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**Measuring Economic Abuse in the Lives of Survivors:
Revising the Scale of Economic Abuse**

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Review

Measuring Economic Abuse in the Lives of Survivors: Revising the Scale of Economic Abuse

Intimate partner violence (IPV) includes the attempt of an abuser to use a variety of strategies over time to coercively control an intimate partner. Research and practice in the field have identified such strategies to include physical and sexual assault, psychological badgering, emotional blackmail, isolation tactics, and threats to harm the children. Recent attention has been given by researchers to exploring economic abuse strategies abusers may also utilize to control their partner. Such strategies may include economic exploitation and economically controlling behaviors as well as employment sabotage (Adams, Sullivan, Bybee, & Greeson, 2008; Postmus, Plummer, McMahon, Murshid, & Kim, in press). Unfortunately, limited measures are available to accurately understand the prevalence or impact of economic abuse in the lives of survivors. Only recently did researchers create the Scale of Economic Abuse (SEA) (Adams, et al., 2008) but further validation is needed. This article addresses this need by describing the psychometric evaluation of the SEA using confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) from data collected with survivors of abuse.

Measuring Economic Abuse

The impact from physical, sexual, and psychological assaults have long been documented by researchers as harmful to IPV survivors’ health and mental health. These forms of abuse are more commonly identified and understood; however, an abuser may also use economic abuse as one of his tactics to control his¹ partner. These tactics may include hindering her economic self-sufficiency and damaging her economic self-efficacy (Adams, et al., 2008; Fawole, 2008;

¹ We specifically talk about violence against women in this paper since women disproportionately represent victims and males as perpetrators of physical, sexual, and other forms of violence. Hence, we will refer to victims as female and perpetrators as males. This in no way diminishes the experiences of male victims nor absolves females of violence they might inflict upon males or other females.

Postmus, et al., in press). For example, he may discourage or prevent her from working, harass and disrupt her at work, purposively ruin her credit score, demand to know how money was spent, spend money that was designated for bills, or make important financial decisions without seeking input from his partner (Adams, et al., 2008; Postmus, et al., in press; Raphael, 1999; R. M. Tolman & Rosen, 2001). Indeed, women who are forced to become economically dependent on their partner are at greater risk of being further abused and are less likely to leave the relationship (Borden, 2007; Sanders & Schnabel, 2006; Strube, 1988; Turner & Shapiro, 1986; Zorza, 1991).

Most of what is known about economic abuse comes from one or two questions included in larger studies that focus on physical or psychological IPV. For example, using data from the National Violence Against Women Survey (NVAWS), one recent paper focused on identifying non-physical abuse experiences, including economic abuse, by conducting a secondary analysis of the data (Outlaw, 2009). Economic abuse was measured as a dichotomous question that asked if the respondents' "current partner prevents him/her from knowing about or having access to family income, even when (s/he) asks." The results indicated that economic abuse was a rare phenomenon, occurring even less than physical abuse. The results also indicated that women experienced more economic abuse and physical abuse than men; additionally, the risk of experiencing physical abuse among those who also experienced economic abuse was 4.68 times greater than those who did not experience economic abuse (Outlaw, 2009). Unfortunately, the NVAWS only had one question on economic abuse, making the results from this study suspect.

Other measures that have a few items on economic abuse include the Abusive Behavior Inventory (ABI) (Shepard & Campbell, 1992), the Psychological Maltreatment of Women Inventory (PMWI) (R.M. Tolman, 1989), the Index of Psychological Abuse (IPA) (Sullivan,

Parisian, & Davidson, 1991), and the abuse questions used by the Safer and Stronger Program (SSP) (Curry, et al., 2009). The ABI is a 30-item survey that includes two subscales measuring physical and psychological abusive behaviors. Only two items focus exclusively on economic abuse (“prevented you from having money for your own use”; “put you on an allowance”); two other items allude to economic abuse but are blended with other psychological tactics (“checked up on you”; “tried to stop you from going to work or school”). The long form of the PMWI includes 58 items with five items specifically focused on economic abuse; however, the short form of PMWI only retained one item on economic abuse (my partner used our money or made important financial decisions without talking to me about it). The IPA, a 33-item scale that measures the degree perpetrators ridicule, harass, criticize, or emotionally withdraw, only includes one item on economic abuse (tried to control your money). Finally, the SSP developed measures of abuse among women with disabilities. Only one question that asked about multiple forms of economic control was included (“In the last year, has anyone you know...stolen money, important items, or equipment? Signed your checks to take money from you? Used your credit or debit card without your OK?”) However, the respondent was asked to give only one yes or no answer to this multi-faceted question.

Measuring economic abuse has only recently garnered the attention of researchers, specifically with the creation of the SEA (Adams, et al., 2008). This measurement was created from several sources including the existing anecdotal and empirical research as well as from interviews with advocates and IPV survivors. Several economic abuse concepts were identified including: 1) preventing women’s resource acquisition; 2) preventing women’s resource use; and 3) exploiting women’s resources. Such concepts provided background for the 120-item scale with Likert-type answers ranging from 1-5. The authors then tested this scale with 103 survivors

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3 receiving services from domestic violence organizations. Their analyses resulted in a final SEA
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5 of 28 items and two subscales including economic exploitation (11 items) and economic control
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7 (17 items). The total SEA had a reliability coefficient of .93; the two subscales also showed good
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9 internal consistency with alpha coefficients ranging from .91 (Economic Control) to .89
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11 (Economic Exploitation) (Adams, et al., 2008).
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15 Although the authors condensed their 120-item scale to 28 items, their SEA is still
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17 lengthy when conducting interviews with survivors whether for research or for practice
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19 especially if other measures are used for physical, sexual, or emotional abuse. Additionally, the
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21 testing of the SEA was done with a limited, purposive sample of 103 survivors. Further testing
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23 is needed to determine if similar results can be replicated. Hence, the purpose of this paper is to
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25 further test the factor structure of the SEA. We first present the results from a confirmatory
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27 factor analysis (CFA) that tested the original two-factor structure of the SEA (Adams, et al.,
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29 2008). Due to its poor fit, we subsequently conducted an exploratory factor analysis (EFA) of
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31 the SEA using data collected from 120 survivors from 15 domestic violence organizations across
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33 10 states who were participating in an economic empowerment program. Lastly, we tested the
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35 convergent validity of the revised SEA scale by correlating the revised scale with other forms of
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37 abuse to determine whether it was a distinct form of abuse.
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43 Methods

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45 This study is part of a longitudinal, exploratory study evaluating the impact of the
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47 *Moving Ahead through Financial Management* financial literacy program. This program was
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49 created by The Allstate Foundation in partnership with the National Network to End Domestic
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51 Violence (NNEDV) and was implemented with IPV survivors in domestic violence shelters and
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53 advocacy organizations across the U.S. The curriculum was created to help survivors identify
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the signs of economic abuse and its impact, increase their knowledge of financial issues, enhance their ability to manage their finances, and obtain the confidence they need to rebuild their financial lives.

Potential participants were recruited from 15 domestic violence programs who had obtained grants to introduce the *Moving Ahead through Financial Management* curriculum to their clientele/consumers. Advocates were asked to distribute flyers to those individuals who had attended either group or individual sessions that included content from this curriculum. Individuals at each site were invited to participate in the evaluation if they a) were a current victim or survivor of abuse, b) were 18 years or older, and c) had attended at least one individual or group session during which the economic empowerment curriculum information had been shared.

Individuals who expressed interest in participating in the study completed a contact sheet which requested personal information, including phone numbers and email addresses. Once completed the sheets were collected by the advocates in each domestic violence agency and mailed to the research team using a self-addressed stamped envelope. One of the research team members then contacted the individual to set up the interview date. The research team members had multiple years of experience working with survivors and were trained on the research protocol. Precautions were taken to ensure all contact with survivors was conducted in a safe and sensitive manner. All data collection procedures and forms for this study (i.e. survey, contact sheet) were approved by the institution's IRB.

Sample

One hundred and twenty-one survivors of IPV participated in this study (120 female, 1 male). The data collected from the lone male participant were removed. The mean age of the

female participants was 39 (SD = 11.5), with 55% Caucasian, 20% African American, 18% Latina/Hispanic, and almost 8 percent identified as “Other” (i.e. bi-racial, Native American, unspecified). Almost half (49%) reported a yearly income between \$0 and \$10,000, and 26 percent earned an income between \$15,001 and \$25,000, while only 4 percent reported a salary of \$35,000 or more. Many of the participants had either completed high school (31%) or had some college education (38%). Sixty-five percent of the participants were employed; 71 percent were working full-time jobs and 29 percent worked part-time. The majority of the respondents (60%) had received less than 12 months of services from the domestic violence organization and 23 percent had received advocacy and/or counseling services for more than 2 years.

Data Collection

Face to face interviews lasted approximately one hour and were conducted at various locations including the domestic violence agencies and local libraries. The instrument was available in both paper and online format through Zoomerang©, a web-based survey tool. All of the participants signed IRB approved consent forms prior to beginning the interview. A \$25 gift card was provided for participation in the evaluation, with additional incentives of \$35 and \$50 promised for subsequent interviews.

Measures

The survey instrument was comprised of several validated or revised scales that measured a number of variables. For this paper, the measures used included the Scale of Economic Abuse (SEA), the Abusive Behavior Inventory (ABI), and several questions on demographic variables including age, gender, ethnicity, level of income, and education.

Economic Abuse. The Scale of Economic Abuse (SEA) (Adams, et al., 2008) is a 28-item scale that identifies the frequency of economic abuse participants experienced in their

relationships. Participants were asked to rate how often a partner had exhibited financially abusive behaviors since the relationship began. Participants indicated such frequency using a 5-point scale with answers ranging from 1 (*never*) to 5 (*quite often*). The SEA includes two subscales including: 1) the Economic Control sub-scale (17 items) and 2) the Economic Exploitation sub-scale (11 items) (Adams, et al., 2008). Each subscale in this study demonstrated high internal reliability (Economic Control, $\alpha = .94$; and Economic Exploitation, $\alpha = .92$). Table 1 identifies the mean of the responses to the original SEA, divided by the two subscales.

[insert Table 1 here]

Intimate Partner Violence. Intimate partner violence was assessed using a modified version of the Abusive Behavior Index (ABI) (Shepard & Campbell, 1992). The original ABI includes 30 items and two sub-scales, Physical Abuse (10 items) and Psychological Abuse (20 items). For the current study, one item from the physical and four items from the psychological subscales were eliminated by the research team and community partners in order to eliminate items that were redundant and already captured in the economic abuse scale. Participants were asked to indicate how often a partner had committed specific abusive acts over the last year, or, if they were no longer with the partner, within the last year of their relationship. The survey used a 5-point scale with answers ranging from 1 (*never*) to 5 (*very often*). The ABI has exhibited good reliability and construct validity in previous studies (Postmus & Severson, 2006; Shepard & Campbell, 1992). Both sub-scales in this study demonstrated good internal reliability in the current sample (Physical Abuse, $\alpha = .91$; and Psychological Abuse, $\alpha = .93$).

Data Analysis

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3 In order to revise the Scale of Economic Abuse (SEA) to shorten it, make it reflective of
4 a broad range of economically abuse experienced by women in shelters, and determine its
5 underlying factor structure, the analysis was conducted in three phases.
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10 Phase 1 was a confirmatory factor analysis of the original SEA to determine whether or
11 not the original 2-factor structure found by Adams et al (2008) fits the data of this sample. Amos
12 19.0 was used to test the confirmatory factor model. Maximum likelihood procedure was used
13 as the technique for parameter estimation. Chi square statistics as well as the Comparative Fit
14 Index (CFI), the Incremental Fit Index (IFI) and the Root Mean Square Error of Approximation
15 (RMSEA) were used as model fit indices (Hu & Bentler, 1999).
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24 Because the CFA produced a poor fit, our next steps were to revise the scale. Phase 2
25 included an item selection phase in which missing data were reviewed using SPSS Missing
26 Value Analysis. The Missing Value Analysis showed that missing values were less than 3.5%
27 across all variables. Little's chi-square indicated that missing was completely at random ($p = .07$)
28 so that pairwise deletion of cases was chosen for further analysis.
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36 Next, data suitability for the analysis was assessed through the examination of the
37 bivariate correlation matrix and the variance and the skewness of each item. Items showing
38 correlations above .80 or below .20 with other SEA items were identified as possible items that
39 might be reduced when running the EFA; these items were not removed at this step. Items with a
40 lack of variance and extreme skewness were also identified but not removed from the analysis at
41 this point.
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50 Phase 3 was an exploratory factor analysis phase in which a series of principal component
51 analyses were conducted on the SEA with no rotation, followed by a series of principal axis
52 factor analyses with varimax rotation. Finally, a series of principal axis factor analyses with
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oblimin rotation was conducted. Kaiser-Meyer-Olkin (KMO) values and Bartlett's Test of Sphericity were assessed to examine item suitability for each analysis. Such strategies are used to evaluate factorability (Worthington & Whittaker, 2006). This measure of sampling adequacy accounts for the relationship of partial correlations to the sum of squared correlations. Thus, it indicates the extent to which a correlation matrix actually contains factors or simply chance correlations between a small subset of variables (Worthington & Whittaker, 2006).

Smaller sample sizes may be adequate if communalities are at least .60 and with factor loadings of at least .40 (Worthington & Whittaker, 2006). Additionally, to reduce the number of items in the SEA to create a shorter survey, items that loaded simultaneously onto multiple factors or items with low to moderate factor loadings were deleted. Scree plots, Eigen values, and variances explained by domains or factors were examined to determine the number of domains or factors to be retained.

Phase 4 was the validation phase in which correlation analyses were used to examine the convergent validity. The Abusive Behavior Inventory was utilized as economic abuse is hypothesized to moderately correlated with other forms of abuse (Adams et al., 2008).

Results

Phase 1: Confirmatory Factor Analysis

Adams et al. (2008) performed an exploratory factor analysis that resulted in a 2-factor structure of the Scale of Economic Abuse including Economic Control (17 items) and Economic Exploitation (11 items). When tested with our data, the results of the CFA indicated that the two-factor model is a poor fit (χ^2 (349) = 930.186 [p=.001]; CFI=.740, IFI=.747, RMSEA=.118).

Phase 2: Item selection

Prior to conducting the EFA, the univariate characteristics of the variables and the bivariate correlation matrix were examined. The Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity were performed and these tests indicated that the data was appropriate to analyze. The Bartlett's test of sphericity was significant ($\chi^2(378)=2346.296, p<.001$). The KMO measure of sampling adequacy was .894. Based on these two indications, we determined the data set was appropriate for factor analysis.

Phase 3: Exploratory Factor Analysis

An Exploratory Factor Analysis (EFA) was conducted utilizing Principal Axis Factoring extraction and Direct Oblimin rotation. Oblique rotation was utilized based on the assumption that the constructs would be highly correlated (Worthington & Whittaker, 2006). Items were routinely removed after each extraction when they appeared to load onto multiple factors or if the factor loadings were less than .40. A three factor solution was accepted, utilizing 12 of the original 28 items, ($KMO = .833; \chi^2(66) = 872.783, p < .001$). The combined three factors accounted for 65.78% of the total variance. The three factors were reviewed for common underlying themes and variable names were assigned accordingly. Items with Eigen values greater than 1 included in the three factors are presented in Table 2.

[insert Table 2 here]

The first factor was named Economic Control ($M = 3.40, SD = 1.26$) and contains five items that capture the concept of economic control and restriction. The five items represent the abuser's propensity to monitor and restrict the woman's ability to freely use resources in her life. Some examples include: "make you ask for money" or "demand to know how money was spent."

The second factor or theme, Employment Sabotage ($M = 2.36$, $SD = 1.21$), is comprised of four variables that address access to employment opportunities. All of the items suggest the abuser is restricting the woman's ability to obtain her own resources through employment. Some examples include: "demand that you quit your job" or "do things to keep you from going to your job."

The third factor, Economic Exploitation ($M = 2.95$, $SD = 1.49$), contains three items in which the abuser either depletes their existing funds and/or commits certain acts that will either create debt for the woman, or ruin her credit. Some examples include: "spend the money you need for rent or other bills" or build up debt under your name."

Phase 4: Reliability and Validity of SEA-12

The internal consistency of the SEA-12 was assessed by examining the Cronbach's alpha coefficient and item-total correlations of the total scale and each of the three subscales. The total SEA-12 had a reliability coefficient of .89, with corrected item-total correlations ranging from .52 to .68. The Economic Control, Employment Sabotage and Economic Exploitation subscales also showed good internal consistency, with alpha coefficients of .87, .86, and .89, respectively. The corrected item-total correlations of the Economic Control subscale ranged from .66 to .74, for the Employment Sabotage subscale .63 to .82 and for the Economic Exploitation subscale from .78 to .82.

Correlation and regression analyses were used to examine the construct validity of the SEA-12. Table 3 depicts the correlations among the three subscales of the SEA-12 along with the measure of abusive behavior (ABI) and its subscales. The SEA-12 was positively correlated with the ABI ($r=.775$, $p<.01$) indicating that higher levels of economic abuse are significantly related to higher levels of physical and psychological abuse. The correlations between the three

SEA-12 subscales and the ABI were also positively correlated. The Economic Control subscale was positively correlated with the ABI ($r=.630$, $p<.01$) indicating that the more abuse that a woman experienced, the more her partner controlled her access to and use of economic resources. The positive correlation between the Employment Sabotage subscale and the ABI ($r=.737$, $p<.01$) suggests that a victim who experiences high levels of abuse also experience high levels of employment sabotage. Finally, the Economic Exploitation subscale and the ABI were positively correlated ($r=.461$, $p<.01$) indicating again that women who experience high levels of abuse also experience high levels of economic exploitation. Although the correlations between the three subscales of economic abuse were positively correlated they were of only moderate strength (ranging from .431 to .479). This provides evidence that the three subscales of economic abuse are unique constructs. In addition, there are positive correlations between the three subscales of economic abuse and the subscales of physical and psychological abuse from the ABI but also of only moderate strength (ranging from .343 to .679) suggesting that economic abuse is a unique form abuse separate from psychological and physical abuse.

[insert Table 3 here]

Discussion

The findings of this study provide evidence for the reliability and validity of the SEA-12 as a short instrument to measure economic abuse as a distinct form of abuse. Whereas the original SEA included 28 items with two subscales, the SEA-12 includes 12 items with three subscales including five items capturing behaviors that control a woman's access to and use of resources, four items that measure behaviors that restrict a woman's ability to work or attend school, and three items that measure economically exploitive behaviors. Within this sample, these three dimensions were fully distinct and moderately correlated with experiences of physical

and psychological abuse. The SEA-12 can be a useful tool to quickly access a victim's experience of economic abuse.

This study also demonstrated the importance of assessing economic abuse as a distinct form of abuse as well as how to measure such abuse with a shortened survey (i.e. the SEA-12). Of the 120 women interviewed, 94% had experienced physical abuse in the past twelve months and 95% had experienced psychological abuse. In addition, 94% reported experiencing economic abuse in their relationship; 92% had experienced behaviors of economic control, 88% had experienced employment sabotage and 79% experienced economic exploitation. These findings demonstrate that economic abuse is a significant component of abuse and hence, have important implications for advocates working with survivors of abuse. Advocates play a central role in educating women on the concepts of power and control and helping survivors identify abusive behaviors. Advocates need to be trained on the specific economic abusive behaviors used by batterers and in turn, educate survivors on identifying signs of economic abuse. Having an accessible and short tool with the SEA-12 will afford advocates the opportunity to identify and discuss the different economically abusive tactics batterers use.

Findings need to be considered in light of the study's limitations. First, the sample size is small (n=120) and not a random sample. The majority of the women in the sample were primarily Caucasian (54%). Furthermore, the majority of the women reported earning less than \$25,000 annually (74%), a figure not uncommon when using samples from shelters. All women were currently receiving services from a domestic violence agency and had self-selected to participate in a financial education program at the agency. Hence, this sample may have been more aware of economic abuse as a result of their participation. More research is needed to test

the reliability and validity of the SEA-12 with diverse populations including different ethnic, socio-economic, and non-shelter samples.

Despite these limitations, this study furthers the importance of measuring economic abuse and provides a brief scale which can be used by advocates with survivors. Indeed, economic abuse warrants more attention as to its prevalence and impact with IPV survivors. Further research needs to be conducted on economic abuse in order to support women in escaping abusive relationships and in regaining a new financially secure life.

References

Adams, A. E., Sullivan, C. M., Bybee, D., & Greeson, M. R. (2008). Development of the Scale of Economic Abuse. *Violence Against Women, 14*(5), 563-588.

Borden, L. M., Lee, S., Serido, J., & Collins, D. (2007). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family and Economic Issues, 29*(1), 17.

Curry, M. A., Renker, P., Hughes, R. B., Robinson-Whelen, S., Oswald, M., Swank, P. R., et al. (2009). Development of measures of abuse among women with disabilities and the characteristics of their perpetrators. *Violence Against Women, 15*(9), 1001-1025.

Fawole, O. I. (2008). Economic violence to women and girls: Is it receiving the necessary attention? *Trauma Violence Abuse, 9*(3), 167-177.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.

Outlaw, M. (2009). No one type of intimate partner abuse: Exploring physical and non-physical abuse among intimate partners. *Journal of Family Violence, 24*, 263-272.

Postmus, J. L., Plummer, S., McMahon, S., Murshid, N., & Kim, M. S. (in press). Understanding economic abuse in the lives of survivors. *Journal of Interpersonal Violence*.

Postmus, J. L., & Severson, M. E. (2006). *Violence and victimization: Exploring women's histories of survival* (No. NCJ 214440). Washington, DC: Dept. of Justice, Office of Justice Programs, National Crime Justice Reference Service.

Raphael, J. (1999). Keeping women poor: How domestic violence prevents women from leaving welfare and entering the world of work. In R. A. Brandwein (Ed.), *Battered Women*,

- 1
2
3 *Children and Welfare Reform: The Ties That Bind* (1st ed., pp. 31-43). Thousand Oaks,
4
5 CA: Sage.
6
7
8 Sanders, C. K., & Schnabel, M. (2006). Organizing for economic empowerment of battered
9
10 women: Women's savings accounts. *Journal of Community Practice*, 14(3), 47-68.
11
12 Shepard, M., & Campbell, J. A. (1992). The Abusive Behavior Inventory: A measure of
13
14 psychological and physical abuse. *Journal of Interpersonal Violence*, 7(3), 291-305.
15
16
17 Strube, M. J. (1988). The decision to leave an abusive relationship: Empirical evidence and
18
19 theoretical issues. *Psychological Bulletin*, 104, 236-250.
20
21
22 Sullivan, C. M., Parisian, J. A., & Davidson, W. S. (1991). *Index of Spouse Abuse: Development of*
23
24 *a measure*. Paper presented at the Annual Meeting of the American Psychological
25
26 Association.
27
28
29 Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women
30
31 by their male partners. *Violence and Victims*, 4(3), 159-177.
32
33
34 Tolman, R. M., & Rosen, D. (2001). Domestic violence in the lives of women receiving welfare:
35
36 Mental health, substance dependency and economic well-being. *Violence Against*
37
38 *Women*, 7(2), 141-158.
39
40
41 Turner, S. F., & Shapiro, C. H. (1986). Battered women: Mourning the death of a relationship.
42
43 *Social Work*, 31, 372-376.
44
45
46 Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis
47
48 and recommendations for best practices. *The Counseling Psychologist*, 34, 806-838.
49
50
51 Zorza, J. (1991). Woman battering: A major cause of homelessness. *Clearinghouse Review*, 25,
52
53 421-429.
54
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Table 1. Means and Percentages for the Scale of Economic Abuse

Scale of 1-5; Percentage column includes those who reported the abuse never (1), hardly ever (2), sometimes (3), often (4), or quite often (5) occurred.

Item	Mean	%
Economic Exploitation (11 items)		
1. Convince you to lend him money but not pay it back.	3.13	72.5
2. Take money from your purse, wallet or bank account without your permission and/or knowledge.	3.00	72.5
3. Pay bills late or not pay bills that were in your name or in both of your names.	3.11	71.2
4. Spend the money you needed for rent or other bills.	2.99	69.4
5. Force you to give him money or let him use your checkbook, ATM card or credit card.	2.92	68.3
6. Steal your property.	2.75	64.5
7. Refuse to get a job so you had to support your family alone.	2.87	64.2
8. Build up debt under your name by doing things like use your credit card or run up the phone bill.	2.76	58.8
9. Have you asked your family or friends for money but not let you pay them back.	2.37	52.5
10. Gamble with your money or your shared money.	2.23	50.0
11. Pawn your property or your shared property.	2.30	47.9
Overall Mean = 2.77		
Economic Control (17 items)		
12. Demand to know how money was spent.	3.68	88.3
13. Decide how you could spend money rather than letting you spend it how you saw fit.	3.61	87.5
14. Do things to keep you from having money of your own.	3.63	86.8
15. Make important financial decisions without talking with you about it first.	3.51	82.6
16. Keep you from having the money you needed to buy food, clothes or other necessities.	3.35	77.7
17. Hide money so that you could not find it.	3.53	77.1
18. Keep financial information from you.	3.33	76.9

19. Make you ask him for money.	3.36	74.4
20. Demand that you give him receipts and/or change when you spent money.	3.13	72.5
21. Do things to keep you from going to your job	2.75	68
22. Demand that you quit your job.	2.57	59.3
23. Threaten you to make you leave work.	2.42	59.3
24. Take your paycheck, financial aid check, tax refund check, disability payment or other support payments from you.	2.63	58.3
25. Threaten you or beat you up for paying the bills or buying things that were needed.	2.35	55.8
26. Steal the car keys or take the car so you couldn't go look for a job or go to a job interview.	2.33	52.5
27. Keep you from having access to your bank accounts.	2.14	44.9
28. Beat you up if you said you needed to go to work.	1.77	31.6

Overall Mean = 2.96

Table 2. Pattern Matrix Rotated to Oblimin Criterion

Item	Factor 1 – Economic Control	Factor 2 – Employment Sabotage	Factor 3 – Economic Exploitation
Make you ask him for money	.765	.127	.150
Demand to know how money was spent	.732	.077	-.058
Demand that you give him receipts and/or change when you spend money	.776	.058	.001
Keep financial information from you	.803	-.090	-.071
Make important financial decisions without talking to you first	.709	-.097	-.154
Threaten you to make you leave work	-.129	.950	-.089
Demand that you quit your job	.008	.820	-.005
Beat you up if you said you needed to go to work.	.057	.667	-.001
Do things to keep you from going to your job	.100	.656	-.003
Spend the money you need for rent or other bills	.090	.125	-.740
Pay bill late or not pay bill that were in your name or both of your names	-.035	.021	-.917
Build up debt under your name by doing things like use your credit card or run up the phone bill	.039	-.010	-.834
% of variance	44.1%	12.1%	9.6%

Percentage variance is post-rotation.

Table 3. Correlations Between Scale of Economic Abuse-12 (SEA-12) and Abuse (ABI)

	SEA- 12	Control	Sabotage	Exploitation	ABI	Physical	Psychological
SEA-12	1						
Control	.851**	1					
Sabotage	.759**	.434**	1				
Exploitation	.763**	.479**	.431**	1			
ABI	.775**	.630**	.737**	.461**	1		
Physical	.601**	.436**	.678**	.343**	.885**	1	
Psychological	.785**	.678**	.679**	.483**	.956**	.710**	1

** p<.01