BEYOND THE MEASUREMENT TRAP: A Reconstructed Conceptualization and Measurement of Woman Battering¹

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Abstract:

Many areas of women's health, including battering, suffer from conceptual and methodological deficits. This article uses the "measurement trap" (Graham & Campbell, 1991), a set of conditions defined by lack of information resulting from a narrow conceptualization of the problem, poor existing data sources, inappropriate outcome indicators, and limited measurement techniques, as a framework for describing how current approaches to conceptualizing and measuring battering hamper research and program efforts in the field of domestic violence. We then describe an alternative conceptualization-and-measurement approach that is based on battered women's experiences. We argue that an experiential approach, which grounds measurement in women's lived experiences, improves our ability to conduct research that correctly identifies, monitors, and explains the epidemiology of this phenomenon and provides a solid basis for policy and program development.

Article:

Violence against women by their male partners affects millions of women worldwide. Research in the United States indicates that each year an estimated 2 to 4 million women are battered by their husbands or boyfriends and that between 21% and 34% of all American women will be physically assaulted by a male partner at least once in their lifetime (Louis Harris & Associates, 1993). Research in developing countries suggests that the percentages of women battered globally is certainly no lower than this and perhaps is even higher in some countries (Heise, Pitanguy, & Germain, 1994). Today, private violence is increasingly recognized around the world as a major public health problem in light of growing evidence that the physical, psychological, and often sexual violence inflicted on battered women contributes to the development of many acute and chronic health problems (Heise et al., 1994; Koss et al., 1994). Battering also inflicts a social and financial burden on society including increased health care usage and cOSts, lost work productivity, increased poverty, and retarded social and economic development. The World Bank (1993) estimates that the global health burden from gender-based victimization among women aged 15-44 is comparable to that posed by other risk factors and diseases such as HIV/AIDS, tuberculosis, sepsis during childbirth, cancer, and cardiovascular disease.

To monitor accurately the epidemiology of male violence against women and develop effective prevention and intervention programs, available data must portray this phenomenon correctly and completely. Unfortunately, domestic violence, like some other women's health issues, suffers from conceptual and methodological problems (Dobash, Dobash, Wilson, & Daly, 1992; Koss et al., 1994; Skogan, 1981; Smith, Earp, & DeVellis, 1995). In describing the conditions that constrain research on women's health, Wendy Campbell and Oona Graham, with the Maternal and Child Epidemiology Unit of the London School of Hygiene and Tropical Medicine, outlined a set of conditions known as the "measurement trap" (Graham & Campbell, 1991). This

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"trap" is sprung when a narrow conceptualization of the problem combines with poor data sources, inappropriate outcome indicators, and limited measurement techniques in a cycle that leads to distorted information and neglect, hampering both programmatic and further research efforts.

The issue of battering is a specific example of how the measurement trap constrains women's health research. Using the measurement trap as a framework, this article describes the current approach to measuring battering that constrains research in the field and then offers an alternative conceptualization and measurement approach. The alternative approach draws on research we have conducted with battered women in the United States to derive a qualitative conceptual framework and quantitative measurement instrument that reflect the experiences of battered women from their own perspectives (Smith, Earp et al., 1995; Smith, Tessaro, & Earp, 1995).

CURRENT APPROACHES TO CONCEPTUALIZING AND MEASURING BATTERING

Conceptualization is the prime component of the measurement trap. It refers generally to the process of defining the essential characteristics of a phenomenon and formulating ideas on the topic for the construction of theory and testing of

Table 1
Conceptualizing and Measuring Battering: A Framework for Analysis

	Measurement Trap	Untrapping Measurement
Battering Conceptualization		
• Events orientation	Discrete events	Continuous process
 Treatment of gender 	Neglect of gender	Gendered experience
• Time interval	Bounded by occurrence of assaults	Exposure to victimization and exercise of power
Measurement techniques	Emphasis on events	Emphasis on experience
	Emphasis on physical assault	Contextualized
	Acute condition	Chronic condition
Outcome indicators	Fatal injury	Fatal injury
	Nonfatal injury	Nonfatal injury
	3 2	Physical health
		Mental health
		Social health
Data sources	Injury surveillance	Multiple sources of surveillance

hypotheses. Graham and Campbell's (1991) research revealed that a weak conceptual framework lies at the center of the measurement trap hampering women's health research. Although the other three components have their own problems independent of conceptualization, an incorrect conceptualization will necessarily constrain the development of appropriate outcome measures, useful data sources, and valid measurement techniques (Graham & Campbell, 1991). Outcome indicators both influence and are influenced by conceptualizations and definitions, whereas conceptual approaches provide validity for the use of particular measurement instruments and data sources.

Graham and Campbell (1991) outlined three factors that shape a weak conceptualization: events orientation, the treatment of gender, and a narrow time interval. In their discussion of women's health generally, Graham and Campbell (1991) noted that the field has tended to conceptualize women's health as a discrete, negative state characterized by physical rather than social or mental manifestations. It has focused on the maternal role and, in the process, reduced an analytic span to the narrow time intervals shaped by pregnancy, delivery, and postpartum. Current approaches to measuring battering can be analyzed in terms of these three factors (see Table 1).

Events orientation refers generally to framing a health problem in terms of easily observable events. Researchers have a long history of equating battering with the events of physical assault (Dobash et al., 1992;

Hudson & McIntosh, 1981; Shepard & Campbell, 1992; Straus, 1979), which predisposes them to measure battering by focusing on male behavior. This behavioral approach has three implications for our conceptualization of battering. First, it drives researchers to pay attention to events, not to people. Second, it allows us to consider and evaluate these events exclusive of their meaning to the victim or perpetrator; and, third, it removes them from the social context within which they occurred (Agudelo, 1992; Dohash et al., 1992; Skogan, 1981).

The second of Graham and Campbell's (1991) factors that shape a narrow conceptualization of the problem is the treatment of gender. They argue that researchers of women's health overuse gender as a conceptual frame, thus overemphasizing reproductive health and neglecting other important health concerns of women (e.g., cardiovascular disease) and men's roles in such reproductive health issues as family planning, contraception, and infertility. In contrast, the conventional approach to the conceptualization and measurement of battering neglects gender. The prevailing focus on events rather than people encourages a gender-neutral analysis of assaultive events and the erroneous conclusion that the conditions of women's lives are the same as those of men or that any differences are not germane to an understanding of the issues (Browne & Williams, 1993).

The third factor influencing conceptualization, according to Graham and Campbell (1991), is a narrow time interval. The time frame of interest in the conventional conceptualization of battering is the time during which the assault occurs. Thus, battering becomes equated with the time period defined by the beginning and ending of the assault, or set of assaults, be it a minute, an hour, or a day. This sharp bounding of battering in time and space (Skogan, 1981) implies that battering does not exist outside or between these intervals and furthers the expectation that we can analyze acts of assault or aggression outside the social context in which the aggression occurs and separate it from the interpretations applied by those directly affected (Skogan, 1981).

The current conceptual emphasis on episodes of physical assault leads naturally to a proliferation of measurement instruments that focus on the incidence and frequency of discrete events such as hitting, slapping, kicking, and beating (McFarlane, Parker, Soeken, & Bullock, 1992; Shepard & Campbell, 1992; Straus, 1979). Although a few instruments measure psychological abuse, these are not widely used or are used in tandem with measures of physical assault (Hudson & McIntosh, 1981; Shepard & Campbell, 1992). Following from this, outcome indicators, and hence the data sources required, typically reflect fatal and nonfatal injury (Centers for Disease Control and Prevention, 1997; Rosenberg & Finley, 1991). The focus on physical injury, or consequences assessed, as the critical outcome indicator by which changes in incidence are monitored persists despite the burgeoning literature on the traumatic and social effects of battering (Heise et al., 1994; KOSs et al., 1994; World Bank, 1993).

ARGUMENTS FOR AN ALTERNATIVE APPROACH

In the authors' view, the current approaches hamper, constrain, or otherwise distort research and intervention efforts in the field. Regarding events orientation, some researchers have argued that domestic violence may be better characterized as a continuous process than as a series of discrete events (see Table 1) (Avni, 1991; Ferraro & Johnson, 1993; Landenburger, 1989; Skogan, 1981; Smith, Earp et al., 1995). Skogan illustrated this point:

Consider a family in which the father comes home drunk every night, regularly beats his wife and threatens his children, who may in turn be protodelinquents in their own right. Occasionally the family may generate an official statistic, as when the wife defends herself with a kitchen knife, or when the collective noise level reaches such heights that the neighbors call the police. When a crime survey intervlewer enters the scene, a different set of statistics might be generated. Neither recordkeeping system adequately captures the situation; each samples ongoing activities in select slices of time. (pp. 7-8)

The focus on events as opposed to the chronic condition leads researchers, as Agudelo (1992) put it, "to pay attention only to the level of appearances, or force, rather than to that `essential something' that exists underneath force ... [which] is merely the instrument or physical expression of what is really at stake, which is power" (p. 366). Agudelo further reasoned that a power imbalance is a prerequisite for violence and that, in theory, a greater imbalance is accompanied by a greater potential for violence. By remaining at the level of

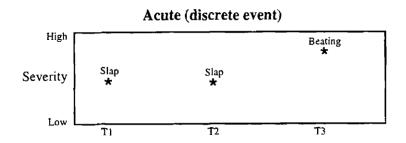
discrete events, researchers choose to ignore power imbalances that predate or follow the use of observable force by men or women in intimate relationships.

This lack of attention to power issues relates to the second factor, neglect of gender, and the trap it creates for researchers. This trap is revealed in the longstanding controversy over the "battered husband syndrome" and debates over women's roles as perpetrators of domestic violence (Dobash et al., 1992; Steinmeitz, 1977-1978; Straus, Gelles, & Steinmeitz, 1980). Because domestic violence assault data indicate a similarity in the frequency with which men and women assault each other (Straus, 1980; Straus et al., 1980; Sorenson & Telles, 1991; Sorenson, Upchurch, & Shen, 1996), gender-neutral analyses indicate that the violence is "mutual," that men and women have an equal tendency toward violence, and that women and men both participate in their own victimization (Dobash et al., 1992; Straus, 1980). This view confuses assocation with causality. It further assumes, as Browne and Williams (1993) articulated, that the conditions of women's lives are either similar to those of men's or are irrelevant to how each uses violence, implying that preexisting power imbalances and structural inequalities are not relevant to the analysis of the use of force.

If conditions of gender discrimination and power imbalances do shape the use of force, however, then gender colors the social meaning of assaults by women and men, just as social meanings are known to differentiate many objectively similar events. As Skogan (1981) illustrated,

When civilians kill policemen it is a crime but when policemen kill civilians it is not; parents who strike their children "discipline" them, while children who strike their parents are committing a crime (in common sense terms) only if they are grown up. Teachers, on the other hand, cannot strike anyone—but a decade ago many kept paddles on their desks. (p. 9)

Some feminist researchers respond to explanations of "mutual combat" by arguing that researchers should view battered women's aggressive behavior within a victim-precipitation framework wherein women's violence is viewed as defensive in nature (Koss et al., 1994; Saunders & Browne, 1991). This perspective, however, is inadequate because it continues to analyze battering within an events-specific conceptualization in which the use of force remains isolated from social context. This approach



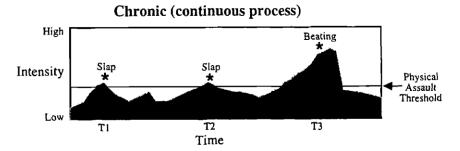


FIGURE 1. Two epidemiological views of battering.

still fails to capture the conditions, or issues of power, that give rise to the events, regardless of precipitation.

The third factor, a narrow time interval, also helps explain why the victim- precipitation framework fails to capture the social context. Once the connection between force and the underlying continuous experience of power imbalance has been severed, the only context one act of force has is another act of force. Hence, the defensiveness or offensiveness of one act of force is judged solely on its proximity to another act; those that occur in the absence of another act of force are assumed to be offensive, whereas thOSe that follow are assumed to be defensive. Relating two distinct events whose association may be spurious or linked only by their relationship to a third unidentified factor violates one of the principle conditions of causality, that is, the elimination of rival causes—in this case, the underlying continuous condition of a gender power imbalance and inequality.

Taken together, the focus on discrete events, the exclusion of gender, and the use of a narrow time interval traps us into an acute epidemiological view of battering that makes for a weak conceptualization of the phenomenon (Figure 1). This conceptualization, in turn, affects, and is reinforced by, measurement techniques, outcome indicators, and data sources.

The means we use to generate or measure a phenomenon greatly affect our understanding of that phenomenon (DeVellis, Alfieri, & Ahluwalia, 1995). Researchers of battering who use conventional measurement instruments identify only the injurious events, an approach that fails to capture the chronicity of women's experience with battering. Consequently, the more we use discrete-event, assault- based measurement instruments to research domestic violence, the more convinced we become, from the body of knowledge available, that the narrow conceptualization is correct and independent (DeVellis et al., 1995).

The focus on injurious outcomes shapes even the framework some have used to provide a gendered analysis of domestic violence data. As Sorensen and colleagues (1996) write, "The validity and significance of gender symmetry in spousal violence are subjects of heated debate, yet parties on each side acknowledge that equal rates of perpetration, regardless of motivation, may not translate into equal rates of injury" (p. 35). This perspective suggests that the problem with the gender-neutral analysis is that it equates unarmed men's and women's potentials to harm and that a gendered analysis is found in the focus on outcomes (Koss et al., 1994; Sorenson et al., 1996). The reliance on discrete injurious outcomes as the frame for a gendered analysis, however, fails to capture the full range of empirically documented outcomes and how those differ by gender. It also fails to capture the gendered nature of the social context that gives rise to men's and women's use of assault.

UNTRAPPING MEASUREMENT

Grounding Conceptualization in Women's Experiences

The lesson of the measurement trap is that the development of a broader conceptual base is a prerequisite to good measurement. One approach to broadening the conceptualization of battering is to define it in the context of women's lives and to focus on battered women's experiences rather than on the discrete events of male behavior (Skogan, 1981; Smith, Earp et al., 1995; Smith, Tessaro et al., 1995). This continuous-process approach provides a way to incorporate into our measurement the meanings people attach to the events and the social context of the events (Skogan, 1981). Also, this approach opens up the time interval to reflect the victimization experience rather than the timing and duration of specific events, recognizing that the conditions of a battering relationship exist outside and between episodes of physical assault. This approach requires that the link between conceptualization and measurement be seamless and that the integrity of women's experiences be maintained from data collection through qualification.

In our own work on reconceptualizing battering according to battered women's experiences, we began by holding six focus groups in which battered women described their own experiences with abuse and what life was like for them. Because this first part of the study concerned understanding how battered women see their own world, the data were collected and initially analyzed from the perspective of empirical phenomenology (Fischer & Wertz, 1979; Smith, Tessaro et al., 1995). Two questions raised by Loeske (1992) in her research on the social construction of battering influenced this stage of the analysis: (a) what must be subjectively

apprehended about an individual experience in order to classify it as one of battering; and (b) what must be subjectively apprehended about an individual woman in order to classify her as battered?

The coding process began with reading the 400 pages of transcribed data while simultaneously listening to the audiotapes of the focus groups in order to check the accuracy of the transcripts and make notes on the hard copy about the feelings expressed by the participants that could potentially be lost during transcription. The data were demarcated into units distinguishable as particular moments in the overall experience, resulting initially in 150 categories. Next, the experiences were revised by combining, separating, and recombining the categories into larger organizational clusters, with multiple different schema organizing the data.

The final organizing schema consisted of six domains representing the multidimensional nature of women's experiences with battering: perceived threat, managing, altered identity, yearning, entrapment, and disempowerment. These domains are interrelated and can be interpreted as a clustering of experiences around a common theme. Taken together, these six domains comprise a framework we called the Women's Experiences with Battering (WEB) Framework (Smith et al., 1995). The WEB framework, by focusing on women's experiences, supplements knowledge of battering that has heretofore been shaped largely by its behavioral feature of physical assault.

The first domain, called perceived threat, reflects women's emotional (fear) and cognitive (danger) reactions to their environment. It reflects women's subjective perception of: susceptibility to future harm; the severity, distribution, and controllability of the risk; the controllability of their emotions in response to the event; and feelings of dread invoked by the risk. This domain combines the two concepts of perceived risk (susceptibility) and perceived severity integral to many social psychological theories, including the health belief model (Becker, 1974), theory of unique invulnerability (Perloff, 1983), protection motivation theory (Rogers, 1975), and the cognitive theory of stress and coping (Lazarus, 1966). The following words by a focus-group participant illustrate the domain of perceived threat:

But each day I lived in fear. I was afraid he was gonna come in while I was taking. I would wait to take a shower. I would hurry up and wash up. I mean, I know I wasn't getting clean enough, under my arms, between my legs but that was it, because I had to make it a minute and a half, whatever you could do in that time because I was afraid he was gonna come in and just, you know, go off.

"Managing" follows from women's assessments of the danger of their situations. Once these women perceive their environment as stressful and assess the extent of the environment's harm or loss, threat or challenge, they take some form of direct action, inhibition of action, or intrapsychic coping behavior. This domain reflects Lazarus' (1966) cognitive theory of stress and coping and the concept of unique invulnerability, as well as women's outcome and efficacy expectations for their behavior. To avoid violence, women engage in behavior they think will be acceptable to their partners, trying to keep peace in the family and avoid giving men cause to be angry. The women's efforts fail to stop the violence, however, because it is the men who control the violence. Consequently, women in these situations spend an increasing amount of energy and take on increasing responsibility for suppressing the violent behavior. The following quotation reflects this experience:

There was no way to tell [what was going to happen] because most of our arguments were not about anything serious ... it was like you got the wrong kind bread" or "I don't like that kinda candy bar." "Oh, you got the wrong beer!" And then I'd get beat for that and all night long, so I got to the point when I would go to the grocery store, if I wasn't sure about what to get him I would call home, "Now what kinda coffee was that you wanted?" Or, especially if they didn't have what he asked for, and you had to pick something else. I was like this—my hands are still shaking.

The third domain, "altered identity," rellects battered women's changing self-concept and loss of identity that follow from the images batterers reflect back to them, or demand of them, and which generally become increasingly negative over time. This aspect of battered women's experience illustrates Cooley's concept of the "looking glass self' (Mead, 1934).

It was always something for him, because when he was happy I was happy. I knew I could breathe that night. But it was never do what I wanted to do.. .. I was always pleasing him to make me happy. And that's what I worked on, pleasing him. If he said I was a bitch, honey, I believed I was a bitch.

Woman 1: Just took away your identity. Who you are and what you want to be. Woman 2: Yeah, absolutely. I had no, when I left he would say "So how do you feel about this?" What do you mean, how do I feel about this?

Woman 3: Of course. What are feelings? You gave up feelings.

Woman 2: Yeah, what kind of question is that? I don't feel. I just react. Woman 1: You just react. I didn't even know who I was, you know?

"Yearning," the fourth domain, represents some battered women's largely futile efforts to establish intimacy with their partners. These women's efforts are not unlike those of women in nonabusive relationships, but battered women's efforts take on an aura of desperation as they persevere in spite of their partners' lack of reciprocity and violent behavior. This yearning for closeness and love is not necessarily fulfilled by sexual intimacy and, in fact, yearning can coexist with sexual intimacy. The words in brackets represent a different speaker.

That's what we as women do, we don't love ourselves. [We don't know how.] We don't think we deserve to be loved. You know, any morsel they give us. You know, they can kick the shit out of us and verbally abuse us. [Umhum ... I can take it] .. and then they'll give us a crumb.... I remember one time I went to this party and this guy was being friendly to me, and my husband got jealous, and I ... I was, that made me feel good, I mean he showed he cared that ... [yeah, something] . he was jealous! I mean, any morsel, I would just grab it.

"Entrapment" represents women's perceptions of being trapped in the relationship, which seems to result from the batterers' efforts to keep women in the relationship, the privacy of the violence, and the belief that no help or support is available.

Mine was fear and misery cause everyday he'd put fear in me cause he'd always threaten me saying that if I decided to ever leave that he'd hunt me down like a dog and shoot me and the girls. And lie knew I had nowhere to go, so I just had to stay there and put up with it.

The sixth domain, "disempowerment," addresses the loss of power that occurs with the woman's sustained exposure to violence and abuse as her thoughts and behaviors become habitually modified in accordance with the batterer's desires. The concept of disempowerment is identified in Finkelhor and Browne's (1985) framework conceptualizing four traumatic ramifications of child sexual abuse. Although they use the word "powerlessness," they conceptualize the construct as disempowerment, or the "process in which the child's will, desires, and sense of efficacy are continually contravened" (p. 532). In the case of battered women the word "disempowerment" is preferred to "powerlessness" because disempowerment implies a process, whereas powerlessness implies a state of being. Although women may enter battering relationships in different degrees of powerfulness, this domain implies that battering itself may begin, or continue, a process of declining personal power. As in the case of sexually abused children, many different aspects of the battered woman's experience, highlighted in the WEB framework, contribute to her disempowerment: feeling trapped and afraid, being afraid to disclose the violence, feeling responsible for the violence, and feeling worthless. The following women's words illustrate this domain (the words in brackets represent a different speaker):

Woman 1: Mine, he programmed me over a long, long, period of time, cause I saw him going through a divorce with his first wife, and I can look hack now saying that was the beginning of his programming "If you do this, I'll kill you"... [Right] ... And it was a constant thing, but you don't, at first you don't know what it is. I mean, you are taking their words, but the words ... [They don't mean anything] ... still he starts connecting the violence with it ... [He starts connecting the violence with it.] ... The violence gets, the violence gets really bad, and then you say, I mean, when I looked down the end of the gun barrel, um ... [Yeah, I did that] . I knew at that point that he could kill me.

Woman 2: Yeah.... Because he has a part you don't want to believe that he will do it. But you know he can do it.

Woman 1: He can do it. Because he's already told you a 150 times.... [That he will.] That, that he will, and so then when you ... [I know.] when he does that and he doesn't kill you, but you know he can.... [That's right] You know he will. And it's like a long process.

Our research revealed battering to be an enduring, traumatic, and multidimensional experience conceptually distinct from episodic physical assault (Smith, Tessaro et al., 1995). We found that battering in women's lives continuously shapes their behavior, views of self, and beliefs in the controllability of their own lives. We also found that battered women are actively engaged in this experience; they want to improve their situation and, as the managing domain in particular indicates, they are continuously engaged in both intrapsychic and active coping. Many of these efforts focus inward, however, and over time may enhance their feelings of personal responsibility for the violence. Based on this, we derived the following definition of battering: A process whereby one member of an intimate relationship experiences vulnerability, loss of power and control, and entrapment as a consequence of the other member's exercise of power through the patterned use of physical, sexual, psychological, and/or moral force.

The WEB framework is not, however, intended to reflect all possible behaviors or reactions that battered women have or that result from exposure to their partners' psychologically and physically violent and controlling behaviors. Because of its focus on the cognitive and affective experience of battering, it does not address battered women's coping and help seeking that are outwardly focused; it does not, for example, explicitly include anger or attempts at escape and resistance. The process of data collection and analysis was designed to derive battered women's perspectives on what it meant to them to be battered, rather than to explore the full range of their feelings or coping strategies. As such, the WEB framework works largely at the psychological or intrapsychic level: It represents the meanings that battered women give to the experiences and circumstances of their lives. Furthermore, calling for reconnecting the relationship between force and the underlying condition of power imbalance and inequity should not be perceived as an attempt to justify all violence used by women. Both women and men may engage, at times, in violence that is morally or legally justified by its social context and violence that is not.

Experiential Basis for Measurement

Women's experiences with battering point to a reconceptualization of battering as a chronic phenomenon, hence, a chronic epidemiology (see Figure 1). In this view, assaults are not isolated events but outcroppings from an underlying condition of continuous abuse and psychological vulnerability that occasionally break through a physical-assault threshold. Consequently, the time interval needed to define battering and within which assaults are analyzed is linked to the battered victim's exposure to, and the batterers' involvement in, the victimization. A gendered perspective seeks to evaluate the condition of women's and men's lives as they are played out in the victimization process and analyze their behavior within the framework of a chronic exposure.

This chronic epidemiology perspective has implications for measurement techniques, selection of outcome indicators, and data sources. Although some research may require techniques that measure the frequency and severity of physical assault, other research may need to discriminate battered (as opposed to assaulted) from nonbattered individuals and reflect the continuous and gendered nature of the battering experience. Consequently, we wanted to build on the conceptualization provided by the WEB framework to develop a measurement instrument that quantified the experience of battered women. This research, described elsewhere (Smith, Earp et al., 1995), required us to take a continuous-process approach to measurement, that is, to operationalize the enduring condition of battering rather than discrete events.

The first step in measurement is to define the construct of interest. Nunnally (1978) referred to the process of construct explication or the process of making an abstract word explicit in terms of observable variables. In our research, the construct of battering was composed in terms of psychological vulnerability (Smith, Earp et al., 1995). This construct is theoretically derived and was defined as women's continuous perceptions of susceptibility to physical and psychological danger, loss of power and loss of control in a relationship with a male partner. To return to

Table 2

An Illustration of the Analytic Process Generating Items Operationalizing Psychological Vulnerability: Scale Item, Original Text, and Supporting Text

Scale item

He has a look that goes straight through me and terrifies me.

Original text

And I saw the fire. And I saw the red-eye. I saw the look, um, and um, and um, he turned around and pushed me. I don't remember the push like I remember the look. [Oh, I know just what you are saying.] And after, and after when he, after that point, all he would have to do was give me the look. The words, the words would not hurt to the point that the look can. And at that point, I don't think that I really didn't understand that. It was the night before, the night before he left, um, I left, I mean, I left in a panic, I—I left in, um another fear. But I didn't realize until a week later why I was so scared. The look. I mean, I knew the look, my soul knew the look. I mean, I couldn't paint it for you, it's not something you can see, it is something that goes straight through you.

Supporting text

- Well, I think if he could have gotten his hand on that gun, I would not be here today
 I had never seen him that angry in my whole life. And, I, I could just see, I
 mean, the fire of hell burning in his eyes, when he was lookin' at me "You just die
 bitch."
- Well, the look in my case, I called it when he got red in his eyes. He would get this look, he has brown, no he has blue eyes, I don't even remember. But he would get this look. His jaw would set and his eyes would just get this stare, but he would see red, and when he would see red, then things would go flying or there would be definite physical violence.

the language of the measurement trap, this approach discards an orientation toward events and adopts an orientation toward the victimization. In addition, it opens up the time interval under consideration so that the interpretative frame is the individual's subjective interpretation of her situation.

We began explicating the construct of psychological vulnerability by returning to the focus-group data, examining the transcripts for fragments or clusters of text that reflected the cognitive, affective, and/or behavioral expressions of susceptibility to physical and psychological danger, loss of power, and loss of control in their relationships. These pieces of text were then developed into items retaining the women's exact words or the meaning of the words. Table 2 provides an illustration of the data-analysis process, from uncoded text to item development.

We initially developed 153 items and reduced these to a set of 40, representing all six of the domains in the WEB framework. Through a combination of expert review and known-groups survey method, we determined a final set of 10 items comprising the Women's Experience with Battering Scale (see Table 3) and determined the Scale's reliability and validity.

The WEB Scale exhibited high internal eonsistency reliability (a = .99) and correlated highly with known-group status and other constructs used in testing the Scale's convergent and discriminant validity (Smith, Earp et al., 1995). The WEB Scale, for example, was significantly correlated in the expected directions with physical assault, psychological abuse, self-esteem, beliefs in a just world, depression,

Table 3

Women's Experience with Battering (WEB) Scale Items

- 1. He makes me feel unsafe even in my own home.
- 2. I feel ashamed of the things he does to me.
- 3. I try not to rock the boat because I am afraid of what he might do.
- 4. I feel like I am programmed to react a certain way to him.
- 5. I feel like he keeps me prisoner.
- 6. He makes me feel like I have no control over my life, no power, no protection.
- 7. I hide the truth from others because I am afraid not to.
- 8. I feel owned and controlled by him.
- 9. He can scare me without laying a hand on me.
- 10. He has a look that goes straight through me and terrifies me.

anxiety, marital satisfaction, locus of control, injury, perceived health status, chronic pain, physician visits, and hospital visits. The WEB Scale is scored using a 6-point Likert-type scale ranging from agree strongly to disagree strongly.

The Scale's 10 items represent five of the six WEB framework domains. They do not represent the domain of yearning because the results indicated that although the ideas represented by this domain are part of the battering experience for many battered women, they are not unique to battered women. For this reason, these items were less useful than items representing other domains for distinguishing battered from nonbattered women.

This shifting of the focus away from events and toward people has implications for outcomes and data sources. The WEB Scale, as a measure of the magnitude of the problem, is a measure of prevalence, not incidence (Skogan, 1981). Additionally, battering involves a complex exposure that places women in prolonged stress because of physical, psychological, and/or sexual abuse. This abuse, coupled with women's attempts to manage the stress and violence, has been shown to result in many different health and behavior outcomes. Hence, indicators need to reflect this range of outcomes, which might include not only injury but chronic pain, substance abuse, recurrent gynecological disorders, increased health care use, delayed prenatal care, reduced control over fertility, and reduced participation in economic development projects or other events of community life.

This variability in outcomes indicates the need to use multiple sources of data that broaden our ability to understand battering in its complexity and that give voice to women's perspectives. This includes the need for monitoring and evaluation systems that are qualitative as well as quantitative, that are developed and monitored by the battered women's movement as well as by social services and researchers, and that are derived from the sociocultural experiences of battered women.

DISCUSSION

Feminist research often calls for an increasing use of nonquantitative research methods (Fonow & Cook, 1991). This article supports this view by demonstrating one way of using both qualitative methods and a feminist perspective to inform quantitative methods. A critical feminist concept that informed our research process was that battered women are the experts of their own lives: They provided the only data source for our conceptualization of battering and the WEB Scale items. Battered women also acted as expert reviewers of the survey instrument and potential scale items and as respondents for the known-groups survey. Additionally, although the battered women did not perform the data analysis, the techniques we selected for analysis called for us to remain as true as possible to the battered women's own experiences and words. Our research methods were not new or radical or inherently feminist. Rather they can be considered classic scale-development methods (DeVellis, 1991; Nunnally, 1978). We believe that grounding these methods in women's experiences accounted for the strong preliminary findings on the WEB Scale's validity, however.

Good conceptualization and measurement are essential to good research. It is impossible to investigate the prevalence of battering, its health or social costs, or the effectiveness of interventions designed to reduce battering if the condition is incorrectly understood and its measures are invalid, impractical, or unreliable. Additionally, often a measurement instrument or approach becomes difficult to replace once it becomes established (DeVellis et al., 1995). For this reason, feminist scholars must continue developing, validating, and critiquing quantitative measures of social phenomena and, equally important, deconstructing the conceptual basis for the measures. As Graham and Campbell (1991) argued, and as our work suggests, measurement instruments derived from weak conceptual frameworks can hamper women's health research by distorting the knowledge base from which our policies and interventions are derived.

Future research will indicate whether, and in what ways, research using the WEB Scale yields findings different from those of other research. Given the WEB Scale's stronger correlation with known-group status than either the Conflict Tactics Scale or the Index of Spouse Abuse (Smith, Earp et al., 1995), we anticipate that the WEB Scale will produce less misclassification of study participants and, thus, more accurate findings. Second, as is the case with other types of serial incidents, it may be difficult for victims of domestic abuse to disentangle them for a survey (e.g., disentangle a push from a hit) and remember the specific months in which they occurred. Consequently, data on discrete events do not always accurately assess frequency (Skogan, 1981). Because the WEB Scale does not require respondents to recall all violent events they encountered or the number of times during each "episode" they were actually pushed, hit, kicked, and so on, use of this scale could reduce respondent burden and make collecting retrospective data more reliable.

The WEB Scale, potentially, can also make it easier to study the relationship between battering and some women's health problems and behaviors. The WEB Scale is a continuous variable that may allow us to examine associations between battering and other continuous measures of health (e.g., depression, anxiety, self- esteem) more clearly. Additionally, the WEB Scale may make studying the relationship between battering and pregnancy more accurate. Research investigating whether pregnancy is a high-risk time for abuse suffers from methodological problems (Gazmararian et al., 1996) including, but not limited to, the difficulty of determining when battering starts and ends. Although incidence-based measures, such as the Conflict Tactics Scale, may provide researchers with an accurate timing of assaultive episodes in relationship to pregnancy, they ignore the fact that the exposure of interest is chronic and prevalent in some women's lives independent of the occurrence of assault, making it difficult to determine precisely whether a woman is battered prior to pregnancy. Researchers interested in studying these relationships might want to investigate both the prevalence of battering in women's lives as well as the timing and incidence of assaults in battered and nonbattered women. This approach could reduce the misclassification of women as battered or not prior to pregnancy, indicate the intensity of women's perceptions of their vulnerability and whether it changes during pregnancy, and provide information on the frequency and severity of assaults battered women are exposed to before, during, and after pregnancy.

The WEB Scale could also prove useful in evaluating the effectiveness ofintervention programs. For example, evaluations of batterer treatment programs suffer from poorly conceptualized and measured outcome indicators. The literature indicates that measuring change in men's use of assaultive behaviors insufficiently determines whether men in treatment have reduced their battering behaviors. Gondolf (1987) wrote that "the acts in themselves may not be as significant as the constellation of behaviors that create a subjective state of terror for the woman. Even when a battered woman is not hit, the possibility of being hit sustains a high degree of fear and uncertainty" (p. 103). He concurred with Edelson (1985) that battered women's experience of terror must inform the definition of battering. The WEB Scale could be used, alone or in combination with other measures of physical assault and psychological abuse, to investigate from the women's perspective whether their experience of psychological vulnerability differs after their partners complete batterer treatment programs. In sum, as an instrument explicitly situated in the lives of battered women, the WEB Scale ideally could provide a starting point for the development of knowledge that validates and reflects battered women's actual experiences of life.

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