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The Intimate Partner Violence Strategies Index: Development and Application Lisa Goodman, Mary Ann Dutton, Kevin Weinfurt and Sarah Cook

Violence Against Women 2003 9: 163 DOI: 10.1177/1077801202239004

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What is This?

The Intimate Partner Violence Strategies Index

Development and Application

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Although research has documented the myriad ways that victims of IPV struggle to keep themselves safe, little research has gone the next step to investigate patterns in women's use of strategies, the factors that influence choice of strategies, or which strategies are most effective. One obstacle to conducting such research is the absence of an instrument to measure the nature and extent of battered women's strategic responses to violence across specific domains of strategies. This article describes the development of such an instrument, the Intimate Partner Violence Strategies Index, in the context of a longitudinal study of battered women's experience over time.

Keywords: coping; domestic violence; resilience; strategies

Women facing abuse at the hands of their intimate partners use a wide variety of strategies to stop, prevent, or escape from the violence, ranging from private attempts to reason with abusive partners, to fighting back, calling the police, or seeking help from a shelter (Bowker, 1983). Indeed, several studies have shown that

AUTHORS' NOTE: This research was supported by NIJ Grant Nos. 98-WT-VX-0023 and 2001 WT-RX 0001, An Ecological Model of Battered Women's Experience Over Time, Phases 1 and 2. We would like to extend our heartfelt thanks to Dorothy Lennig, Esq., from the House of Ruth, Baltimore, MD; and Jane Murphy, Esq., from the University of Baltimore Law School, for their collaboration on this project.

VIOLENCE AGAINST WOMEN, Vol. 9 No. 2, February 2003 163-186 DOI: 10.1177/1077801202239004 © 2003 Sage Publications

far from helpless resignation, women demonstrate increasing activity in the face of escalating violence (Gondolf & Fisher, 1988). These studies have also begun to delineate the kinds of strategies found to be most helpful to women who use them (Bowker, 1987; Donato & Bowker, 1984; Gondolf & Fisher, 1988). It appears then that the field has moved away from viewing battered women as suffering from learned helplessness and toward understanding them as active participants in the process of creating safety for themselves and their families (Gondolf & Fisher, 1988). This is an important development as it offers a very different picture of battered women than that created by a sole focus on their psychological difficulties.

However, little research has gone the next step to investigate patterns in women's use of strategies or the factors that influence choice of strategies, such as the nature of the violence they face, their economic situations, mental health, and the social and community supports to which they have access. Nor has any research investigated the extent to which choice of strategies might influence the likelihood of repeat violence. Of course, an investigation of women's strategic responses to violence can by no means replace direct and ongoing attempts to stop men from using violence. But it is also critical to learn more about what victims of intimate partner violence (IPV) do to maximize their safety. Such knowledge could contribute to interventions that build on women's strengths, capabilities, and coping styles as well as their own sense of how to keep themselves safe (Davies, Lyon, & Monti-Catania, 1998).

One obstacle to conducting such research is the absence of an instrument to measure the nature and extent of battered women's strategic responses to violence across specific domains of strategies. This article describes the development of such an instrument in the context of a longitudinal study of battered women's experience over time. It then goes on to illustrate a potential application of the measure by exploring the relationship between severity of violence and strategic responses to it. More specifically, we ask whether previous findings (e.g., Bowker, 1987; Gondolf & Fisher, 1988) that increased violence is related to increased strategy use exist across a range of types of strategies or just within particular domains of strategies, such as private resistance or formal help seeking.

LITERATURE REVIEW

Lazarus and Folkman (1984) theorized that problem-focused coping is used to manage specific problems (e.g., IPV), whereas emotion-focused coping functions to regulate the distress associated with them. With regard to domestic violence in particular, Chang (1989) made a similar conceptual distinction between strategies used to control violence and strategies used to keep intact the sense of self. Although this dichotomy can become blurred over time, it represents a useful way of thinking about the myriad ways women cope with the violence in their lives. In this article, we focus exclusively on strategies women use to control the violence. A forthcoming article will focus on strategies women use to deal with its emotional sequelae.

Over the last several decades, two competing theories have attempted to explain battered women's responses to violence. Lenore Walker (1979, 1984) developed the first in the early 1970s. Based on interviews with 403 battered women in the community, Walker posited that when women perceive that none of their actions lead to changes in the batterer's behavior, they come to view their own actions as futile. This "learned helplessness" is then generalized to other situations and can result in depression and anxiety. Social messages that women are themselves responsible for the abuse may further exacerbate a sense of helplessness. At the time, Walker's theory represented a groundbreaking attempt to explore battered women's behavior in response to, as opposed to as a cause of, the violence they endured. But since then, many advocates and researchers, including Walker herself, have criticized the concept for its implication that women are passive in response to the violence (see, e.g., Bowker, 1993; Peterson, Maier, & Seligman, 1993).

Ten years later, Gondolf and Fisher (1988) developed the contrasting survivor theory to understand battered women's responses. Based on their own survey of 6,612 victims of IPV in Texas shelters and Bowker's (1983) previous mail survey of 1,000 community women, this theory held that battered women actually become increasingly active in their attempts to stop violence as it grew more frequent or severe. Not only were participants in these studies more likely to seek help as the violence worsened, but they also were also likely to seek a wider variety of forms of help (Bowker, 1986; Gondolf & Fisher, 1988). A number of other studies—both qualitative and quantitative—have since demonstrated support for the finding that IPV victims are tremendously active and persistent in their attempts to stop the violence (see, e.g., Follingstad, Hause, Rutledege, & Polek, 1992; Horton & Johnson, 1993).

Consistent with these empirical studies, a number of qualitative studies have also deepened our understanding of battered women's responses to violence by proposing a stage model whereby women move from more private attempts to control the abuse to more public help seeking (see, e.g., Brown, 1997; Lempert, 1996; Mills, 1985). Lempert (1996), for example, conducted a qualitative study of 32 women reporting interpersonal violence at the hands of their intimate male partners. Based on in-depth interviews, Lempert eloquently described an initial stage of face saving and managing contradictory beliefs (e.g., that participants were the only ones who could stop the abuse and yet that they were unable to do so), all in an effort to render the violence invisible. During this period, even actions that might appear to be evidence of learned helplessness (e.g., hiding or not putting up a fight) actually represented attempts to make an inevitable beating a little less severe, to make it less likely to affect the children, or to otherwise ameliorate the situation, however little.

But as the violence worsened, their hope that they could stop the violence on their own began to disappear. At this point, "they began to supplement their individual strategies and to request outside help in order to turn the dialogue into a multilog" (p. 283). This "multilog"—with family members, friends, or service providers—helped women redefine the problem for themselves, sometimes resulting in a recognition of the need to leave the relationship. Conversations with others also transform "domestic" violence into a public issue requiring external regulation and increased tangible and emotional support for engaging in new safety-promoting strategies (Brown, 1997; Mills, 1985).

Although these studies have been critical for shifting the public perception of battered women and deepening our understanding of their changing responses to violence, none has explored systematically, in a large and varied sample, the interplay of the range of strategic responses to violence that women may employ—those that involve public help seeking and those that involve

more private attempts to deal with the violence. The picture of how women respond to increasing violence in their lives thus remains fuzzy. For example, as violence escalates, do women turn to the legal system more and other formal services less? Do they engage in fewer strategic responses in the private sphere and more in the public sphere? Do they do less placating and more resisting? Answers to these questions are critical to the development of services that build on women's own ways of handling the violence in their lives.

In the next section, we describe the conceptual development of the Intimate Partner Violence Strategies Index and the conceptual distinctions among categories within the index. We conclude this section with a brief discussion of two possible conceptual approaches to the measurement of women's strategies and a rationale for our choice of approach. Then, in the Results section, following the presentation of some initial findings on the extent of use and helpfulness of strategies in a sample of IPV victims seeking help from the legal system or a shelter, we explore two issues: the measure's convergent validity and the question of whether more severe violence is related to increased strategy use across a range of strategy categories or only within specific categories.

INDEX DEVELOPMENT

ITEM AND CATEGORY GENERATION: CONTENT VALIDITY AND INTERRATER RELIABILITY

We generated items for the index from four sources: (a) a review of the literature on battered women's strategy use, summarized above; (b) our own clinical and forensic experience; (c) two focus groups with advocates, one in an urban shelter and one in an urban court; and (d) one focus group with battered women in an urban shelter. Based on these sources of information, we developed an initial list of 41 items that represented the range of strategies women use to ensure their safety, and we asked a few advocates to review our list to ensure that the wording of items made sense.

To ensure that we had covered the scope of strategies that women use, we administered the newly revised index to a sample of 406 participants described below in the Methods section. For

each item, we asked whether participants had used the strategy in the last year and to what extent the strategy had been helpful in dealing with the violence. Following the administration of the index, we asked participants to do the following: "Including the strategies listed above but also thinking about anything else you may have done to stop, prevent, or escape the violence in your life, please list the three things you did that worked the best." As a result of this last step of item generation, we added 6 new items for subsequent waves of data collection, leaving 47 items. However, we also eliminated the 8 items that were endorsed by fewer than 5% of the sample, resulting in a total of 39 items (see Appendix).

The authors then reviewed these strategies and imposed categories on them. As a group, we struggled a great deal with how to organize the items. Organizing them according to their purpose was problematic in that such an organizing framework united strategies that seemed so widely divergent in terms of the means involved. For example, "fought back physically" and "tried not to cry during the violence" are both strategies intended to stop the abusive partner's violent behavior once it starts (as opposed to avoiding it altogether). Yet the first does so through confrontation and the second through the avoidance of confrontation. These two items clearly do not belong together. However, to organize the items solely according to the means involved, without reference to purpose, seemed superficial. Moreover, both schemes left out the dimension of the level of involvement of others. For example, the distinctions between strategies carried out in isolation (private strategies), those involving family and friends (informal network strategies), and those involving the engagement of public agencies (public strategies) are critical to understanding women's coping as well as to developing responsive programs and policies. Thus, in the end, we worked out a categorization that combined purpose, means, and level of involvement of others. For example, both placating and resistance strategies are intended to change batterer behavior, but the former does so without challenging his sense of control, whereas the latter does so by challenging that control. Resistance, in turn, differs from legal strategies—also intended to change batterer behavior by challenging his control—in that the former is exercised within the private realm, whereas the latter is not.

Using these distinctions, we placed each item into one of six categories. Although some of the resultant categories included several strategies with dual purposes, the overall framework seemed to work well. Moreover, it can be seen to have some face validity in that it is quite similar (although more comprehensive) to the typology developed by Bowker (1983) and later adopted by Gondolf and Fisher (1988), and the safety planning category includes items similar to those developed by advocates who work with battered women (see, e.g., Davies et al., 1998).

To ensure interrater reliability, we then provided category definitions to five graduate students involved in domestic violence work and asked them to categorize the items. These independent raters classified each of the 33 strategies into one of the five categories. All of the raters agreed on the placement of 85% of the strategies. For the remaining 15% of the strategies, a group discussion was conducted with several of the raters and the study investigators to arrive at an agreement concerning the appropriate placement of the strategies. Items and categories can be found in the Appendix.

The placating category includes strategies intended to change batterer behavior without challenging, and possibly even supporting, his sense of control. These strategies are exercised in the private realm and do not change the balance of power in the relationship. The resistance category includes strategies intended to change batterer behavior and possibly the balance of power in the relationship by challenging his sense of control. These too are exercised in the private realm. The safety planning category includes strategies intended to increase resources and/or options for escaping or protecting against a future incident of abuse. These are actions taken within the private domain, without accessing a public institution. The legal category includes strategies intended to change batterer behavior through the use of an outside regulator, the legal system. The formal network category includes strategies intended to change batterer behavior or increase resources and/or options for escape through use of nonlegal public agencies, ranging from medical to religious. Finally, the informal network category includes strategies designed to increase resources and/or options for escaping or protecting against a future incident of abuse. These are taken within the public realm in that they involve reliance on external sources of support.

QUESTION OF LATENT VS. INDUCED VARIABLES

In constructing our measure, we had to choose between two different measurement frameworks, which we review shortly. This choice was critical because it determines how the resulting instrument should be constructed, evaluated, and used. More fundamentally, the framework chosen expresses an idea about how we understand women's strategic responses. The two different frameworks were the traditional latent variable model and the induced variable model (Klem, 2000).

A latent variable model for a single scale assumes the existence of some underlying, unobserved causal agent that causes the person's observable behavior. For example, perhaps there is an unobserved strategic principle of resistance. Once a woman adopts this strategic goal, it causes her to use certain strategies, such as fighting back, sleeping separately, and ending the relationship (see Figure 1). Because the use of these strategies is caused by the same latent variable (resistance), they are assumed to be correlated. For a set of strategies to be caused by a single latent variable, the use of the strategies in the set must be intercorrelated. Indeed, internal consistency is a requirement of a scale that is purported to measure a latent construct. To summarize, the latent variable model assumes (a) the latent variable causes the use of each of the strategies and (b) because of this common cause, there are intercorrelations among the set of strategies.

In contrast, an induced variable model (see Figure 1) posits that the individual strategies combine to define a new variable like ingredients combining to make a cake (Bollen, 1989; Klem, 2000). Another way to think about an induced variable is as a category name for a specific set of strategies. This is illustrated in Figure 1b, in which fighting back, sleeping separately, and ending the relationship can all be considered members of the category resistance strategies. One important implication of the induced variable model is that use of one strategy within a category does not need to be correlated with use of other strategies in that category. This means that factor analysis and estimation of internal consistency would be irrelevant to the construction of an induced variable measure.

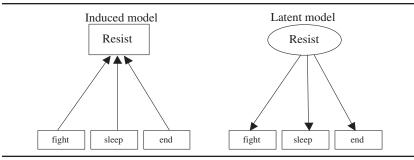


Figure 1: Induced Versus Latent Variable Model

Initially, each approach seemed to be theoretically plausible with regard to women's responses. Further consideration, however, showed that the latent model would impose theoretical constraints on women's responses that we did not consider ecologically valid. As described earlier, the latent model assumes that if a woman uses one resisting behavior, she is likely to use another and that her behavior is organized or directed by an overarching strategic plan. This approach also assumes that all strategic responses are potential options for all women (e.g., that all women have cars, kids, and shelters available). We know that not all women have all options available, however, and we also believe that women use a variety of strategies that are not necessarily related. Their choice of responses may reflect what they believe works at a particular time, in a particular situation, or in a particular place. Their choices also reflect options that they perceive are available to them. In other words, women's responses are highly context dependent and more flexible than what preordained plans of action would allow. For these reasons, we concluded that the induced model was a better ecological fit for conceptualizing women's strategic responses.

METHOD

This study is part of a larger investigation of battered women's experiences over time. For that larger study, we conducted inperson, semistructured interviews with 406 battered women in a major city on the Eastern Seaboard and are tracking them over the course of a 3-year period. For the purposes of this article, we will describe the initial sample recruitment and a portion of the interview protocol only.

SAMPLE

Over the course of 7 months (June 1999 to January 2000), we recruited a total of 406 women from one of three sites in the same mid-Atlantic city at the point they were seeking help for intimate violence at the hands of a current or former male partner. The first site, the Shelter (n = 68, 16.7%), is the main crisis shelter for battered women and their children in this city. Participants were recruited within the first 30 days of their shelter stays. The second site, the District Court, Civil Division (n = 220, 54.2%), handles petitions for civil protection orders. Participants were recruited at the point they were seeking an initial temporary restraining order. The third site, the District Court, Domestic Violence Criminal Docket (n = 118, 29.1%), is a specialized court handling most domestic violence misdemeanor cases in the city. Participants were recruited outside the courtroom following the final disposition of the case.

PROCEDURE

Law students living in the area were trained as research assistants to recruit participants and administer Time 1 questionnaires. They described the study briefly to all potential participants and then conducted a brief screening to ensure their eligibility. To participate in the study, a woman had to be a victim of IPV perpetrated by a man who is a current or former intimate partner, English speaking, sober, and without significantly impaired mental status at the time of the initial interview. As part of informed consent, each potential participant was advised that a researcher would contact her by telephone every 3 months for the next year at least. She was asked to provide detailed contact information and to answer a series of questions about how to maximize her safety during follow-up phone contacts. The initial interview and/or questionnaire required approximately 45 to 60 minutes to complete, and participants were paid \$20 for their time. Participants who agreed to do so (n = 294) completed the questionnaire on their own in a private room or by interview, according to their preference. Participants who were willing to participate in the study but unable to do so at the time were offered the questionnaire to return by mail via a stamped envelope (n = 112). The overall refusal rate among women we attempted to recruit was 28.6%. A number of reasons were given for refusing to participate, but most were related to time constraints.

MEASURES

Demographics. We elicited information from participants on a range of demographic factors, including age, ethnicity, children, education, employment, living situation, and current relationship status.

Violence. To measure adult physical and sexual assault, we modified the Revised Conflict Tactics Scales (CTS2-Form A) (Straus, Hamby, Boney-McCoy, & Sugarman, 1995) in the following two ways. With regard to the Sexual Coercion subscale, we consolidated the original 7 items into 4, thereby eliminating items that asked about his "insisting" on sex without the use of force or threats. We also created a new item: "I had sex with him because I was afraid of what he would do if I didn't." We asked these questions with regard to the last year with participants' current partners and with regard to prior partners. Response choices were yes or no. All endorsed items were summed to produce scores for each subscale and an overall score. Also, consistent with Straus et al. (1995), we distinguished between "severe" and "less severe" abuse for the Physical Assault and Injury subscales, with severe physical assault including kicking, punching, or hitting with something, slamming against a wall, choking, burning, "beating up," or using a knife or gun, and severe injury including passing out from being hit on the head in a fight with the abuser, needing to go or actually going to a doctor because of a fight with him, or having a broken bone from a fight with him.

To measure psychological abuse, we used a short (14-item) version of the Psychological Maltreatment of Women Inventory (PMWI-Short Form) (Tolman, 1995). This inventory asks whether participants have experienced a variety of acts of psychological abuse, ranging from "he swore at me" to "he watched over my activities and insisted I tell him where I was at all times." Response choices range from 1 (*never*) to 5 (*a lot*). The PMWI is composed of two subscales designed to measure dominance-isolation and emotional-verbal psychological abuse (Tolman, 1989). The

short form has been shown to successfully discriminate battered and nonbattered women (Tolman, 1995).

Strategies. For the IPV Strategies Index, category scores represent the percentage of items endorsed within each category, and the total score represents the mean of these percentages. Helpfulness scores were obtained by asking women to note on a 5-point scale ranging from 1 (not at all) to 5 (extremely) how helpful each strategy was in dealing with the violence. A score of 3, 4, or 5 can be considered an indicator that the strategy was helpful.

ANALYSIS PLAN

We computed descriptive statistics to summarize the characteristics of the sample. Then we calculated the proportion of women who used each strategy as well as the proportion of participants who found that strategy helpful (by rating it 3, 4, or 5). To index the degree to which multiple categories were used, we determined the percentage of women who used at least one strategy within each of the five categories. To obtain category scores, we computed the proportion of strategies in each category that were used by the participant. We then used Spearman rank correlations to describe the relationships among five category scores.

To test the measure's convergent validity, we estimated the Spearman rank correlations between each category of strategy use and the CTS total score and PMI total score. Consistent with Gondolf and Fisher's (1988) findings, we expected at least moderate correlations. We also sought to determine whether individual women who experienced more abuse tended to have increased use of a small number of categories rather than a uniformly higher level of use for all categories. For such women, we would expect to observe greater variation in their profile of category scores as abuse increased. To address this question, we computed two different measures of profile variation. The first was the spread of category scores for each woman individually, defined as the standard deviation of each woman's category scores. For example, consider two women, A and B. Woman A's five category scores are .20, 0, .15, .11, .10, and .12. Thus, her mean score is .11, and the standard deviation or spread is .07. Woman B's five category scores are .70, .42, .30, .20, .80, and .10. Thus, her mean score is .42, and the

standard deviation or spread is .31. The higher standard deviation for Woman B reflects a relative disparity in the use of some strategies to the neglect of others.

The second measure of profile variation we used was the range of category scores for each woman, defined as the difference between the woman's smallest and greatest category scores. For Woman A, the difference between the maximum and minimum scores is .20 - 0 = .20. For Woman B, the range is .80 - .10 = .70. As with the measure of spread, the measure of range reflects the fact that Woman B used some strategies much more than other strategies. If increased abuse led to increases in only a few categories of strategy use, then one would expect to see greater spread or a greater range among category scores in women who reported greater levels of abuse. We tested this by computing the Spearman rank correlation between each woman's spread, range, and level of abuse (the psychological abuse factor and PMI total score).

RESULTS

SAMPLE DESCRIPTION

Most (81.2%) of the participants were African American, and most (90.9%) had at least one child. About half (51%) were employed full-time and most (66.2%) had an income of less than \$15,000 a year. Most (88.2%) of the sample reported severe physical abuse at the hands of the target partner. Additional demographic and violence-related characteristics of the sample can be found in Table 1.

DISTRIBUTIONS OF STRATEGY CATEGORIES: PREVALENCE AND HELPFULNESS

Because the Time 1 interviews were based on our initial pool of items (before we expanded the list based on T1 participant comments), the following results are based on the 33-item index rather than the full 39-item index. Table 2 lists index items and the prevalence and reported helpfulness of each.

Overall, the mean proportion of strategies used was 52% (SD =.24). Interestingly, more than half of the participants (54%) reported using at least one strategy within each category.

TABLE 1 Sample Characteristics

Variable	%			
Ethnicity				
African American	81.2			
Anglo	13.0			
Other	5.8			
Children				
At least one child	90.9			
Children in home	78.9			
Children with abusive partner	45.4			
Employment				
Unemployed	25.4			
Employed full-time	51.0			
Employed part-time	11.9			
Income				
Less than \$5,000	37.5			
\$6,000-\$15,000	28.7			
\$16,000-\$25,000	20.2			
\$26,000 and higher	13.4			
Public assistance	35.2			
Public housing	7.0			
Medicaid	98.6			
WIC	28.9			
Food stamps	65.6			
Education				
Less than high school	27.0			
High school	28.7			
Technical school	7.2			
Some college	27.7			
Two-year college	3.5			
Four-year college	3.7			
Some grad school	2.2			
Relationship status				
Intact	68.9			
Estranged	31.1			
Marital status				
Married	42.1			
Boyfriend	57.9			
Living arrangement				
Lives together	73.0			
Lives separately	27.0			
Physical/sexual violence				
Any physical	96.5 ^a			
Severe physical	88.2			
Any sexual	46.9 ^b			
Any injury	77.7 ^c			
Severe injury	49.6			

(continued)

TABLE 1 (continued)

Variable	%	
Psychological abuse		
Any dominance/isolation	96.0 ^d	
Any emotional/verbal abuse	98.5 ^e	

- a. Mean = .50, SD = .27.
- b. Mean = .27, SD = .26.
- c. Mean = .36, SD = .27. d. Mean = .71, SD = .30.
- e. Mean = .86, SD = .21.

Category scores (the proportion of strategies used within each category) and mean helpfulness ratings provided by those who used at least one strategy within the category are listed in Table 3.

Participants rated safety planning, informal, and legal strategies as most helpful, though placating and resistance strategies were most commonly used.

RELATIONSHIPS AMONG STRATEGY CATEGORIES

Table 4 describes the relationships among strategy category scores. Correlations ranged from r = .34 between legal and placating strategies to r = .60 between formal and safety strategies.

RELATIONSHIPS BETWEEN STRATEGY **CATEGORIES AND ABUSE**

Table 4 also describes the relationships between strategy scores, the CTS-2 and PMI total scores. In addition, the spread of category scores was correlated .02 with the CTS-2 total score and -.02 with the PMI total score. The range of category scores was correlated only .04 with the CTS-2 total score and only .004 with the PMI total score, indicating that there was no greater spread or range among category scores in women who reported higher levels of abuse.

DISCUSSION

REVIEW OF THE FINDINGS

To our knowledge, the IPV Strategies Index represents one of the first attempts to measure systematically the different types of

TABLE 2 Prevalence of Use and Perceived Helpfulness of Strategies to Deal With Intimate Partner Violence

Strategy	Category	Prevalence (%)	Percentage Who Found the Strategy Helpful
Ended the relationship	Resistance	86.9	54.5
Refused to do what he said	Resistance	86.5	57.7
Called police ^a	Legal	85.2	74.8
Fought back physically	Resistance	82.0	53.5
Slept separately	Resistance	80.4	57.4
Left home to get away from him	Resistance	78.7	62.9
Filed for protection order	Legal	72.8	68.4
Tried to keep things quiet for him	Placating	70.0	53.5
Tried not to cry	Placating	69.6	51.8
Talked to family members ^a	Informal	69.0	74.8
Did whatever he wanted	Placating	63.5	62.9
Hid money/valuables	Safety planning	62.0	68.9
Stayed with family or friends ^a	Informal	59.1	70.2
Helped to file criminal charges	Legal	51.1	68.0
Kept important phone numbers ^a	Safety planning	50.1	78.3
Talked to a DV program ^a	Formal	49.3	78.9
Tried to get him counseling	Formal	46.9	37.6
Kept the house/car keys close by	Safety planning	45.9	57.3
Hid important papers ^a	Safety planning	44.2	77.6
Kept a weapon accessible	Safety planning	41.8	53.1
Sent kids to family/friends ^a	Informal	41.5	73.5
Used weapon	Resistance	41.4	40.0
Worked out an escape plan	Safety planning	36.2	68.1
Developed a danger code	Safety planning	36.1	62.9
Talked to a doctor or nurse	Formal	34.4	60.7
Kept a supply of basics accessible	Safety planning	32.3	68.0
Stayed at a shelter	Formal	31.7	67.5
Called a mental health counselor	Formal	29.9	64.9
Removed or hid weapons	Safety planning	29.7	56.2
Tried to get help from clergy	Formal	26.0	53.6
Tried to get help from employer	Formal	25.9	56.7
Tried to get help for alcohol/			
substance abuse	Formal	25.3	48.5
Tried to get legal assistance	Legal	23.5	43.3

NOTE: DV = domestic violence. A strategy was categorized as helpful if the participant endorsed 3 (helpful), 4 (quite helpful), or 5 (extremely helpful) as a response choice. Items are ordered from the most to the least prevalent.

strategies IPV victims use to keep themselves safe. Because it was developed in part on the basis of focus groups with IPV victims themselves and those who work with them, it likely has good ecological validity. We found evidence for the face validity of our

a. Items found helpful by 70% or more of the sample.

TABLE 3 Category Scores: The Mean Proportion of Items Endorsed in Each Category of the Intimate Partner Violence Strategies Index

	Items I	Items Endorsed		Helpfulness Rating	
Category	M	(SD)	M	(SD)	
Placating	.67	(.35)	2.90	(1.40)	
Resistance	.76	(.76)	2.90	(1.30)	
Safety planning	.42	(.34)	3.38	(1.28)	
Legal	.58	(.29)	3.42	(1.36)	
Formal	.33	(.31)	3.20	(1.21)	
Informal	.56	(.35)	3.54	(1.35)	

TABLE 4 Correlations Among Strategy Categories and Physical and Psychological Abuse

	Placating	Resistance	Safety Planning	Legal	Formal	Informal
Resistance	.46					
Safety planning	.55	.55				
Legal	.34	.35	.54			
Formal	.40	.39	.60	.47		
Informal	.50	.45	.54	.40	.45	
CTS total	.42	.28	.39	.22	.34	.23
PMWI total	.43	.30	.40	.21	.25	.38

NOTE: All correlations are significant at the .01 level.

classification scheme in that it is consistent with Bowker's (1983) typology and the safety planning checklists used by domestic violence advocates. The measure also demonstrated good interrater reliability in that a group of independent raters classified the items similarly. Convergent validity was evidenced in the moderate correlations between strategy scores and scores on measures of physical and psychological abuse. Finally, the correlations among strategy category scores were sufficiently low (.33 - .67) to suggest that they indeed measure different things, although it is possible that the low correlations could also be due in part to measurement error.

With regard to the extent of use of strategies, women were more likely to use private strategies, such as placating and resisting, than public strategies that involved seeking help from the legal system or from other community agencies. Indeed, as Table 2 shows, most women in the sample had tried most of the resisting

and placating strategies listed in the index. At the same time, relatively few had sought help from formal institutions (i.e., formal strategies). This is especially striking given that the sample selection was based on women who had pursued public strategies. Interestingly, informal network strategies, such as staying with family or friends, seemed to fall between private and formal network strategies in terms of prevalence. These findings are consistent with Lempert's (1996) theory that most women start out using private strategies (e.g., placating and resisting) and then a smaller group move on to more public help seeking as the violence increases. They also suggest that women do not substitute public strategies for private ones. Instead, they may complement or extend their use of private strategies as the violence escalates. However, it would take a longitudinal study—with a portion of the sample experiencing increasingly severe levels of violence to demonstrate this hypothesized pattern.

With respect to the helpfulness of strategies, it is noteworthy that the resistance and placating strategies so commonly used were also found to be the least helpful. Instead, all of the informal network strategies, as well as a number of the safety planning and legal strategies, were listed as helpful by most of the sample. Interestingly, Table 2 shows that 74.8% of the sample found calling the police helpful, and the strategy rated helpful by the largest number of people (78.9%) was talking to someone at a domestic violence program. These results are partially consistent with Bowker's (1983, 1986) findings that women responding to a recruitment effort through Woman's Day magazine reported that personal strategies that did not involve a change to the balance of power in the relationship (e.g., hiding or begging a partner to stop) were less effective than strategies that challenged the partner's control (e.g., calling the police). However, in this study, even private forms of resistance that might be conceptualized as attempts to change the balance of power (e.g., fought back physically or tried to end the relationship) were rated relatively low in terms of helpfulness. Overall, participants' helpfulness ratings show that external help seeking, as opposed to private attempts to manage the violence, is critical to women's ability to end the violence in their lives. Strategies that involve engaging family and friends seem to be particularly helpful.

With regard to the question of whether increasing levels of violence are associated with specific patterns of strategy use, we found that more severe violence was associated with increased use of strategies in every category, even in those that, on first consideration, could appear to be opposite (e.g., placating and resisting). That is, one might expect that as violence increased, either placating or resistance would increase but not both. By contrast, this study shows that women may increase their use of both placating and resistance as violence severity increases. This finding, like so many others, supports Gondolf and Fisher's (1988) survivor theory—that as women experience escalating levels of violence, they become more persistent in fighting it. It is also consistent with Molm's (1997) theory of social power, which predicts that greater power to punish and greater likelihood of being punished result in greater compliance and greater resistance. These responses are not mutually exclusive. It seems that the more violence women endure, the more broadly they cast their strategic net, intensifying their efforts within a broad range of arenas, both private and public, both confrontational and nonconfrontational, both placating and resisting.

LIMITATIONS

This study represents a preliminary investigation of women's use of strategies to deal with IPV and is limited in a number of ways. With regard to the sample itself, increasing evidence points to the need to distinguish between what Johnson (2000) called "patriarchal terrorism" (ongoing violence in the context of coercion and control) and "common couple violence" (discrete acts of violence that exist outside a context of coercion and control). Johnson asserted that the former type of violence may predominate among IPV victims who seek help from the legal or shelter system. Those who do not seek such help may face a qualitatively different kind of violence and, subsequently, may use completely different types of strategies. Although the sample on which this study is based is a relatively large and diverse group of IPV victims, all participants were involved with a court or shelter at the time of recruitment. Thus, generalizability is clearly limited to help-seeking, urban, predominantly low-income women who may represent victims of patriarchal terrorism more than common couple violence.

With regard to the measure itself, it does represent a broad range of strategies women use to keep themselves safe, but the list of strategies women actually use is, of course, much longer. Some of the items, though quite specific, nevertheless leave room for individual interpretation. And although the helpfulness ratings enable us to draw some gross conclusions about the relative usefulness of strategies, they do not provide information on why women find particular strategies helpful or unhelpful. Moreover, although we were able to demonstrate some evidence of content and convergent validity, further psychometric testing is clearly needed. For example, further evidence of convergent and discriminant validity would be useful, as would evidence of testretest reliability.

Finally, this study is based on cross-sectional data. We cannot determine whether the causality flow is exclusively from increasing violence to increased use of strategies. It may be that the use of certain strategies actually triggers increased violence. Although a longitudinal investigation could shed some light on the question of causality, even it could not fully illuminate the causal flow of these phenomena as they often occur practically in tandem. That is, a victim of IPV can and often does respond immediately to an act of violence, just as a batterer can respond instantly to a particular strategic response.

PRACTICE AND RESEARCH IMPLICATIONS

Despite these limitations, this study demonstrates the importance of understanding in a more fine-grained manner the ways in which women act to stop, prevent, or escape from violence in their lives. Only by understanding how these strategies work in women's lives can we develop interventions for victims that capitalize on their strengths. Moreover, it is important for service providers, court personnel, and others who work with IPV victims to recognize, on one hand, how hard battered women work on their own to end the violence in their lives and, on the other hand, that women cannot do it on their own. Indeed, participants rated strategies that engaged community agencies—especially calling the

police or a domestic violence agency—as much more helpful than strategies that they undertook in the private domain.

Further research using the IPV Strategies Index with diverse populations is necessary. Only with a comparable database can we begin to articulate the types of interventions that would flow from the strategic responses that particular groups of battered women actually use. Further research should address questions such as how strategies shift over time; how additional factors at the individual, interpersonal, institutional, community (rural vs. urban), and cultural levels influence choice of strategy; how effective different types of strategies are in different contexts; and how perpetrators of abuse respond to specific strategies. These kinds of questions can be answered only by using longitudinal designs, sampling a variety of types of IPV victims (i.e., differentiated by ethnicity, class, type of violence endured, nature of resources available), and using measures, such as the IPV Strategies Index, that tap a range of domains of strategy use. It is time to let IPV victims themselves teach us how to help them. The IPV Strategies Index represents one tool for doing so.

APPENDIX Items and Categories for the Intimate Partner Violence Strategies Index

Formal Network

- Tried to get help from clergy
- Tried to get help from her employer or coworker
- Talked to a doctor or nurse about abuse
- Called a mental health counselor for yourself
- Tried to get him counseling for violence
- Stayed in shelter
- Talked to someone at a domestic violence program, shelter, or hotline
- Tried to get help for yourself for alcohol or substance abuse
- Tried to get him help for alcohol or substance abuse (added at T3)

Legal

- Filed petition for CPO
- Filed or tried to file criminal charges
- Sought help from legal aid
- Called police

Safety Planning

- Hid car or house keys
- Kept money and other valuables hidden
- Developed code so others would know I was in danger
- Worked out escape plan
- Removed or hid weapons
- Kept important phone numbers I could use to get help
- Kept extra supply of basic necessities for myself/children
- Hid important papers from him
- Put a knife, gun, or other weapon where I could get it
- Changed locks or somehow improved security (added at T3)

Informal Network

- Talked to family or friends about what to do to protect myself/children
- Stayed with family or friends
- Sent kids to stay with friend or relatives
- Made sure there were other people around (added at T3)

Resistance

- Fought back physically
- Slept separately
- Refused to do what he said
- Used/threatened to use weapon against him
- Left home to get away from him
- Ended (or tried to end) relationship
- Fought back verbally (added at T5)

Placating

- Tried to keep things quiet for him
- Did whatever he wanted to stop the violence
- Tried not to cry during the violence
- Tried to avoid him (added at T3)
- Tried to avoid an argument with him (added at T3)

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