the family.

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APPENDIX 1. CONFLICT TACTICS SCALES, HUSBAND FORM A, AS USED IN STRAUS, 1974a AND BULCROFT AND STRAUS, 1975

Here is a list of things you might have done when you had a conflict or disagreement with your wife. We would like you to try and remember what went on during the last year your son or daughter was in high school. Please circle a number for each of the things listed below to show how often you did it that year:

- 0 = Never
1 = Once that year
2 = Two or three times
3 = Often, but less than once a month
4 = About once a month
5 = More than once a month

	0	1	2	3	4	5
a. <i>I tried</i> to discuss the issue relatively calmly	0	1	2	3	4	5
b. <i>Did</i> discuss the issue relatively calmly	0	1	2	3	4	5
c. Got information to back up my side of things	0	1	2	3	4	5
d. Brought in someone else to help settle things (or tried to)	0	1	2	3	4	5
e. Argued heatedly but short of yelling	0	1	2	3	4	5
f. Yelled and/or insulted	0	1	2	3	4	5
g. Sulked and/or refused to talk about it	0	1	2	3	4	5
h. Stomped out of the room	0	1	2	3	4	5
i. Threw something (but not at my wife) or smashed something	0	1	2	3	4	5
j. Threatened to hit or throw something at her	0	1	2	3	4	5
k. Threw something <i>at my wife</i>	0	1	2	3	4	5
l. Pushed, grabbed, or shoved her	0	1	2	3	4	5
m. Hit (or tried to hit) her but <i>not</i> with anything	0	1	2	3	4	5
n. Hit (or tried to hit) her with something hard	0	1	2	3	4	5

APPENDIX 2. HUSBAND-WIFE PAGE OF CTS FORM N, AS USED IN 1976 NATIONAL SURVEY

No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. I'm going to read a list of some things that you and your (husband/partner) might have done when you had a dispute, and would first like you to tell me for each one how often you did it in the past year.

Hand Respondent Card A

Hand Respondent Card A		Q. 78									Q. 79									Q. 80		
		Respondent – In Past Year									Husband/Partner – In Past Year									Ever Happened		
		Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Yes	No	Don't Know		
a.	Discussed the issue calmly	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
b.	Got information to back up (your/his) side of things	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
c.	Brought in or tried to bring in someone to help settle things	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
d.	Insulted or swore at the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
e.	Sulked and/or refused to talk about it	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
f.	Stomped out of the room or house (or yard)	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
g.	Cried	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		
h.	Did or said something to spite the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X		

(Continued on next page.)

i. Threatened to hit or throw something at the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
j. Threw or smashed or hit or kicked something	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
k. Threw something at the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
l. Pushed, grabbed, or shoved the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
m. Slapped the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
n. Kicked, bit, or hit with a fist	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
o. Hit or tried to hit with something	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
p. Beat up the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
q. Threatened with a knife or gun	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
r. Used a knife or gun	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
s. Other (PROBE): _____	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X

79. And what about your (husband/partner)? Tell me how often he (ITEM) in the past year. [→]
 For each item circled either "Never" or "Don't Know" for BOTH respondent and partner, ask: : [↑]
 80. Did you or your (husband/partner) ever (ITEM)? _____

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