

# University of Kentucky UKnowledge

**CRVAW Faculty Journal Articles** 

Center for Research on Violence Against Women

2001

# Assessment of Clinical Partner Violence Screening Tools

Ann L. Coker
University of South Carolina, ann.coker@uky.edu

Brian O. Pope

Paige H. Smith
University of North Carolina at Greensboro, phsmith@uncg.edu

Maureen Sanderson

Meharry Medical College, msanderson@mmc.edu

James R. Hussey *University of South Carolina*, jhussey@mailbox.sc.edu

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Follow this and additional works at: https://uknowledge.uky.edu/crvaw\_facpub

Part of the Mental and Social Health Commons, <u>Psychiatry and Psychology Commons</u>, <u>Public</u> Health Commons, and the Social Work Commons

#### Repository Citation

Coker, Ann L.; Pope, Brian O.; Smith, Paige H.; Sanderson, Maureen; and Hussey, James R., "Assessment of Clinical Partner Violence Screening Tools" (2001). CRVAW Faculty Journal Articles. 96. https://uknowledge.uky.edu/crvaw\_facpub/96

This Article is brought to you for free and open access by the Center for Research on Violence Against Women at UKnowledge. It has been accepted for inclusion in CRVAW Faculty Journal Articles by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

## Assessment of Clinical Partner Violence Screening Tools

ī	Jotes	/Citatio	n Infor	mation

Published in *Journal of the American Medical Women's Association*, v. 56, no. 1, p. 19-23.

 $Dr.\ Ann\ Coker\ had\ not\ been\ a\ faculty\ member\ of\ the\ University\ of\ Kentucky\ at\ the\ time\ of\ publication.$ 

# **Assessment of Clinical Partner Violence Screening Tools**<sup>1</sup>

By: ANN L. COKER, PHD, BRIAN O. POPE, MPH, PAIGE H. SMITH, PHD, MAUREEN SANDERSON, PHD, and JAMES R. HUSSEY, PHD

Coker, A.L., Pope, B.O., <u>Smith, P.H.</u> and Hussey, J.R. (2001). Assessment of clinical partner violence screening tools. Journal of the American Medical Women's Association. Winter: 19-23.

Made available courtesy of American Medical Women's Association: <a href="http://cpmcnet.columbia.edu/dept/sph/popfam/jamwa/">http://cpmcnet.columbia.edu/dept/sph/popfam/jamwa/</a>

\*\*\*Note: Figures may be missing from this format of the document

#### **Abstract:**

Objective: to compare the Women's Experience with Battering Scale (WEB) with the Index of Spouse Abuse-Physical Scale (ISA-P) as screening tools to identify intimate partner violence (IPV).

Methods: We conducted a large cross-sectional survey of women age 18 to 65 attending one of two family practice clinics from 1997 to 1998. All women completed both the WEB and the ISA-P and a telephone interview. We figured agreement estimates between the two tools, used stratified analyses to evaluate attributes of those more likely to screen as battered or physically assaulted, and compared associations between the WEB and ISA-P and a range of mental and physical health indicators known to be associated with IPV.

Results: 18% of 1152 eligible women surveyed had experienced IPV in a current or most recent intimate relationship with a male partner; 17% had been battered (WEB+), and 10% had been physically assaulted (ISA-P+). Had we used the ISA-P alone to assess IPV, we would have missed almost 45% of IPV. As anticipated, the ISA-P was more strongly associated with IPV-associated injuries and number of physician visits in the last year. The WEB was more strongly associated with self-perceived mental health, anxiety, depression, drug abuse, and low social support.

Conclusion: Clinicians need validated screening tools to rapidly and reliably screen patients for IPV. Most screening tools assess physical violence and injury without considering the more chronic experience of battering and the psychological terror associated with this violence. The WEB may identify more abused women than tools measuring physical assaults.

### **Article:**

Intimate partner violence (IPV) is a leading cause of injury among American women (nearly one million incidents annually) and has been thought to affect as many as 25% of American families. Women who experience IPV are more likely to report their physical and mental health as fair to poor <sup>2-7</sup> and to have more physician visits <sup>8-10</sup>; irritable bowel syndrome and frequent dyspepsia <sup>11-14</sup>; chronic pain <sup>4,13-14</sup>; migraine and other frequent headaches <sup>14-16</sup>; sexually transmitted infections; pelvic inflammatory disease; chronic pelvic pain; and bladder, kidney, or other urinary tract infections <sup>14,17-21</sup> than women who do not experience IPV.

The Conflict Tactics Scale, <sup>22</sup> the Index of Spouse Abuse ,23 the Severity of Violence Against Women Scale, <sup>24</sup> HITS, <sup>25</sup> and the Woman Abuse Screening Tool <sup>26</sup> are several scales used to identify women in abusive relationships. They assess violence based on the frequency and severity of physical attacks, and although they have subscales to assess threats of violence or psychological abuse, these are rarely used. Only one tool, the Women's Experience with Battering Scale, <sup>27-28</sup> assesses battering, which is distinguished from episodic physical assaults by its continuous, chronic nature and by such other forms of abusive behavior as threatening and humiliating, forcing and withholding sexual activity, and isolating women and restricting their access to other people and important resources. We define battering here as the process through which one member of an

<sup>&</sup>lt;sup>1</sup>This research was funded by a grant (R49 CCR412752) from the Centers for Disease Control and Prevention National Center for Injury Prevention and Control and the Disabilities Prevention Program of the National Center for Environmental Health.

intimate relationship experiences a loss of power and control due to the other member's patterned use of physical, sexual, and psychological force.<sup>29</sup>

Prior research with both clinical and population-based samples of women <sup>6,30</sup> suggests that battering and physical assaults are both conceptually and empirically distinct. Consequently, it is important to identify the various health consequences of each type of IPV. Physical assault results in such obvious outcomes as broken bones, bruises, and head and facial injuries. However, the nonphysical forms of abuse battered women experience, and the coercive, disempowering relationships within which they live are likely to be associated with a range of health problems. <sup>6,14</sup>

The purpose of this study was to compare two screening tools used to identify IPV: the Index of Spouse Abuse-Physical (ISA-P), which measures physical abuse, and the Women's Experience with Battering Scale<sup>29,30</sup> (WEB), which measures battering, to determine whether one measure was more sensitive or more strongly associated with the range of adverse mental and physical health outcomes known to be linked with IPV.

#### **Methods**

*Sample.* In this cross-sectional study, eligible women seeking medical care in one of two university-associated family practice clinics were recruited and screened for IPV from February 1997 through January 1999. Eligible women were those age 18 to 65 who were insured by a managed care organization or Medicaid and had ever been in an intimate, sexual relationship with a man for at least three months. Interviewers invited women in the clinic waiting room to discuss study participation and obtained their informed consent; for safety reasons, we did not

Table 1. Demographic Characteristics of Women Screened for Physical Assault and Battering (n=1152)

	N (Percent)
Race	
African American	715 (62)
White	437 (38)
Insured by	
Medicaid	254 (22)
Managed care	898 (78)
Education level	
< High school	132 (11)
HS graduate or some college	642 (56)
College graduate	378 (33)
Current employment status	
Unemployed	129 (11)
Student	37 (3)
Employed	986 (86)
Current marital status	
Single	401 (35)
Divorced or separated	244 (21)
Widowed	54 (5)
Married	453 (39)
Substance abuse problem (TWEAK or DAST)	
Yes	134 (12)
No	1018 (88)
Current partner has substance abuse problem	
Yes	251 (22)
No	901 (78)
Physical IPV in past relationship	
Yes	370 (32)
No	782 (68)
Father abusive toward mother	` ,
Yes	349 (30)
No	803 (70)
	` '

Table 2. Number and Percent of Women Who Scored Positive on Either or Both the Women's Experience with Battering (WEB) Scale and the Index of Spouse Abuse-Physical (ISA-P)

	N (Percent)	Percent of Abused (n=206)			
Both WEB and ISA-P	98 (9)	48			
ISA-P, but not WEB	16 (1)	8			
WEB, but not ISA-P	92 (8)	45			
Neither WEB nor ISA-P	946 (82)				

attempt to recruit women whose partners would not leave them alone. Interviewers were female graduate students who had received extensive training in asking these sensitive questions, in active listening, and in providing women with community resources.

Study participation included a 5- to 10-minute in-clinic interview to screen for partner violence using both the ISA-P and the WEB and a 30- to 45-minute telephone interview to assess medical history and current health status. Subjects were reimbursed \$5 for completing the in-clinic interview and \$10 for the longer telephone interview. As a safety measure, women currently in violent relationships were given the option of completing the longer interview in the clinic. We used computer-assisted interviewing for both in-clinic and telephone

interviews to reduce errors and rapidly provide scale scores for IPV measures. We told all women about community services for battered women, and we were more explicit in providing the local shelter hotline number; talking about safety plans; and describing services for women, children, and batterers for women screened as IPV positive.

The University of South Carolina Institutional Review Board approved this project.

*Measures ofIPV*. We used a modified version of the ISA-P,<sup>23</sup> a 25-item scale designed to measure the severity of physical violence inflicted on women by their current or most recent male partners. The Cronbach's alpha coefficient for the reduced 15-item scale was high (a=0.93). We used the recommended weighted scale score and cutpoint.<sup>31</sup>

We used the 10-item WEB <sup>,27,29-30</sup> which measures battering by characterizing women's perception of their vulnerability to physical and psychological danger or loss of power and control in relationships with male partners. Respondents indicated their level of agreement or disagreement using a six-point Likert scale. The WEB has good construct validity, accurately discriminates battered from nonbattered women, and shows strong internal consistency ((x=0.95 in current sample). Although the WEB and ISA-P were designed to be self-administered, we used personal interviewers because of concern with literacy in our population.

The WEB and revised 15-item ISA-P are included as appendices.

We collected the following demographic characteristics: the woman's marital status, age, race/ethnicity, education, and usual occupation; whether she had an alcohol or drug problem; whether her father was either emotionally or physically abusive toward her mother; her current male partner's age, race/ethnicity, and occupation; and her perception of his drinking or drug problems, if any.

*Injuries and Health Assessment.* We assessed current mental and physical health status in the 45-minute follow-up

Table 3. Associations Between WEB and ISA-P Scores and Partner Violence-Associated Injuries, Adverse Mental Health Outcomes, Poor Perceived Health, and Health Care Utilization

Health Indicator	Indicator Pr IPV Statu	revalence by us,* N (%)	Association Between IPV Scale and Health Indicator, Adjusted RR (95% CI)			
(Dependent Variable)	IPV+ (n=206)	IPV- (n=946)	WEB <sup>†</sup>	ISA-P‡		
≥10 MD visits in last year§	87 (42)	237 (25)	1.05 (0.82, 1.37)	1.49 (1.11, 1.96)		
>1 hospitalizations last year§	15 (7)	41 (4)	0.87 (0.41, 1.87)	1.52 (0.63, 3.66)		
Self-reported poor physical health	31 (15)	45 (5)	1.54 (0.91, 2.56)	1.32 (0.70, 2.51)		
Self-reported poor mental health	19 (9)	15 (2)	6.25 (2.72,14.32)	0.85 (0.37, 2.13)		
Speilberger Anxiety Score	54 (26)	61 (6)	3.77 (2.43, 5.81)	1.14 (0.69, 1.85)		
Currently depressed <sup>  </sup>	96 (47)	197 (21)	1.82 (1.39, 2.36)	1.25 (0.93, 1.69)		
Alcohol abuse (TWEAK>1) <sup>¶</sup>	17 (8)	68 (7)	1.05 (0.54, 2.05)	1.27 (0.60, 2.70)		
Drug abuse (DAST>1) <sup>5</sup>	25 (12)	29 (3)	2.38 (1.14, 5.00)	1.32 (0.63, 2.78)		
Low social support <sup>9</sup>	106 (51)	222 (23)	1.73 (1.35, 2.22)	1.27 (0.98, 1.67)		

<sup>\*</sup>IPV+ women scored positive on either the WEB or ISA-P; IPV- women scored negative on both.

<sup>†</sup>WEB included as the dichotomized measure (≥20) with ISA-P in the same model.

<sup>&</sup>lt;sup>‡</sup>ISA included as the dichotomized measure (>2) with WEB in the same model.

<sup>§</sup>Adjust RR for insurance type and recent pregnancy (all 1152 women included in model).

Adjust RR for age and insurance type (all 1152 women included in model).

Adjust RR for insurance type and partner having a substance abuse problem (all 1152 women included in model).

interview. Measures included the Drug Abuse Screening Test<sup>32</sup> ((C=0.76), the TWEAK<sup>33</sup> to measure alcohol abuse ((C=0.71), an injury frequency and severity scale specific to partner violence ((C=0.76), the Speilberger State-Trait Personality Inventory<sup>34</sup> to measure anxiety ((C=0.77), the Center for Epidemiologic Studies Depression Scale<sup>35</sup> to measure depressive symptoms in the past two weeks ((C=0.79), and the Social Support Questionnaire-Short Form<sup>36</sup> ((C=0.89) to measure current social support. *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV)<sup>37</sup> criteria were used to assess symptoms of post-traumatic stress disorder ((C=0.87). We assessed current self- perceived mental and physical health with the following standard question: "Compared to others your own age, do you consider your current mental/ physical health to be excellent, very good, good, fair or poor?" We asked women the number of times they were seen by physicians and the number of times they were hospitalized in the year before recruitment. All health indicators were dichotomized for stratified analysis.

*Statistical Analysis.* All analyses were conducted in SAS version 6.12 .38 We compared women's responses to the WEB and the ISA-P using dichotomous cut-points (WEB > 20 and ISA-P >2).

We used Cohen's kappa statistic to measure correlation between the two dichotomized measures, adjusting for chance agreement and Pearson correlation coefficient for the continuous WEB and ISA-P scales.

We next assessed the association between the WEB and ISA-P and a range of current mental and physical health indicators. We used stratified analyses to provide Mantel-Haenszel adjusted relative risk estimates for each of the ten dichotomized health indicators as the dependent variables, adjusting for the confounders noted in the table. Additionally, because there was overlap between the WEB and ISA-P, and because we wanted to identify which of the two measures was more strongly associated with the health indicator of interest, we included both the WEB and the ISA-P as dichotomous variables in stratified analyses. The referent group was women who scored negative on both the WEB and the ISA-P.

#### **Results**

Forty women had never had intimate relationships with men and were thus ineligible. Of the 1503 eligible women approached for participation, 174 refused (12%), 97 did not complete the health assessment interview (6%), and 80 had missing data on several response variables (5%), leaving 1152 women for this analysis (77%). Refusers (32%) were more likely than respondents (25%) to be Medicaid recipients; we have no additional demographic data to compare refusers and respondents. Women who did not complete the health assessment interview were younger and more likely to have recently experienced IPV than were women who completed the health assessment.

Table 1 presents the demographic characteristics of the study participants. The mean age was 38.1 years (SD±11.2). The majority (62%) of women screened were African American, insured by a managed care provider (78%), and currently employed (86%). Almost one- third (32%) of women had been in physically abusive intimate relationships in the past, and 30% had fathers who were abusive to the respondents' mothers.

Table 2 provides the comparison of ISA-P and WEB scores. Eighty-two percent (946) of the 1152 women did not test positive on either screening tool. The kappa statistic of 60% indicates good agreement between the two measures. The Pearson correlation coefficient for the continuous WEB and ISA-P scales (r=0.67) also indicates good agreement. The mean and standard deviation for continuous IPV scores were 15.4  $\pm$  11.2 (range 10-60) for the WEB and 1.7  $\pm$  6.8 (range 0-84) for the ISA-P.

Table 3 provides a summary of our analyses comparing the dichotomized ISA-P and WEB with a range of self-reported dichotomous health indicators for all 1152 women in the study. Relative risk estimates (RR) and 95% confidence intervals (CI) are presented. Prevalence of each health outcome is presented for those who were currently experiencing IPV (IPV+) and those who had not experienced IPV (IPV-). When controlling for the ISA-P, the WEB score was significantly associated with poor mental health, anxiety, depression, drug abuse, post-traumatic stress disorder (PTSD), and low social support. When controlling for the WEB, the ISA-P score

was associated only with more physician visits. Among women currently experiencing physical IPV only (n=154), the continuous ISA-P score (adjusting for the continuous WEB score) was significantly associated with having an IPV- associated injury requiring medical care (RR=1.06), and the WEB was not (RR=0.99). Among women reporting an event that could lead to PTSD (n=356), the WEB score was associated with higher PTSD symptom scores (RR=2.02), and the ISA-P score was not (RR=0.93).

#### **Discussion**

This is the first study to evaluate how the WEB correlates with the ISA-P in terms of absolute frequency of IPV and health indicators. Our findings indicate that the WEB may have greater clinical and public health relevance because it is more strongly associated with the more prevalent IPV-associated health outcomes and may have longer term health consequences. In short, these data provide support for the WEB Scale as a tool for IPV screening and intervention alone or in combination with other measures of physical assault. Our assessment of a range of health outcomes associated with IPV is important from a clinical and public health perspective. Although injuries are frequently a result of IPV, IPV also has a negative impact on women's physical and mental health. Screening for battering using the WEB and intervening early could reduce the health impact of this violence.

As do most studies, this one had limitations. Because our sample included insured women, we cannot generalize to uninsured women. As is true for all cross-sectional studies, we cannot establish that IPV preceded the health outcome. Because we were measuring current physical and mental health outcomes not routinely collected from all patients, we could not rely on medical records to provide validation of health outcomes. Because we did not have chart audit data for all women in the study and the agreement between our chart audit for 238 women and their recall of number of clinic visits in the last year was good (r=0.69), we opted to use the self-report data.

Study strengths included the relatively large (n=1152) sample size, which provided us with sufficient power to address the question. We controlled for potential confounding by including the identified covariates in all stratified analyses.

We conclude that the WEB Scale may identify more women experiencing both physical and psychological battering. Further, the WEB is more strongly associated with the wide range of health outcomes associated with IPV. From a practical standpoint, the 10-item, self- administered WEB can be completed much more rapidly than the 25-item ISA-P or the longer Conflict Tactics Scale without any loss of effectiveness. Clinicians in busy primary care settings can provide the WEB to women in the private examination room, and it can be scored by clinic staff to provide a rapid assessment of battering. Alternatively, the clinic assistant could administer the WEB, calculate the score, and provide it to the clinician for follow-up and referral. We recommend that all women be screened annually for battering independent of any clinical indicators. Clinicians must talk with each woman who screens positive and offer resources. Expressing concern for her safety and well-being is an important intervention and may help her seek services to address IPV.

#### References

- 1. Novello AC, Rosenberg M, Saltzman L, Shosky J. From the Surgeon General, U.S. Public Health Service. *JAMA*. 1992;267:3132.
- 2. Roberts GL, Lawrence JM, Williams GM, et al. The impact of domestic violence on women's mental health. *Aust N Z J Public Health*. 1998; 22:796-801.
- 3. Plitcha S. The effects of woman abuse on health care utilization and health status: A literature review. *Womens Health Issues*. 1992;2:154-163.
- 4. Campbell JC, Lewandowski LA. Mental and physical health effects of intimate partner violence on women and children. *Psychiatr Clin North Am.* 1997;20:353-374.
- 5. Wagner PJ, Mongan PF. Validating the concept of abuse: Women's perceptions of defining behaviors and the effects of emotional abuse on health indicators. *Arch Fam Med.* 1998:7:25-29.

- 6. Smith PH, Edwards G. Battering among reproductive age women: Prevalence and health implications. Paper presented at the Fourth Annual Family Violence Conference, Durham, New Hampshire, July 2, 1997.
- 7. Mullen PE, Romans-Clarkson SE, Walton VA, Herbison GP. Impact of sexual and physical abuse on women's mental health. *Lancet*. 1988; 1:841-845.
- 8. Abbott J, Johnson R, Koziol-McLain J, et al. Domestic violence against women: Incidence and prevalence in an emergency department population. *JAMA*. 1995;273:1763-1767.
- 9. Koss MP, Heslet L. Somatic consequences of violence against women. *Arch Fam Med.* 1992; 1:53-59. 10.Jaffe P, Wolfe D, Wilson S, Zak L. Emotional and physical health problems of battered women. *Can J Psychiatry.* 1986;31:625-629.
- 11. Drossman DA, Lesser J, Nachman G, et al. Sexual and physical abuse in women with function or organic gastrointestinal disorders. *Ann Intern Med.* 1990;113:828-833.
- 12. Talley NJ, Fett SL, Zinsmeister AR, Melton LJ. Gastrointestinal tract symptoms and self-reported abuse: A population-based study. *Gastroenterology*. 1994;107:1040-1049.
- 13. Hogston P. Irritable bowel syndrome as a cause of pelvic pain in women attending a gynecologic clinic. *BMJ*. 1987;294:934-935.
- 14. Coker AL, Smith PH, Bethea L, King MR, McKeown RE. Physical health consequences of physical and psychological intimate partner violence. *Arch Fam Med.* 2000;9:451-457.
- 15. Koss M, Koss PG, Woodruff WJ. Deleterious effects of criminal victimization on women's health and medical utilization. *Arch Intern Med.* 1991;151:342-347.
- 16. Domino JV, Haber JD. Prior physical and sexual abuse in women with chronic headache: Clinical correlates. *Headache*. 1987;27:310-314.
- 17. Chapman JD. A longitudinal study of sexuality and gynecologic health in abused women. *J Am Osteopath Assoc.* 1989;89:619-624.
- 18. Bergman B, Brismar B. A 5-year follow-up study of 117 battered women. *Am J Public Health*. 1991;81:1486-1488.
- 19. Campbell JC, Alford P. The dark consequences of marital rape. *Am J Nurs*. 1989;89:946-949.
- 20. Schei B. Physically abusive spouse A risk factor for pelvic inflammatory disease. *Scand J Prim Health Care*. 1991;9:41-45.
- 21. Rapkin AJ, Kames LD, Darke LL, et al. History
- of physical and sexual abuse in women with
- chronic pelvic pain. Obstet Gynecol. 1990;76: 92-96.
- 22. Straus MA, Hamby SL, Boney-McCoy S, et al. The revised Conflict Tactics Scale (CTS2): Development & preliminary psychometric data. *Journal of Family Issues*. 1996;17:283-316.
- 23. Hudson WW. Partner Abuse Scale Physical. Tempe, Ariz: Walmyr Publishing; 1991.
- 24. Marshall LL. Development of the severity of violence against women scales. *Journal of Family Violence*. 1992;7:103-121.
- 25. Sherin KM, Sinacore JM, Li XQ, Zitter RE, Shakil A. HITS: A short domestic violence screening tool for use in a family practice setting. *Fam Med.* 1998;30:508-512.
- 26. Brown JB, Lent B, Brett PJ, Sas G, Pederson LL. Development of the Woman Abuse Screening Tool for use in family practice. *Fam Med.* 1996; 28:422-428.
- 27. Smith PH, Smith JB, Earp JA. Beyond the measurement trap: A reconstructed conceptualization and measurement of woman battering. *Psychology of Women Quarterly*. 1998;23:177-193.
- 28. Smith PH, Earp JA, DeVellis R. Development and validation of the Women's Experience with Battering (WEB) Scale. *Womens Health.* 1995; 1:273-288.
- 29. Smith PH, Tessaro I, Earp JA. Women's experience with battering: A conceptualization from qualitative research. *Womens Health Issues.* 1995; 5:173-182.
- 30. Coker AL, Smith PH, McKeown RE, et al. Frequency and correlates of intimate partner violence by type: Physical, sexual, and psychological battering. *Am J Public Health*. 2000;90: 553-559.
- 31.Attala JM, Hudson WW, McSweeney M. A partial validation of two short-form partner abuse scales. *Women Health.* 1994;21:125-139.
- 32. Skinner HA. Statistical approaches to the classification of alcohol and drug addiction. *Br J Addict*. 1982;77:259-273.

- 33.Russell M, Bigler L. Screening for alcohol-related problems in an outpatient obstetric-gynecologic clinic. *Am J Obstet Gynecol.* 1979;134:4-12.
- 34. Speilberger CD. *Manual for the State-Trait Anxiety Inventory*. Rev ed. Palo Alto, Calif: Consulting Psychologists Press; 1983.
- 35.Radloff LS. The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977;1:385-401.
- 36.Sarason BR, Shearin EN, Pierce GR, et al. Interrelations of social support measures: Theoretical and practical implications. *J Pers Soc Psychol.* 1987;52:813-832.
- 37. DSM-IV: Diagnostic and Statistical Manual of Mental Disorders. 4th ed. Washington, DC: American Psychiatric Association; 1994:427-429.
- 38.SAS/STAT User's Guide Version 6. 4th ed. Cary, NC: SAS Institute; 1994.

# Appendix A. Women's Experience with Battering Scale

Description of how your partner makes	you feel	Agree Strongly	Agree Somewhat	Agree a Little	Disagree a little	Disagree Somewhat	•	
1. He makes me feel unsafe even in my	own home.	6	5	4	3	2	1	
2. I feel ashamed of the things he does	to me.	6	5	4	3	2	1	
3. I try not to rock the boat because I a	ım afraid of what							
he might do.		6	5	4	3	2	1	
4. I feel like I am programmed to react	a certain way to him.	6	5	4	3	2	1	
5. I feel like he keeps me prisoner.		6	5	4	3	2	1	
6. He makes me feel like I have no con	trol over my life,							
no power, no protection.		6	5	4	3	2	1	
7. I hide the truth from others because	I am afraid not to.	6	5	4	3	2	1	
8. I feel owned and controlled by him.		6	5	4	3	2	1	
9. He can scare me without laying a ha	nd on me.	6	5	4	3	2	1	
10. He has a look that goes straight thro	ugh me and terrifies me	e. 6	5	4	3	2	1	

Scoring: To score WEB scale, sum responses for items 1-10. Range of scores is 10-60. Score ≥20 indicates battering.

#### Appendix B. Index of Spouse Abuse, Partner Abuse Scale: Physical

	All of the time		A good part of the time		A little of the time		None of the time
1. My partner pushes and shoves me around violently.	7	6	5	4	3	2	1
2. My partner hits and punches my arms and body.	7	6	5	4	3	2	1
3. My partner threatens me with a weapon like a gun or knife.	7	6	5	4	3	2	1
4. My partner beats me so hard I must seek medical help.	7	6	5	4	3	2	1
5. My partner beats me when he drinks.	7	6	5	4	3	2	1
6. My partner hits, punches, or kicks my face and head.	7	6	5	4	3	2	1
7. My partner beats me in the face so badly that I'm ashamed							
to be seen in public.	7	6	5	4	3	2	1
8. My partner tries to choke, strangle or suffocate me.	7	6	5	4	3	2	1
9. My partner knocks me down and then kicks or stomps me.	7	6	5	4	3	2	1
10. My partner throws dangerous objects at me.	7	6	5	4	3	2	1
11. My partner has injured me with a weapon like a gun,							
knife or other object.	7	6	5	4	3	2	1
12. My partner has broken one or more of my bones.	7	6	5	4	3	2	1
13. My partner physically forces me to have sex.	7	6	5	4	3	2	1
14. My partner badly hurts me while we are having sex.	7	6	5	4	3	2	1
15. My partner injures my breasts or genitals.	7	6	5	4	3	2	1

Scoring: Sum the responses, subtract the number of questions actually answered (n=15) and multiply by 100, then divide by 90. Scores >2 indicate physical IPV.