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**STRESS AND ASSAULT IN A NATIONAL SAMPLE
OF AMERICAN FAMILIES***

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ACQUISITIONS

In a number of papers (Straus, 1973; 1976; 1977), and most clearly in a forthcoming book (Straus, Gelles and Steinmetz, 1979), I have presented evidence that the family is the most violent institution, group, or setting that a typical citizen is likely to encounter. There are of course exceptions, such as the police or the army in time of war. But the typical citizen has a high probability of being violently assaulted only in his or her own home.

I can make this clear without, at this point, giving detailed statistics by pointing out that the Uniform Crime Reports give data on violent crimes in rates per hundred thousand. By contrast, in the book BEHIND CLOSED DOORS: VIOLENCE IN THE AMERICAN FAMILY just mentioned, we found it more appropriate to report rates per hundred, than per hundred thousand or even per thousand.

THE PARADOX OF FAMILY VIOLENCE AND FAMILY STRESS

Family Violence

These data point to the first of many ironies or paradoxes about the family. In this case, the paradox is the fact that the family is also the group to which people look for love, support, and gentleness. So the hallmark of family life is both love and violence.

During the past few years I have directed a program of research designed to unravel that paradox. We are a long way from a full explanation. However, some progress has been made. This paper examines one of the several factors which go into that explanation: the link between stress and violence.

Stress in Families

Another irony of family life is the fact that although the family is often seen as a place where one can find respite from the tensions of the world, in fact, the family tends to be a group with an inherently high level of conflict and stress.

Richard Gelles and I have presented the theoretical case for this view in detail elsewhere (Gelles and Straus, 1978). For the moment, I will simply point out such things as the fact that, in addition to the normal differences and conflicts between two or more people, the family has built into its basic structure the battle of the sexes and the so-called "generation gap." Moreover, in addition to the stresses inherent in individual differences, age differences, and sex differences, there is the stress inherent in what is expected of families. For example, families are expected to provide adequate food, clothing and

shelter in a society which does not always give families the resources necessary to do this; or the expectation that families bring up healthy, well-adjusted, law-abiding and intelligent children who can get ahead in the world. The stress occurs because these traits, and the opportunity to get ahead, are all factors which are to a greater or lesser extent beyond the control of any given family.

The basic argument of the paper has probably been made clear by what has just been said: that a major cause of the high rate of violence in families is the high level of stress and conflict which characterizes families. Of course, this is only a plausible argument. Brenner (1976) for example, has shown a clear relationship between stress as indexed by unemployment rate and the rate of assault and homicide in the US, Canada, and Great Britain. But is it other members of their own family who are assaulted or murdered by the unemployed? This needs to be demonstrated with empirical data. Consequently, a major part of this paper is devoted to such an empirical study.

THE THEORETICAL MODEL

Although empirical findings will start with the relationship between the level of stress in families and the level of violence, I do not believe that stress directly causes violence. Violence is only one of many possible responses to stress. Among the alternatives are passivity, resignation, or just leaving. Academic departments, for example, are also stressful environments, but the rate of physical violence within such departments is close to zero.

The absence of any necessary link between stress and violence is shown in Brenner's data on the correlates of unemployment (1976). Unemployment is highly correlated not only with assault and homicide, but also with annual rates of hypertension, deaths from heart attacks, mental hospital admissions, and alcoholism. At the individual level Brown and Harris's (1978) study of a random sample of women in London includes highly reliable and valid data on life stresses. The interesting point is that they demonstrated a clear tendency for these women to respond to stress by depression rather than violence.

(Figure 1 about here)

Mediating Variables

The center box of Figure 1 shows some of the other variables which must also be present to produce a correlation between stress and violence. For example, people are unlikely to respond to stress by violence unless this is part of the socially scripted method of dealing with

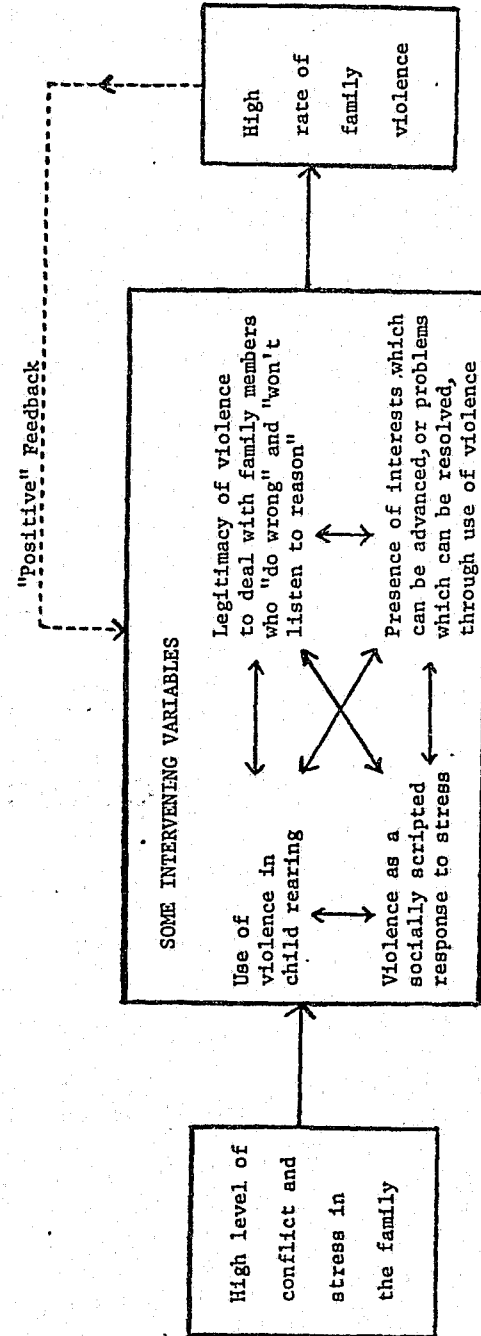


Figure 1. Partial model of relationship between stress and family violence.

* This diagram is labeled as a "partial" model for two main reasons: The most obvious reason is that it includes only a sampling of the intervening variables which could be included in the center box. Second, the model omits negative feedback loops (i.e. deviation dampening processes) which must be present. Without them the violence would escalate to the point where the system would self-destruct--as it sometimes, but not typically, does. See Straus, 1973 for a systems model of family violence which includes negative feedback processes and other elements of a cybernetic system.

stress and frustration--as it is in our society. So, an important part of the model is the existence of norms or images of behavior which depict striking out at others when under stress as part of human nature.

However, these are very general behavioral scripts. They cannot explain family violence because they are part of the society's image of basic nature in all types of situations. It may be part of the explanation, but is not sufficient. To find the additional variables which will lead to a sufficient explanation one has to look at the nature of the family itself.

Normative Legitimacy of Family Violence

One very simple, but nonetheless important factor is that the family has different rules about violence than other groups. In an academic department or a factory, the basic rule is that no one can hit anyone else, no matter what they do wrong. A person can be a pest, an intolerable bore, negligent, incompetent, selfish, or unwilling to listen to reason. But that still does not give anyone the right to hit such a person. In the family, as I said, the situation is different. There, the basic rule is that if someone does wrong and won't listen to reason, violence is permissible, and sometimes even required. As one husband said about an incident in which his wife threw a coffee pot at him: "I was running around with other women--I deserved it."

I have heard statements like that from many husbands and wives. In another paper I have documented evidence in support of the idea that a marriage license is also a license to hit (Straus, 1976; 1979b). Still, that does not explain why or how such a norm arose or why it persists. Here again, there are a number of factors, one of which is shown in Figure 1: the use of violence in child rearing; that is, physical punishment.

Family Socialization in Violence

Physical punishment provides the society's basic training in violence, but of course, training which applies most directly to behavior in the family. At least some use of physical punishment is just about universal in American society, typically beginning in infancy (Steinmetz and Straus, 1974). What are the reasons for saying that learning about violence starts with physical punishment?

When physical punishment is used, several things can be expected to occur. Most obviously, the infant or child learns to do or not to do whatever the punishment is intended to teach; for example, to not pick up things from

the ground and put them in his or her mouth. Less obvious, but equally or more important are three other lessons which are so deeply learned that they become an integral part of one's personality and world view.

The first of these unintended consequences is the association of love with violence. Mommy and daddy are the first and usually the only ones to hit an infant. For most children this continues throughout childhood. The child therefore learns that those who love him or her the most, are also those who hit.

Second, since physical punishment is used to train the child or to teach about dangerous things to be avoided, it establishes the moral rightness of hitting other family members.

The third unintended consequence is the principle that when something is really important, it justifies the use of physical force.

Involuntary Nature of Family Membership

The last of the intervening variables which I have time to discuss is the simple fact that the family is only a semi-voluntary institution. This is most obvious in the case of children. They cannot leave, and parents cannot throw them out until a legally set age. So leaving--which is probably the most widely used and effective method of avoiding violence--is not available as an alternative in the parent-child aspect of the family.

To a considerable extent the same is true for the marital relationship. Ninety-four percent of the population marries, and anything done by this large percent of the population is not likely to be voluntary. No system of socialization is that effective. In fact, we all know the tremendous informal social pressures which are put on people to get married and stay married. Although divorces are now easier to get, the economic, social, and emotional barriers to breaking up a marital relationship are still extremely high. Even couples who are living together without a formal marriage find it difficult to end the relationship. In cities like Boston and New York, there is a booming business in marriage counseling for the unmarried.

There are a number of other factors which should be included in Figure 1 and in this discussion. Those which have been discussed, however, should be sufficient to illustrate the theory which guided the analysis to be reported in this paper.*1

By way of summary, the theory underlying this paper rejects the idea that humans have an innate drive toward aggression, or an innate tendency to respond to stress by aggression. Rather, a link between stress and aggression occurs only if the individual has learned an "aggressive" response to stress, if such a response is a culturally recognized script for behavior under stress, and if the situation seems to be one which will produce rewards for aggression.

SAMPLE

The data used to examine this theory were obtained from a survey conducted in January and February of 1976. Interviews were conducted with a national area-probability sample of 2,143 adults. To be eligible for inclusion in the sample each respondent had to be between 18 and 70 years of age and living with a member of the opposite sex as a couple. However, the couple did not have to be formally married. A random half of the respondents were female and half were male. Each interview lasted approximately one hour and was completely anonymous. Furthermore, interviewers were of the language or racial group which was predominant in the sampling area for which they were responsible. Further details on the sample are given in Straus, Gelles and Steinmetz, 1979.

DEFINITION AND MEASURES OF STRESS

There has been a vast debate on the concept of stress (Mechanic, 1962; Lazarus, 1966; Levine and Scotch, 1967; McGrath, 1970; Scott and Howard, 1970; Selye, 1956). For example, one issue is whether stress is a property of the situation (such as illness, unemployment, family conflict, getting married, or getting promoted to a new job) or whether it is a subjective experience. For some people a new set of job responsibilities is experienced as stress, whereas for others, lack of such responsibility is a stress.

The definition of stress which I favor treats stress as a function of the interaction of the subjectively defined demands of a situation and the capabilities of an individual or group to respond to these demands. Stress exists when the subjectively experienced demands are inconsistent with response capabilities.*2

In fact, there is a gap between the definition of stress given above and data I will actually report. This is because the methodology of this paper assumes that (1) some life event, such as having a child, produces a certain but unknown degree of demand on parents, (2) that on the average this is subjectively experienced as a demand, (3) that the capabilities of parents to respond to these demands will not

Table 1. Percent Experiencing 18 Life Stresses During Previous Year.

Life Event	Male (N=960)	Female (N=1183)	Total (N=2143)
1. Troubles with the boss	25.8	9.9	17.0
2. Troubles with other people at work	31.4	11.2	20.3
3. Got laid off or fired from work	10.0	5.9	7.7
4. Got arrested or convicted of something serious	1.9	0.9	1.3
5. Death of someone close	41.5	38.8	40.0
6. Foreclosure of a mortgage or loan	1.5	1.6	1.6
7. Being pregnant or having a child born	8.1	15.8	12.4
8. Serious sickness or injury	18.9	16.7	17.6
9. Serious problem with health or behavior of a family member	23.0	29.0	26.3
10. Sexual difficulties	9.0	13.1	11.6
11. In-law troubles	10.9	12.0	11.5
12. A lot worse off financially	15.8	12.1	13.7
13. Separated or divorced	3.6	2.6	3.0
14. Big increase in arguments with spouse/partner	8.1	9.4	8.8
15. Big increase in hrs. worked or job responsibilities	28.9	16.3	21.9
16. Moved to different neighborhood or town	17.2	16.4	16.8
17. Child kicked out of school or suspended	1.6	1.6	1.6
18. Child got caught doing something illegal	2.7	3.0	2.8

Table 2. Mean Scores on Stress Indexes, by Sex

Index	Items	Mean Score*		
		Male (N=960)	Female (N=1183)	Total (N=2143)
Overall stress index	1 to 18	14.9	12.4	13.5
Occupational stress	1, 2, 15	28.7	12.4	19.7
Economic stress	3, 6, 12	9.0	6.5	7.6
Occ. and Econ. Stress	Occ. + Econ.			27.3
Interpersonal stress	5, 9, 11, 16	23.1	24.1	23.6
Health stress	7, 8	13.3	16.2	14.9
Spousal stress	10, 13, 14	7.1	8.2	7.7
Parental stress	17, 18	2.7	3.1	2.9
Nuclear family stress	Spousal + Parental	14.3	14.2	14.2

* The scores are in percentage form in order to make the scores on each index somewhat comparable. That is, each is a percentage of the maximum possible raw score. Thus, a mean of 14.9 on the Overall Stress Index means that this group averaged 14.9% of the 18 points which are possible; a mean of 28.7 on the Occupational Stress Index means that this group averaged 28.7% of the three points which are possible on this index. See Straus, 1979, Chapter 2 for further explanation of percentage standardization.

always be sufficient, and (4) that the result is a certain level of stress. On the basis of these assumptions, it is then possible to investigate the relationship between such events and the level of violence in the family. Obviously, that leaves a large agenda for other investigators who will deal with this issue more adequately.

(Tables 1 and 2 about here)

As indicated above, the aspect of stress which is measured in this study is limited to what are called "stressor stimuli." We administered a modified version of the Holmes and Rahe stressful life events scale (1967). Because of limited interview time, the scale was restricted to the 18 items listed in Table 1.*3 The scores on this scale ranged from zero to 18, with a mean of 2.4 and a standard deviation of 2.1. In addition to the overall stress score, we also considered different subgroupings of items. The subscores and their means are given in Table 2.

Sex Differences

The first thing to notice in Table 1 is that the experiences reported by the men and women respondents are quite similar. The exceptions are events for which men and women have different exposure. Thus, fewer women have paid employment, so it is not surprising that two to three times as many men as women experienced an occupationally related stress such as troubles with a boss or losing a job.*4 There are a few other interesting sex differences.

First, item 4 shows that twice as many men were arrested or convicted of a serious crime. An interesting sidelight is that to a non-criminologist, an annual arrest or conviction rate of two per hundred men seems quite high.

The only other item with a non-trivial difference is number 10, having had some type of sexual problem in the previous year. The rate for women is half again higher than the rate for men (13.1 versus 9.0).

Frequency of Different Stressors

The most frequently occurring stress among the 18 on the list is the death of someone close to the respondent (item 5). This happened to 40 percent of our respondents during the year we asked about. The next most frequent stress is closely related: item 9, a serious problem with the health or behavior of someone in the family. This occurred in the lives of about one out of four. For men, however, occupational stresses occurred more frequently. Item 2 shows that about 30 percent had a difficulty with their boss, and at the positive end about the same percentage had a large increase in their work

responsibilities (item 15).

DEFINITION AND MEASURES OF VIOLENCE

I can deal more adequately--both conceptually and operationally--with violence. This is because violence has been the focus of my research on families for the past seven years, and is the main focus of the study I will be reporting. The definition of violence which underlies this research treats violence as one type of aggressive act. So I will first define aggression.

Aggression

Aggression is an act carried out with the intention of, or perceived as having the intention of, hurting another person.

Violence

Violence is an act carried out with the intention or perceived intention to cause physical hurt, pain, or injury to another person. Violence, as I am using that term, is therefore synonymous with "physical aggression."

Although this is the basic definition of violence used in studies undertaken as part of the Family Violence Research Program at the University of New Hampshire, it is usually necessary to take into account a number of other characteristics of the violent act. These include (1) the severity of the act, ranging from a slap to torture and murder; (2) whether it is "instrumental" to some other purpose such as forcing another to do or not to do something; or "expressive," i.e. an end in itself; (3) whether it is a culturally permitted or required act or one which runs counter to cultural norms (legitimate versus illegitimate or criminal violence).

To illustrate these three dimensions in relation to violence within the family, a child may be slapped mildly for some misdeed or beaten so severely that medical treatment is necessary; the spanking or beating may be instrumental to teaching the child not to run into a busy street, or it may be done out of exasperation and anger; and the child may be of an age when the legitimacy of parents hitting a child is virtually unquestioned, as compared to the general illegitimacy in our society of hitting an 18 year old child.

As in the case of the measurement of stress, there is a gap between what this set of definitions demands and what is available for analysis. The technique used is known as the

Table 3. Incidence Rates For Severe Violence Index, Overall Violence Index, and Items Making Up These Indexes.

Conflict Tactics Scale Violence Indexes And Items	Rate Per 100 For Violence By:		Frequency*			
	Violence By:		Mean		Median	
	H	W	H	W	H	W
Wife-Beating and Husband-Beating (N to R)	3.8	4.6	8.0	8.9	2.4	3.0
Overall Violence Index (K to R)	12.1	11.6	8.8	10.1	2.5	3.0
K. Threw something at spouse	2.8	5.2	5.5	4.5	2.2	2.0
L. Pushed, grabbed, shoved spouse	10.7	8.3	4.2	4.6	2.0	2.1
M. Slapped spouse	5.1	4.6	4.2	3.5	1.6	1.9
N. Kicked, bit, or hit with fist	2.4	3.1	4.8	4.6	1.9	2.3
O. Hit or tried to hit with something	2.2	3.0	4.5	7.4	2.0	3.8
P. Beat up spouse	1.1	0.6	5.5	3.9	1.7	1.4
Q. Threatened with a knife or gun	0.4	0.6	4.6	3.1	1.8	2.0
R. Used a knife or gun	0.3	0.2	5.3	1.8	1.5	1.5

* For those who engaged in each act, i.e., omits those with scores of zero.

Conflict Tactics Scales (Straus, 1979a). This measure consists of a check list of acts of physical violence. The respondent is asked about conflicts and difficulties with other family members, and then is asked if, in the course of the conflict, he or she did any of the items on the list. The list starts with non-violent tactics, such as talking things over, and then proceeds on to verbally aggressive tactics, and finally to physical aggression--that is, violent acts.

The violent acts in turn were deliberately designed so as to permit a measure of the severity as well as the frequency of family violence. The list starts out with pushing, slapping, shoving and throwing things. These are what can be called the "ordinary" or "normal" violence of family life. It then goes on to kicking, biting, punching, hitting with an object, beating up, and using a knife or gun. This latter group of items are used to compute a measure of "severe violence" which is comparable to what social workers call child abuse, feminists would call wife-beating, and criminologists would call assaults.

It can be seen from this description of the Violence Indexes of the Conflict Tactics Scales that they take into account the dimensions of intent and severity. However, we do not have data on whether the act was primarily instrumental versus expressive, nor on whether the act was one which the members of that family believed to be illegitimate, or in the circumstances, legitimate.

(Table 3 about here)

Spouse Violence Rates

The first row of Table 3 show that violence by a husband against his wife which was serious enough to be classified as wife-beating occurred at a rate of 3.8 per hundred couples. Violence by a wife serious enough to be classified as husband-beating occurred at an even higher rate: 4.6 per hundred couples. However, it is important to remember that these data are based on attacks, rather than on injuries produced. If one uses injuries as the criterion, then wife-beating would far outdistance husband-beating.*5

What proportion of these attacks were isolated incidents? Our data suggest that this was rarely the case. For those who experienced an assault, the medians in the last column of Table 3 show that it tended to happen about three times during the year. If the means are used as the measure of frequency of occurrence, the figure is much higher--about eight or nine times. But this is because of a relatively few couples at the extreme for whom such violence was just about a weekly event.

STRESSFUL LIFE EVENTS AND ASSAULT BETWEEN SPOUSES

For purposes of this analysis, the Stress Index was transferred to Z Scores and grouped into categories of half a Z Score. Therefore, in Figure 2, each horizontal axis category indicates the families who fall within a band that is half a standard deviation wide.

(Figure 2 about here)

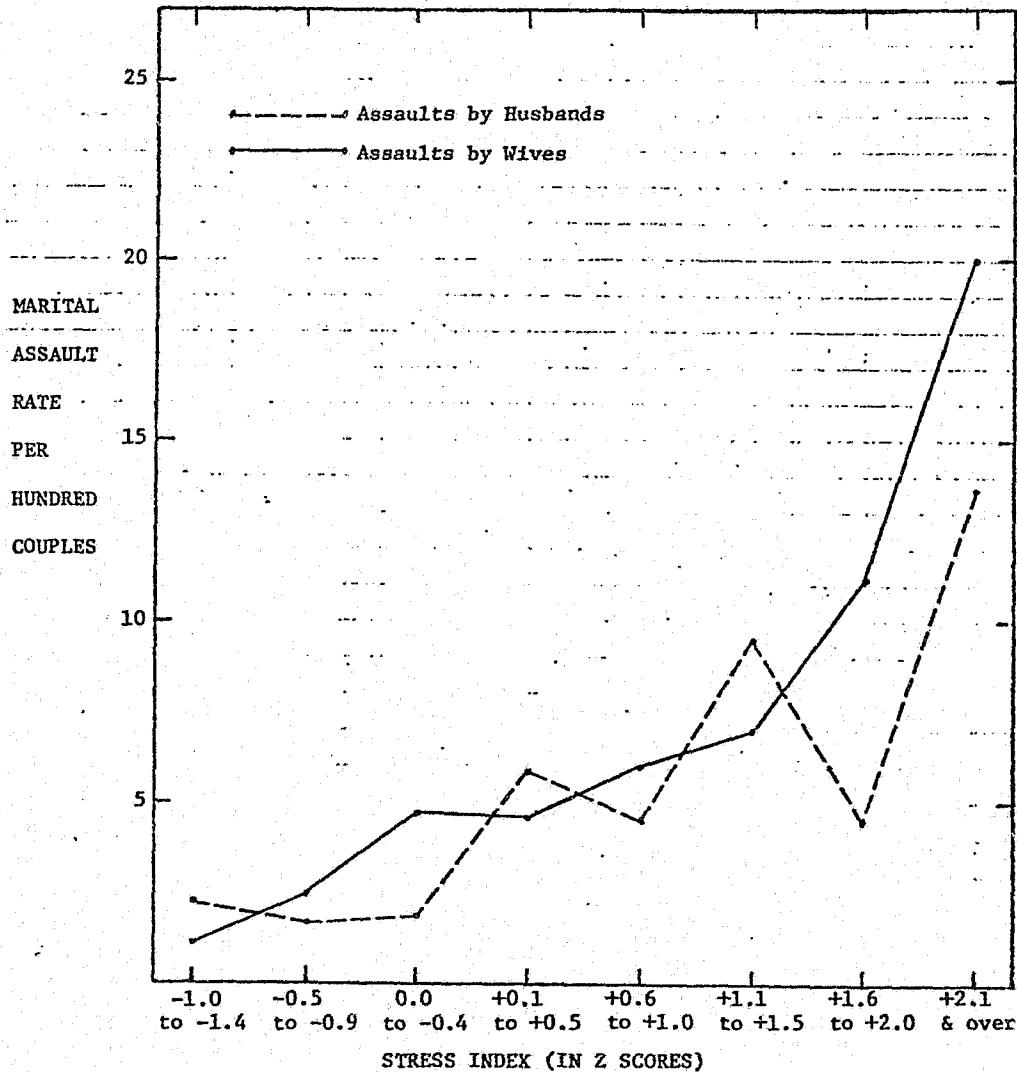


Figure 2. Marital Assault Rate by Stress Index Score

The data plotted in Figure 2 clearly show that the higher the stress score the higher the rate of assault between husband and wife. For the wives (solid line) the curve approximately fits a power function. For the husbands, the relationship shows a general upward trend, but is irregular.*6

Both the smooth shape of the curve, and the fact that the line plotted for the women is above the line for the men at the high stress end of the graph, suggest that stress has more effect on wives than on husbands. At the low end of the scale, women in the -1.0 to -1.4 stress group have an assault rate which is about half that of the men in this group (1.1 per hundred versus 2.2 for the men). But at the high stress end of the scale, women in the +1.6 to +2.0 and +2.1 and over categories have assault rates which are 150 percent and 50 percent greater than the rates for the husbands who experienced this much stress. It seems that in the absence of stress women are less violent to their spouse than are men, but under stressful conditions women are more violent.

An analysis identical to that in Figure 2 was done, except that the dependent variable was not limited to the types of severely violent acts used in Figure 2; that is, the measure included pushing, slapping, shoving, and throwing things. Except for the fact that the rates are much higher--they start at five per hundred and range up to 48 per hundred--the results are very similar.

The importance of this similarity is that it helps establish a connection which is extremely important for understanding serious assaults: over and over in our research, we find a clear connection between the "ordinary" violence of family life, such as spanking children or pushing or slapping a spouse, and serious violence such as child abuse and wife-beating. Actually, the connection goes deeper. Verbal aggression is also part of this network of relationships. People who hurt another family member verbally are also the ones most likely to hurt them physically. Moreover, the same set of causal factors applies to both the milder forms of violence and acts of violence that are serious enough to be considered child abuse or an assault on a spouse. The similarity of the relationship between stress and the overall violence index

with the relationship between stress and serious assaults is but one of many such examples found for this sample (Straus, Gelles, and Steinmetz, 1979).

TYPES OF STRESSORS AND ASSAULTS

The analyses just reported were also carried out using each of the stress subscores listed in Table 2 as the independent variable. In each case, as the amount of stress increased, so did the assault rate. These relationships were strongest for the "Spousal Stress" and the "Economic Plus Occupational Stress" subscores.

The fact that a very strong relationship was found between stress in the spousal relationship and assault on a spouse is what might be expected because in such cases the assaulter is lashing out at what he or she may believe is the cause of the stress. The relationship between economic and occupational stress and assault is therefore better evidence that stress per se is associated with violence. This relationship is shown in Figure 3.*7

(Figure 3 about here)

FACTORS LINKING STRESS AND WIFE-BEATING

Interesting as are the findings presented so far, they do not reflect the theoretical model sketched at the beginning of this paper in Figure 1. One might even say that the data just presented distort the situation because the graphs tend to draw attention away from a very important fact: most of the couples in this sample who were subject to a high degree of stress were NOT violent.

A critical question is brought to light by this fact. What accounts for the fact that some people respond to stress by violence whereas others do not? Part of the answer to that question was suggested in the center box of Figure 1. The variables included there were selected to illustrate the theory. They were not intended to be a complete list, either of what is theoretically important or a list of the variables available for this sample. The available data actually cover three of the four variables listed in Figure 1 plus a number of other variables.

The analysis carried out to take into account these intervening variables focuses on assaults by husbands on their wives. It is restricted to this one aspect of intrafamily assault because, along with child abuse, it is the most serious problem aspect of intrafamily violence, and because of limitations imposed by the time available to prepare this paper and by the length of the paper.

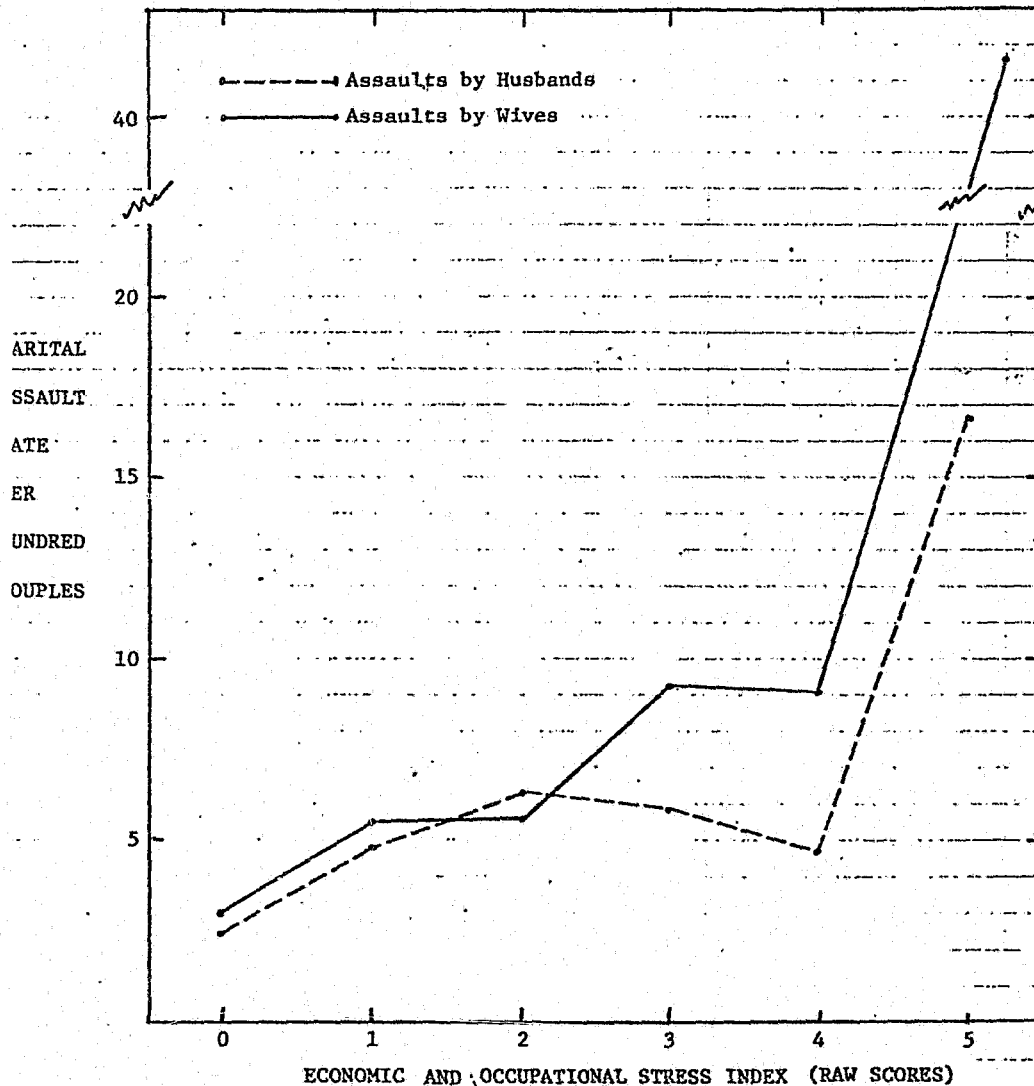


Figure 3. Marital Assault Rate by Economic Plus Occupational Stress Index

Table 4. Effect of Intervening Variables on the Incidence of Assault by Husbands Experiencing High Stress.

Intervening Variable	Assault Rate Per 100 Husbands when Intervening Variable was:		N*	
	Low	High	Low	High
A. Childhood Experience With Violence				
Physical punish. after age 12 by mother (0 vs 4+ per yr)	7.1	6.7	85	89
Physical punish. after age 12 by father (0 vs 4+ per yr)	7.4	8.4	81	83
Husband's father hit his mother (0 vs 1+ per yr)	5.4	17.1	167	41
Husband's mother hit his father (0 vs 1+ per yr)	4.6	23.5	176	34
B. Legitimacy of Family Violence				
Approval of parents slapping a 12 year old (0 vs high ¼)	5.9	9.9	34	71
Approval of slapping a spouse (0 vs any approval)	2.7	15.0	150	100
C. Marital Satisfaction and Importance				
Marital Satisfaction Index (low vs high quartile)	12.3	4.9	73	61
Marriage less important to husb. than to wife = high	5.9	11.7	17	34
D. Socioeconomic Status				
Education	6.1	5.4	49	56
Husband a blue-collar worker = low	9.2	5.4	284	202*
Income (low ≤ \$9,000, high ≥ \$22,500)	16.4	3.5	122	113*
E. Marital Power				
Power Norm Index (high = husb. should have final say)	4.2	16.3	71	55
Decision Power Index (high = husb. has final say)	5.2	16.1	58	62
F. Social Integration				
Organizational Participation Index (0 vs 11+)	10.5	1.7	86	60
Religious service attendance (0-1/yr vs weekly)	8.9	5.4	79	56
Relatives living near (0-2 vs 13+)	5.7	11.9	124	118*

*The N's vary because, even though the intent was for the high and low groups to be the upper and lower quartiles, this was not always possible. In the case of occupational class, for example, the comparison is between a dichotomous nominal variable. In the case of continuous variables, we sometimes wanted to preserve the intrinsic meaning of a score category, such as those who with a score of zero, even though this might be more or less 1/4 of the sample. Another factor causing the N's to vary is that the division into quartiles was based on the distribution for the entire sample of 2,143, rather than just the high stress subgroup analyzed in this table. Finally, there are three variables for which the data was obtained from the wife as well as the husband (husband's occupation, family income, and relatives living nearby). The N's for these variables are roughly double those for the other variables because they are based on the entire sample, rather than only on those families where the husband was the respondent.

The analysis started by distinguishing husbands in the sample who experienced none of the stressful events in the past year (N=139) and those in the high quartile of the index (N=258). Each of these groups was further divided into those who were in the high quartile of each intervening variable, versus those in the low quartile. This enables us to see if the intervening variable was, as specified in the theoretical model, necessary for life stresses to result in violence. If the theory is correct, the men who are high in respect to an intervening variable will have a high rate of violence, whereas the men in the low category will not be more violent than the sample as a whole, despite the fact that they were under just as much stress during the year as the others.

(Table 4 about here)

Socialization For Violence

The first row of Table 4 runs directly contrary to the theory being examined. It shows that the men who were physically punished the most by their mother when they were teenagers were slightly less violent under stress than the men who were not or only rarely hit at this age by their mother. On the other hand, having been physically punished a more than just a rare occasion by a father does relate to assaulting a wife. Husbands whose father hit them the most have an assault rate against their wives which is slightly higher than do husbands who were under equally high stress that year, but who did not experience this much violence directed against them as a teenager. The difference between the effect of having been hit by one's mother versus by one's father suggests that violence by the father against a teenage boy is a more influential role model for violent behavior which the son will later display under stress.

The next two rows of Table 4 refer to violence between the parents of the husbands in this sample. These two rows show large differences between husbands who are the sons of parents who engaged in physical fights and those who did not. The assault rate by husbands whose own father had hit their mother was 216 percent higher than the rate for the men whose fathers never hit their mother (17.1 per 100 vs 5.4). Surprisingly, the largest difference of all is in the much greater assault rate by husbands who had grown up in families where their mother had hit their father. This contradicts the idea of the same sex parent being a more influential role model. Whatever the intervening process, however, Section A of Table 4 shows that the men who assaulted their wives were exposed to more family violence as teenagers than were the men who were not violent despite an equally high level of stress.

Legitimacy of Family Violence

Section B of Table 4 reports "semantic differential" scores (Osgood, Suci and Tannenbaum, 1957) in response to questions about slapping a child and slapping one's husband or wife. Each score is made up by combining the ratings for how "necessary," "normal," and "good" the respondent rated slapping.

The first row of Section B shows that husbands who approved of slapping a child had a 68 percent greater rate of assaulting their wives than did the husbands with a score of zero on this index. When it comes to approval of slapping a spouse, there is a 456 percent difference in the predicted direction. These findings are consistent with the theoretical model asserting that the relation between stress and violence is a socially mediated process, rather than a direct biologically determined relationship. However, since these are cross sectional data, the findings do not prove the correctness of the model. It is also quite plausible to interpret the greater assault rate by men who approve of violence as an after-the-fact justification. Except for a few variables which clearly occurred at a previous time, such as the ones on violence experienced as a child, this caution applies to most of the findings to be reported.

Marital Satisfaction and Importance

The first row of Section C compares men who were low in marital satisfaction with men in the high quartile. The low quartile men had a 151 percent higher assault rate. A similar difference is shown by comparing men who rated their marriages as a less important part of their lives than the marriage played in the life of their wives. Of course, as noted above, these differences, like a number of others to be reported in this paper, could reflect the effect of marital violence rather than being a cause. Only a longitudinal study can adequately sort out this critical issue. On the basis of this study, it can only be said that the findings are not inconsistent with the idea that men under stress are more likely to be violent if they do not find the marriage a rewarding and important part of their lives.

Socioeconomic Status

Three aspects of socioeconomic status are examined in Section D of Table 4. The first of these, the educational level of the couple, shows findings which many will find surprising. The husbands in the high quartile of education were only slightly less violent than those in the low quartile. This is inconsistent with the widely held view that less educated people are more violent. Actually, a

careful review of the available studies fails to support this widespread idea (Straus, 1979c). A number of studies (including an analysis of this sample, Finkelhor, 1977) suggest there is little or no difference in aggression and violence according to education.

On the other hand, when it comes to indicators of present socioeconomic position, the low groups are, as expected, more violent. The second row of Section D, for example, shows that the assault rate of blue-collar husbands is 70 percent greater than the assault rate of the white-collar employed husbands. If the combined income of the couple was \$9,000 or less, the rate of assault by husbands on their wives was 368 percent higher than in families with a more adequate income (16.4 per hundred versus 3.5 per hundred).

What could account for the sharply different findings for education as compared to occupation and income? One fairly straight forward possibility is that low income and low status occupations are indirect indicators of even more stress than is measured by the stress index. Low or high education, on the other hand, does not necessarily mean that the couple is currently in an economically bad position, such as is indicated by a total family income of \$9,000 and under.

Marital Power

One of the most important factors accounting for the high rate of marital violence is the use of force by men as the "ultimate resource" to back up their position as "head" of the family (Allen and Straus, 1979; Goode, 1971; Straus, 1976; 1977). Section E provides evidence that this may be part of the explanation for why some men assault their wives when under stress and others do not.

The first row of Section E shows that the assault rate of husbands who feel that husbands should have the final say in most family decisions is 288 percent higher than it is for husbands who are not committed to such male dominance norms. The second row suggests that when this is translated into actual decision power, the differences are almost as great. The husbands who actually did have the final say in most family decisions had an assault rate of 16.1 per hundred as compared to 5.2 for the husbands who were also under high stress but shared decisions with their wives.

Social Integration and Isolation

The last set of intervening factors included in this paper explore the theory that violence will be higher in the absence of a network of personal ties. Such ties can provide help in dealing with the stresses of life, and perhaps intervene when disputes within the family threaten to become violent.

The first row of Section F shows that men who belonged to no organizations (such as clubs, lodges, business or professional organizations, or unions) had a higher rate of assault than did the men who participated in many such organizations. The same applies to men who attended religious services as compared to men who rarely or never did.

The third row of Section F, however, shows opposite results. Couples who had many relatives living within an hour's travel time had a higher rate of assault than did couples with few relatives nearby. This finding is not necessarily inconsistent with social network theory. The usual formulation of that theory assumes that the network will be "pro-social." Usually, that is a reasonable assumption. However, a social network can also support "anti-social" behavior. That is the essence of the "differential association" theory of criminal behavior. In respect to the family, Bott (1957) and others have shown that involvement in a closed network helps maintain sexually segregated family roles, whereas couples not tied in to such networks tend to have a more equal and shared task type of family organization. In the present case, the assumption that the kin network will be opposed to violence is not necessarily correct. For example, a number of women indicated that when they left their husband because of a violent attack, their mothers' responses included such things as urging her to deal with the situation by being a better housekeeper, a better sex partner, by just avoiding him, etc. In some cases, the advice was "you just have to put up with it for the sake of the kids--that's what I did."

SUMMARY AND CONCLUSIONS

This paper was designed to determine the extent to which stressful life experiences are associated with assault between husbands and wives, and to explore the reasons for such an association. The data used to answer these questions come from a nationally representative sample of 2,143 American couples. Stress was measured by an instrument patterned after the Holmes and Rahe scale. It consisted of a list of 18 stressful events which could have occurred during the year covered by the survey. Assault was measured by the severe violence index of the Family Conflict Tactics Scales. This consists of whether any of the

following violent acts had occurred in the course of a family dispute during the past year: punching, kicking, biting, hitting with an object, beating up, and using a knife or gun.

The findings show that respondents who experienced none of the 18 stresses in the index had the lowest rate of assault. This applies to assaults by wives as well as by husbands. As the number of stressors experienced during the year increased, so did the assault rate. This was most clear in the case of the wives. Wives with a stress score of zero had a lower rate of assault on their husbands as compared to the assaults by husbands with a stress score of zero. But the assault rate of wives climbed steadily with each increment of stress, and gradually became greater than the assault rate of the husbands. Thus, although wives were less assaultive under normal conditions, under stress they were more assaultive than the husbands.

The second part of the analysis was based on the theory that stress by itself does not necessarily lead to violence. Rather, it was assumed that other factors must be present. Several such factors were examined by focusing on men who were in the top quartile in stresses experienced during the year. These men were divided into low and high groups on the basis of variables which might account for the correlation between stress and violence. It was assumed that, if the theory is correct, the men who were high in the presumed intervening variable should have a high assault rate, whereas the men in the low category on these variables should not be more assaultive than the sample as a whole, despite the fact that they were under as much stress during the year as were the other high-stress subgroup of men.

The results were generally consistent with this theory. They suggest the following conclusions: (1) Physical punishment by fathers, and observing parents hit each other train men to respond to stress by violence. (2) Men who assault their wives believe that physical punishment of children and slapping a spouse are appropriate behavior. Their early experience with violence therefore seems to have carried over into their present normative stance. However, a longitudinal study is needed to establish whether this is actually the causal direction. (3) Men under stress are more likely to assault their wife if the marriage is not an important and rewarding part of their life. (4) Education does not affect the link between stress and violence. However, low income and a low status occupation do, perhaps because these are indicators of additional stresses. (5) Men who believe that husbands should be the dominant person in a marriage, and especially husbands who have actually achieved such a power position, had assault rates from one and a half to three times higher than the men without such values who were also under stress. (6) Men who were socially isolated (in the sense of not participating in

unions, clubs, or other organizations) had higher rates of assault on their wives, whereas men who were involved in supportive networks of this type, only rarely assaulted their wives despite being under extremely high stress.

Human beings clearly have an inherent capacity for violence. They also have an inherent capacity for doing algebra. This capacity is only translated into actually solving an equation, or actually assaulting a spouse, if one has learned to respond to scientific or technical problems by using mathematics or learned to respond to stress and family problems by using violence. Even with such training, violence is not an automatic response to stress, nor algebra to a scientific problem. One also has to believe that the problem is amenable to a mathematical solution or to a violent solution. The findings presented in this paper show that violence tends to be high when these conditions are present; for example among those whose childhood experiences taught them the use of violence and whose present need to dominate the marriage provides a situation which is likely to yield to violence. If conditions such as these are present, stress is related to violence. If these conditions are not present, the relation between stress and violence is absent or minimal.

Of course, conclusions such as these, although consistent with the findings reported in this paper, are not proved by the findings. Many of the findings are open to other equally plausible interpretations, particularly as to causal direction. Other findings may be confounded with variables such as socioeconomic status. An analysis to deal with the problem of confounding with socioeconomic status is now being run and would have been reported had there been more time before this conference. The question of causal direction can only be adequately dealt with by a longitudinal study. Such a longitudinal study should have the highest priority in funding research to test theories about the link between stress and violence.

REFERENCES

- Allen, Craig and Murray A. Straus
1979 "Resources, power, and husband-wife violence." Chapter 12 in Murray A. Straus and Gerald T. Hotaling (eds.), *The Social Causes of Husband-Wife Violence*. University of Minnesota Press. In Press.
- Bott, E.
1957 *Family and Social Network*. London, Tavistock Publications.
- Brenner, Harvey M.
1976 "Estimating the social costs of national economic policy: Implications for mental and physical health, and criminal aggression." Paper presented to the Joint Economic Committee, U.S. Congress 1976.
- Brown, George W. and Tirril Harris
1978 *Social Origins of Depression: A Study of Psychiatric Disorder in Women*. London: Tavistock Publications.
- Bulcroft, Richard A. and Murray A. Straus
1975 "Validity of husband, wife, and child reports of conjugal violence and power." Mimeographed Paper.
- Farrington, Keith
1979 "Stress and Family Violence." Chapter 7 in Murray A. Straus and Gerald T. Hotaling (eds.), *The Social Causes of Husband-Wife Violence*. University of Minnesota Press. In Press.
- Finkelhor, David
1977 "Education and marital violence." Mimeographed paper.
- Gelles, Richard J.
1976 "Abused wives: Why do they stay?" *Journal of Marriage and the Family* 38 (November): 659-668.
- Gelles, Richard J. and Murray A. Straus
1978 "Determinants of violence in the family: Toward a theoretical integration." Chapter in Wesley R. Burr, Rueben Hill, F. Ivan Nye, and Ira L. Reiss., *Contemporary Theories About the Family*. New York: Free Press.
- Gersten, J.C., T. S. Langner, J. G. Eisenberg and L. Orzek
1974 "Child behavior and life events: undesirable change or change per se." PP. 159-170 in B. S. Dohrenwend and B. P. Dohrenwend (eds.), *Stressful Life Events: Their Nature and Effects*. New York: John Wiley.
- Goode, William J.
1971 "Force and violence in the family." *Journal of Marriage and the Family* 33 (November): 624-636. Also reprinted in Steinmetz and Straus, 1974.
- Holmes, Thomas H. and Richard H. Rahe
1967 "The social readjustment rating scale." *Journal of Psychosomatic Research* 11:213-218.
- Hotaling, Gerald T., Sandra G. Atwell and Arnold S. Linsky
1979 "Adolescent life changes and illness: A comparison of three models." *Journal of Youth and Adolescence*. In Press.
- Lazarus, Richard S.
1966 *Psychological Stress and the Coping Process*. New York: McGraw-Hill.
- Levine, Sol and Norman A. Scotch
1967 "Toward the development of theoretical models: II." *Milbank Memorial Fund Quarterly* 45 (2): 163-174.
- Revised version to be published as "The impact of social and industrial changes on psychopathology, a view of stress from the standpoint of macrosocietal trends. In Lennard Levi (Ed.), *Society, Stress, and Disease*. Oxford University Press, 1979.

- Martin, Del
1976 *Battered Wives*. San Francisco: Glide Publications.
- McGrath, Joseph E. (ed.)
1970 *Social and Psychological Factors in Stress*. Pp. 10-21 "A conceptual formulation for research on stress." New York: Holt, Rinehart and Winston.
- Mechanic, David
1962 *Students Under Stress: A Study in the Social Psychology of Adaptation*. New York: Free Press.
- Osgood, C., G. Suci, and P. Tannenbaum
1957 *The Measurement of Meaning*. Urbana, Ill.: University of Illinois Press.
- Paykel, E. S.
1974 "Life stress and psychiatric disorder: Applications of the clinical approach." Pp. 135-149 in B. S. Dohrenwend and B. P. Dohrenwend (eds.), *Stressful Life Events: Their Nature and Effects*. New York: John Wiley.
- Scott, Robert and Alan Howard
1970 "Models of Stress." Pp. 259-278 in Sol Levine and Norman A. Scotch (eds.), *Social Stress*. Chicago: Aldine.
- Selye, Hans
1966 *The Stress of Life*. New York: McGraw-Hill.
- Steinmetz, Suzanne K. and Murray A. Straus (eds.)
1974 *Violence in the Family*. New York: Harper and Row (originally published by Dodd, Mead and Co).
- Straus, Murray A.
1973 "A general systems theory approach to a theory of violence between family members." *Social Science Information* 12 (June):105-125.
- Straus, Murray A.
1976 "Sexual inequality, cultural norms, and wife-beating." *Victimology* 1 (Spring):54-76, also reprinted in Emilio C. Viano (eds.), *Victims and Society*, Washinton, D.C.: Visage Press, 1976, and in Jane Roberts Chapman and Margaret Gates (eds.), *Women Into Wives: The Legal and Economic Impact on Marriage*. Sage Yearbooks in Women Policy Studies, Vol. 2, Beverly Hills, Calif.: Sage Publications, 1977.
- Straus, Murray A.
1977 "Wife-beating: How common and why?" *Victimology* 2 (November):443-458. Also reprinted in Straus and Hotaling, 1979.
- Straus, Murray A.
1979a "Measuring intrafamily conflict and violence: The Conflict Tactics (CT) scales." *Journal of Marriage and the Family* 41:
- Straus, Murray A.
1979b "The marriage license as a hitting license: Evidence from popular culture, law, and social science." Chapter 3 in Murray A. Straus and Gerald T. Hotaling (eds.), *The Social Causes of Husband-Wife Violence*. University of Minnesota Press. In Press.
- Straus, Murray A.
1979c "Socioeconomic status, aggression, and violence." Paper in preparation.
- Straus, Murray A., Richard J. Gelles and Suzanne K. Steinmetz
1979 *Behind Closed Doors: Violence in the American Family*. New York: Anchor/Doubleday. In Press.
- Straus, Murray A. and Gerald T. Hotaling (eds.)
1979 *The Social Causes of Husband-Wife Violence*. University of Minnesota Press. In Press.
- Straus, Murray A. and Fumie Kumagai
1979 "An empirical comparison of eleven methods of index construction." Chapter 2 in Murray A. Straus, *Indexing and Scaling for the Social Sciences with SPSS*. Book in preparation. (A mimeographed copy of this chapter is available on request).
- Wolfgang, Marvin E.
1956 "Husband-wife homicides." *Corrective Psychiatry and Journal of Social Therapy* 2:263-271. Also reprinted in Clifton D. Bryand (ed.), *Deviancy and the Family*. Philadelphia: F. A. Davis.

FOOTNOTES

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1. Figure 1 is intended to illustrate the general nature of the theory, rather than to list all the variables which need to be taken into account. There are also two aspects of the model which are included simply to alert readers to their importance, but which will not figure in the empirical analysis. First, this paper will not deal with feedback processes. Second, within the center box illustrating some of the intervening variables, the arrows show that each of these variables is related to the others. They are a mutually supporting system, and interaction effects are no doubt also present. However, in this paper, these and other intervening variables will be dealt with one by one.

2. This can be demands in excess of capabilities or a low level of demand relative to response capabilities. A more adequate formulation of stress includes a number of other elements. For example, Farrington (1979) has identified six components which need to be taken into account in research on stress: the stressor stimulus, objective demands, subjective demands, response capabilities, choice of response, and stress level. Important as are these six components, they will be ignored in this paper for the simple reason that there is no way to investigate them with the data I have available.

3. The stress index used in this study actually departs in other ways than length from the Holmes and Rahe scale. (1) One of the criteria used to select items from the larger original set was to eliminate stresses which have a "positive cathexis." This was done on the basis of methodological studies which show that it is the "negative" items which account for most of the relationship between scores on the stress index and other variables (Gersten, Langner, Eisenberg and Orzek, 1974; Paykel, 1974). (2) We modified some items and added some which are not in the Holmes and Rahe scale to secure a set of stressors which seemed best for the purpose of this research. (3) The Holmes and Rahe weights were not used in computing the index score for each respondent. This was based on research which found that the weighting makes little difference in the validity of scales of this type (Straus, and Kumagai, 1979), and of the Holmes and Rahe scale specifically (Hotelling, Atwell and Linsky, 1979).

An important limitation which this stress index shares with the Holmes and Rahe index is that one does not know the time distribution of the stressful events. At one extreme, a person who experienced four of the stressors during the year could have had them spread out over the year, or at the other extreme, all four could have occurred at roughly the same time.

4. The sex difference in item 7 (being pregnant or having a child) is probably due to a misunderstanding of the question by the male respondents. It was meant to apply to the men as well as the women in the sample, in the sense of whether the wife was pregnant or had a child in the last year.

5. Although these findings show high rates of violence by wives, this should not divert attention from the need to give primary attention to wives as victims as the immediate focus of social policy. There are a number of reasons for this:

a. A validity study carried out in preparation for this research (Bulcroft and Straus, 1975) shows that underreporting of violence is greater for violence by

husbands than it is for violence by wives. This is probably because the use of physical force is so much a part of the male way of life that it is typically not the dramatic and often traumatic event that the same act of violence is for a woman. To be violent is not unmasculine. But to be physically violent is unfeminine according to contemporary American standards. Consequently, if it were possible to allow for this difference in reporting rates, it is likely that, even in simple numerical terms, wife-beating would be the more severe problem.

b. Even if one does not take into account this difference in underreporting, the data in Table 3 show that husbands have higher rates in the most dangerous and injurious forms of violence (beating up and using a knife or gun).

c. Table 1 also shows that when violent acts are committed by a husband, they are repeated more often than is the case for wives.

d. These data do not tell us what proportion of the violent acts by wives were in response to blows initiated by husbands. Wolfgang's data on husband-wife homicides (1957) suggest that this is an important factor.

e. The greater physical strength of men makes it more likely that a woman will be seriously injured when beaten up by her husband than the reverse.

f. A disproportionately large number of attacks by husbands seem to occur when the wife is pregnant (Selles, 1975) thus posing a danger to the as yet unborn child.

g. Women are locked into marriage to a much greater extent than men. Because of a variety of economic and social constraints, they often have no alternative to putting up with beatings by their husband (Gelles, 1976; Martin, 1976; Straus, 1976, 1977).

6. The number of husbands and wives on which each of the rates in Figure 2 is based are: -1.0 = 361 and 365; -0.5 = 459 and 460; 0.0 = 414 and 415; +0.1 = 304 and 303; +0.6 = 224 and 218; +1.1 = 128 and 129; +1.6 = 45 and 45; +2.1 = 103 and 105.

7. The number of husbands and wives on which each of the rates in Figure 3 is based are: 0 = 1053 and 1058; 1 = 544 and 548; 2 = 257 and 256; 3 = 135 and 130; 4 = 43 and 44; 5 = 12 and 12.

END