

Intimate Partner Violence and Psychological Well-Being: Examining the Effect of Economic Abuse on Women's Quality of Life

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Objective: To expand our understanding of the effects of intimate partner violence (IPV) on women's general psychological well-being by empirically investigating the longitudinal effects of economic abuse on subjective quality of life. **Method:** In total, 94 women who had recently experienced physical violence and were receiving IPV services participated in 3 in-person interviews over a 4-month period. **Results:** Time 1 (T1) economic abuse was not related to perceived quality of life at T1 or to change in quality of life over time. However, within-woman change in economic abuse was significantly related to change in quality of life over time. In other words, relative to T1, at times when economic abuse was higher, quality of life was lower, and vice versa. **Conclusion:** These findings suggest that economic abuse plays a role in the psychological well-being of IPV survivors, and the effect appears to be immediate. Research examining the psychological consequences of IPV would benefit from the inclusion of economic abuse in the measurement of IPV. Further, research examining the effects of economic abuse on survivors' psychological well-being should consider including indicators of quality of life and explore how this relationship unfolds over time using a lagged design and a longer follow-up period. Finally, practitioners can support the overall psychological well-being of survivors of IPV by implementing strategies to help prevent, minimize, or recover from economic abuse.

Keywords: intimate partner violence, domestic violence, economic abuse, quality of life, hierarchical linear modeling

According to the U.S. Centers for Disease Control and Prevention, one in four women experience severe physical violence by an intimate partner in their lifetime (Smith et al., 2017). For many of these women, physical violence is only one component of their victimization. Abusers also exert power by using a wide range of sexual, psychological, and economic abuse tactics, which over time limit women's autonomy and freedom to direct the course of their lives¹ (Stark, 2007). A wealth of research has exposed the detrimental psychological effects of physical, sexual, and psychological forms of intimate partner violence (IPV), but we know little about the unique effects of economic abuse on women's psychological well-being. Economic abuse is defined as behaviors that control a woman's ability to acquire, use, and maintain economic resources, thus threatening her economic security and potential for self-sufficiency (Adams, Sullivan, Bybee, & Greeson, 2008). Evidence suggests that this form of victimization is as common in abusive relationships as physical and psychological abuse (Adams et al., 2008). Limited research has explored the psychological consequences of economic abuse (Antai, Oke, Braithwaite, & Lopez, 2014;

Haj-Yahia, 2000; Postmus, Huang, & Mathisen-Sylianou, 2012; Voth Schrag, 2015). The current study seeks to expand our understanding of the effects of IPV on women's general psychological well-being by empirically investigating the longitudinal effects of economic abuse on subjective quality of life.

IPV and Psychological Well-Being

A substantial body of literature exists demonstrating the damaging effects of IPV on women's psychological well-being. The majority of these studies have examined mental health outcomes. In a recent comprehensive review of the international literature from Western and developing countries, Dillon, Husain, Loxton, and Rahman (2013) reported that researchers consistently find a significant positive association between history of IPV and symptoms of depression, anxiety, posttraumatic stress disorder, suicidal ideation, general psychological distress, and sleep disturbance. IPV puts women at risk for long-term mental health symptoms, and these mental health effects are greater with more severe and sustained violence. Further, the extant literature shows differential effects of various abuse

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¹ The available data suggest that, whereas IPV has some gender-neutral aspects, dimensions associated with power and control implicate gender (Johnson, 2006). The more control-oriented it is, the more likely it is to be perpetuated by men against women (Black et al., 2011). It is for this reason that the current study focuses on women and uses gendered language in referencing victims.

types on mental health outcomes. For example, psychological abuse has been shown to be more highly related to depression than physical violence, sexual abuse has been shown to be more highly related to posttraumatic stress disorder than physical and psychological abuse, and physical and sexual abuse have been shown to be stronger risk factors for suicidal ideation than psychological abuse (Dillon et al., 2013).

In addition to the expansive literature examining the mental health consequences of IPV, researchers have begun to move toward conceptualizing psychological well-being more broadly to include perceptions of life quality. Subjective quality of life is defined as "satisfaction of developmental needs through participation in salient life domains and reflected in a value-laden belief about the totality of one's life" (Sirgy, 2012, p. 540). In other words, the greater the capacity of individuals to meet the needs that they seek to fulfill, the better they feel about their lives overall. Research consistently finds that survivors of IPV struggle to meet their self-defined needs; that reality is reflected in studies showing an association between IPV and diminished subjective quality of life. In one such study, using a nationally representative sample of American married and cohabiting women, Zlotnick, Johnson, and Kohn (2006) found that, compared with nonabused women, those who were physically victimized by their intimate partner at the start of the study reported reduced life satisfaction 5 years later. Similarly, when investigating the long-term effects of IPV on quality of life with 160 service-seeking survivors participating in a randomized intervention study conducted in the United States, Beeble, Bybee, Sullivan, and Adams (2009) found that, after controlling for the intervention and involvement with their abuser psychological abuse, was related to quality of life over time; however physical abuse was not. Specifically, at times when psychological abuse was higher, perceived quality of life was lower. Similar findings are seen in cross-sectional research. For example, Leung, Leung, Ng, and Ho (2005) interviewed obstetrics and gynecology patients in Hong Kong and found that, compared with women who reported never experiencing IPV, those who had been victimized by their partners showed significantly lower quality of life in the following four domains: physical health, psychological health, social relationships, and environment.

Economic Abuse and Psychological Well-Being

Economic abuse is a distinct form of IPV that involves tactics of economic control (Adams et al., 2008; Adams, Beeble, & Gregory, 2015; Sanders, 2015; Stylianou, Postmus, & McMahan, 2013). In an effort to exert control, batterers restrict economic resources by interfering with employment, regulating access to money, and denying access to financial information, among other tactics. Abusers also exert control by exploiting their partners' resources. For instance, abusers steal their partners' money, refuse to contribute income to expenses, and generate debt in their partners' names. Studies with women seeking services for domestic violence in the United States suggest economic abuse is common, with prevalence rates ranging from 92% to 99% (Adams et al., 2008; 2015; Postmus, Plummer, McMahan, Murshid, & Kim, 2012). Although economic abuse has been shown to be a distinct form of IPV, there is a dearth of research on the role that economic abuse

plays in the psychological well-being of women with abusive partners.

Stress process theory is a useful framework for understanding the connection between economic abuse and women's psychological well-being. This theory posits that discrete, major life events (e.g., marriage, divorce, births, or deaths) and chronic problems of daily life (e.g., conditions of poverty, chronic illness, sustained unemployment, or ongoing relationship conflict) interact with an array of social and psychological factors to ultimately impact mental health (Pearlin, Menaghan, Lieberman, & Mullan, 1981). Financial strain is one such stressor (Hoyt, Conger, Valde, & Weihs, 1997; Kahn & Pearlin, 2006; Pearlin et al., 1981; Price, Choi, & Vinokur, 2002), and economic abuse has been shown to contribute to financial strain. For instance, in a cross-sectional study of 103 women seeking services for IPV, Adams and colleagues (2008) found that after controlling for the effects of physical and psychological abuse, economic abuse was significantly related to economic hardship. Specifically, the more economic abuse women experienced, the more they struggled with issues such as housing instability, food insufficiency, bill-pay hardship, utility insecurity, and credit problems. Adams et al. (2015) built on this study by examining the longitudinal effects of economic abuse on women's financial resources and found that, after controlling for physical and psychological abuse, within-women change in economic abuse significantly predicted change in financial resources over a 4-month period. In other words, at times when economic abuse was higher in a woman's life, the money she had available to meet her needs declined; conversely, when economic abuse was lower, there was more money available to pay the bills. In a cross-sectional study with 120 service-seeking women, Postmus et al. (2012) also demonstrated the financial harm associated with economic abuse by showing that economic abuse predicted lower perceived economic self-sufficiency. The relationship between economic abuse and financial strain is well documented, and stress process theory postulates that financial strain is a chronic stressor that impacts psychological well-being.

Four studies provide initial evidence in support of a link between economic abuse and women's psychological well-being. Using a nationally representative sample of women in the Philippines, Antai and colleagues (2014) showed cross-sectional relationships between economic abuse and psychological distress and suicide attempts. In a cross-sectional study of Palestinian women, Haj-Yahia (2000) found that women who were economically abused had lower self-esteem and more depression and anxiety than women who did not experience economic abuse. Additionally, two longitudinal studies were conducted using data from the Fragile Families and Child Well-being Study (FFCW). The FFCW is a national, longitudinal investigation of approximately 5,000 children and their parents, roughly 75% of whom were unwed, from 20 large U.S. cities. In the first study, Voth Schrag (2015) found a relationship between baseline experiences of economic abuse and depression, which in turn impacted material hardship four years later. However, this model failed to account for the effects of physical or psychological abuse, two known predictors of negative mental health sequelae that frequently co-occur with economic abuse (Adams et al., 2008; Postmus, Plummer, et al., 2012). In another study (Postmus, Huang, et al., 2012) found that economic abuse at baseline had a significant effect on the likeli-

hood of experiencing depression five years later, after accounting for the effects of physical and psychological abuse. More work is needed to not only investigate the impact of economic abuse on the development of mental health concerns, such as depression or anxiety, but to also understand how these tactics impact women's psychological well-being more broadly.

The Current Study

The current study sought to expand our understanding of the link between economic abuse and women's psychological well-being by investigating the unique effects of economic abuse, over and above physical and psychological abuse, on women's perceived quality of life over time. Exploring the relationship between economic abuse and quality of life helps us to move beyond the well-established literature linking physical and psychological forms of IPV with negative mental health symptomology to investigate more global indicators of psychological well-being. Specifically, this study examined the question: Does economic abuse negatively affect women's perceived quality of life over time, after controlling for the effects of physical and psychological abuse? Our hypotheses were as follows:

Hypothesis 1: Higher levels of baseline economic abuse would be associated with lower perceived quality of life at baseline.

Hypothesis 2: Higher levels of baseline economic abuse would be associated with reduced quality of life over time.

Hypothesis 3: Within-woman increases in economic abuse, relative to baseline, would be associated with reduced quality of life over time.

Method

Participants

Study participants were recruited from the legal advocacy, counseling, and shelter programs of a domestic violence and sexual assault service agency to participate in a larger, longitudinal study testing the effectiveness of a community-based advocacy intervention. Multiple criteria were used to determine study eligibility, including English-speaking, having experienced physical abuse in the 4 months preceding the study's inception, living within a 45-min driving range of the aforementioned service organization, and agreeing to participate in an intervention, if randomly assigned to that condition. A total of 94 women met these criteria and were included in the sample. All 94 women were interviewed at Time 1 (T1; i.e., the baseline interview), 95% ($n = 89$) of these women returned for their Time 2 (T2) interview that occurred 10 weeks later, and 94% ($n = 88$) of the original sample returned for their Time 3 (T3) interview, which occurred ~8 weeks after the T2 interview.

At the start of the study, participants' ages ranged from 19 to 60 years, with an average age of 37 years ($SD = 10.26$). Women had a median of two children. Half of the participants identified as White, 39% identified as African American, and the remaining participants identified as "other" (11%). The majority (69%) of the participants were unemployed at the start of the study. Of those

who were working, 41% worked full-time, 41% worked part-time, and 17% reported sporadic employment. Of the women who disclosed their income (three participants did not), 15% had no income, 64% reported earning between \$1 and \$15,000 annually, 11% reported earning between \$15,001 and \$30,000, and 10% reported an annual income over \$30,000. Education levels varied greatly, as 17% of the women reported they had yet to complete high school, 16% had completed high school or a general equivalency diploma, 6% graduated from trade school, 43% attended college but had not yet completed a degree, and 18% had a college diploma.

Participants were involved with their abusive partners for an average of 8.7 years (range: 1 month to 36 years). Eleven women reported living with their assailants at the time of their first interview, and 37% had been married to their abusive partner at some point. A complete breakdown of participant demographics is presented in Table 1.

Procedure

Structured interviews were conducted by highly trained female research assistants. The training, which was developed by interviewing hundreds of IPV victims across numerous studies, focused on safe, sensitive, culturally responsive interviewing (Bybee & Sullivan, 2005; Sullivan & Bybee, 1999; Sullivan, Bybee, & Allen, 2002). Participants were actively involved in identifying safe and

Table 1
Participant Demographics at Baseline

Demographics	<i>n</i>	%
Age		
19–25	15	15.96
26–32	21	22.34
33–39	24	25.53
40–46	18	19.15
47–53	8	8.51
54–60	8	8.51
Race		
White	47	50.00
African American/Black	37	39.36
Other	10	10.64
Employment status ^a		
Full-time	12	12.77
Part-time	12	12.77
Sporadic	5	5.32
Unemployed	65	69.15
Income ^b		
Over \$30,000	9	9.57
Between \$15,001 and \$30,000	10	10.64
Between \$1 and \$15,000	58	61.70
No income	14	14.89
Education		
Less than high school	16	17.02
High school diploma/general equivalency diploma	15	15.96
Trade/Technical school graduate	6	6.38
Some college	40	42.55
College degree	17	18.09
Living with assailant		
No	83	88.30
Yes	11	11.70

^a % may not sum to 100 due to rounding. ^b % may not sum to 100 due to missing data.

convenient locations for their interviews. Informed consent was obtained before the start of the T1 interviews, and participants were compensated for their time as follows: \$30 for the T1 interview, \$30 for the T2 interview, and \$40 for the T3 interview. On average, interviews lasted 1 hr. Study procedures were approved by our institutional review board.

Measures

Economic abuse. Economic abuse was assessed using the Scale of Economic Abuse (Adams et al., 2008), a 28-item measure that captures the extent to which the assailant used a variety of economically abusive strategies to control or exploit their partners (e.g., “How often has he made you ask him for money?”; “Take money from your purse, wallet, or bank account without your permission and/or knowledge”). Participants responded according to a 5-point Likert-type scale (0 = *never*, 1 = *rarely*, 2 = *sometimes*, 3 = *often*, 4 = *quite often*). The T1 interviews asked the participants to report on their experiences of economic abuse since their relationship with the assailant began; however, in subsequent interviews, women were asked about the frequency of economic abuse they endured since their previous interview. A mean score was calculated for analysis. The scale demonstrated good internal consistency across all time points, with Cronbach’s α ranging from .93 to .95. Construct validity of the instrument has been demonstrated in cross-sectional and longitudinal studies, distinguishing economic abuse from psychological and physical abuse (Adams et al., 2015).

Physical abuse. A modified version of the Conflict Tactics Scale (CTS) was used to assess participants’ experiences of the physical violence they endured at the hands of their abusive partners (Straus, 1979; Sullivan & Bybee, 1999). The CTS is a 23-item measure that captures the frequency of violent acts, such as how often the assailant has pushed or shoved, grabbed, hit, or threatened the participant with a knife or gun. Responses were based on a 7-point Likert-type scale (0 = *never/none*, 1 = *once/one*, 2 = *once a month or less (two to four times)*, 3 = *two to three times a month*, 4 = *one or two times a week*, 5 = *three or four times a week*, 6 = *more than four times a week*). Participants were asked about violence that occurred in the 4 months before their T1 interview and in between subsequent interviews. Women’s responses across all items were averaged to produce scale scores. Internal consistency across all time points was high, with Cronbach’s α ranging from .90 to .93. The CTS is one of the most widely used measures to assess IPV and has been shown to be valid and reliable across diverse samples (Lucente, Fals-Stewart, Richards, & Goscha, 2001; Strauss & Micky, 2012).

Psychological abuse. The 14-item Psychological Maltreatment of Women Inventory (PMWI; Tolman, 1999) was used to assess participants’ experience of psychological abuse. The PMWI assesses two domains of psychological abuse, namely, emotional/verbal and dominance/isolation. Emotional/verbal tactics included, for example, “call you names” and “tell you your feelings were irrational or crazy.” Examples of the dominance/isolation items are “monitor your time and make you account for your whereabouts” and “was jealous or suspicious of your friends.” Women were asked about the psychological abuse they endured during the 4 months before their T1 interview and in between subsequent interviews. Participants responded to each item on a 5-point

Likert-style scale (0 = *never*, 1 = *rarely*, 2 = *occasionally*, 3 = *frequently*, 4 = *very frequently*). All items were averaged to produce scale scores, and Cronbach’s α ranged from .87 to .96 across all time points. The short-form PMWI has been shown to differentiate between abused and nonabused women (Tolman, 1999).

Quality of life. Quality of life was measured using a scale developed by Andrews and Withey (1976) and adapted for use with survivors of IPV by Sullivan and Bybee (1999). Women reported how they were feeling on nine items assessing various life domains. Example items included the following: “How do you feel about your life overall?” “How do you feel about your independence or freedom—that is, how free you feel to live the kind of life you want?” “How do you feel about your emotional or psychological well-being?” Women were asked to report on their experiences during the 4 months before the first interview and then in the period between each subsequent interview. Responses were given on a 7-point Likert-type scale (1 = *terrible*, 2 = *unhappy*, 3 = *mostly dissatisfied*, 4 = *mixed—equally satisfied and dissatisfied*, 5 = *mostly satisfied*, 6 = *pleased*, 7 = *extremely pleased*). A mean score was calculated for analysis. Cronbach’s α across all time points ranged from .88 to .93. This scale has been found to have high predictive and convergent validity (Sirgy, 2012) and has been shown to correlate as expected with conceptually related outcome measures in violence against women research (Beeble, Bybee, & Sullivan, 2010; Beeble et al., 2009; Sullivan & Bybee, 1999; Sullivan et al., 2002).

Control variables. Two variables that could affect the frequency of abuse and/or women’s perceived quality of life were controlled for in the analyses. First, the experimental condition was included as a binary variable reflecting whether each woman was randomly assigned to the intervention ($n = 49$, 52%) or the control ($n = 45$, 48%) condition. Second, a dichotomous variable was included that captured whether women were living with their assailants at the time of each of their interviews.

Data Analysis

Longitudinal multilevel modeling was used to explore experiences of IPV on women’s perceived quality of life. Using HLM software (Raudenbush, Bryk, & Congdon, 2004), repeated measures of physical, psychological, and economic abuse were modeled at Level 1 and nested within participants, which were modeled at Level 2. Data were complete at Level 2, and very minimal amounts of missing data existed at Level 1. More specifically, only a total of five scores across the physical, psychological, and economic abuse measures for all time points were missing.

Longitudinal multilevel modeling allowed us to assess both between-women and within-woman effects. That is, we assessed differences between women by exploring the associations of T1 levels of physical, psychological, and economic abuse on T1 perceived quality of life, as well as the effects of T1 levels of physical, psychological, and economic abuse on change in perceived quality of life over time. We also assessed within-woman effects of change in physical, psychological, and economic abuse on change in perceived quality of life over time. These within-woman effects were modeled using time-varying covariates (i.e., deviation scores) that reflected the amount of change women

reported over time, relative to their T1 scores for each form of abuse (Singer & Willett, 2003).

A total of five sequentially nested models were tested. Model parameters were estimated using full maximum likelihood to determine whether adding additional predictors to subsequent models improved the proportion of variance accounted for in women's perceived quality of life. An initial unconditional model contained only intercept and slope terms, both of which were estimated as random effects (i.e., allowed to vary from woman to woman), to determine whether there was significant variability in quality of life over time. The control variables were entered into Model 2. More specifically, whether women were living with their assailants was added as a Level 1 time-varying covariate, and experimental condition was added as a Level 2 variable. Women's experiences of physical abuse and psychological abuse were added in the third and fourth models, respectively. The final model contained all aforementioned predictors, as well as economic abuse. The effects of abuse were fixed (i.e., not allowed to vary over time), as they were assumed to be similar across women, given the nature of the recruitment strategy used.

Results

Women's experiences of all forms of abuse markedly declined, on average, when comparing scores at subsequent time points with scores at T1. On the contrary, women's average perceived quality of life scores were higher at T2 and T3, when compared with T1. Means and standard deviations of physical, psychological, and economic abuse modeled at Level 1 and Level 2 are presented in Table 2. Following Table 2, results of each of the five sequentially nested models are presented.

Unconditional Model

The initial model containing both random intercept and slope terms revealed significant differences in the slope of time, signifying variation in change in quality of life over time from woman to woman ($p < .001$); therefore, the slope term was allowed to vary in all subsequent models. On average, across all women, significant linear change was detected in quality of life over time, with $\gamma = .09$ ($p < .001$). The results of each of the five sequentially nested models discussed are presented in Table 3.

Table 2
Descriptive Statistics of Model Variables

Model variables	Baseline ($N = 94$)		Time 2 ($n = 89$)		Time 3 ($n = 88$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Physical abuse	1.42	1.13	0.16	0.35	0.11	0.33
Psychological abuse	3.19	0.70	1.45	1.39	1.34	1.31
Economic abuse	1.91	0.97	0.45	0.65	0.43	0.69
Deviated physical abuse ^a	0.00	0.00	-1.25	1.14	-1.31	1.09
Deviated psychological abuse ^a	0.00	0.00	-1.78	1.46	-1.85	1.39
Deviated economic abuse ^a	0.00	0.00	-1.44	0.99	-1.47	0.96
Quality of life	3.79	1.23	4.21	1.21	4.16	1.40

^a Deviation scores reflect within-woman variation relative to Time 1. Mean deviation scores reflect the average change from Time 1 across all women.

Control Variables Model

The addition of two control variables, that is, whether women were living with their assailants modeled at Level 1 and experimental condition modeled at Level 2, significantly improved model fit over the initial, unconditional model (likelihood ratio [LR] $\chi^2(5) = 18.70$, $p < .01$). Experimental condition was not related to T1 quality of life ($\gamma = -.18$, *ns*) or to change in quality of life in this model ($\gamma = -.02$, *ns*) or in any model discussed hereafter. However, the time-varying effect of living with their assailants was significantly related to women's perceived quality of life over time ($\gamma = -.72$, $p < .01$) in this model and in all models hereafter. At times when women reported living with their assailants, quality of life scores were lower.

Physical Abuse Model

After the addition of physical abuse, model fit significantly improved over the previous model, with LR $\chi^2(3) = 8.46$, $p < .05$. Although the between-women effect of T1 physical abuse was not found to relate to T1 quality of life, when controlling for all other variables ($\gamma = -.03$, *ns*), it was negatively associated with change in quality of life over time ($\gamma = -.07$, $p < .01$). That is, a 1-unit increase in T1 physical abuse was associated with a 0.07-unit decrease in quality of life. In addition, the time-varying effects of physical abuse were found to negatively relate to change in quality of life over time ($\gamma = -.29$, $p < .01$). On average, a 1-unit increase in physical abuse, relative to women's T1 scores, was associated with a 0.29-unit decrease in quality of life.

Psychological Abuse Model

The addition of psychological abuse over and above the previous model marginally improved model fit, with LR $\chi^2(3) = 7.61$, $p = .054$. However, when controlling for all other variables, the between-women effect of variability in T1 psychological abuse was neither related to T1 quality of life ($\gamma = -.30$, *ns*) nor to change in quality of life over time ($\gamma = .01$, *ns*). Within-woman change in psychological abuse was also not related to change in quality of life over time ($\gamma = -.08$, *ns*). Worthy of mention is that the previous effect of T1 physical abuse on change in quality of life over time reduced to a trend ($p = .059$) in this model, and the previous significant time-varying effect of physical abuse on change in quality of life over time became nonsignificant ($p = .108$) with the addition of psychological abuse.

Economic Abuse Model

In the final model, the addition of economic abuse significantly improved model fit over and above the previous model, with LR $\chi^2(3) = 9.28$, $p < .05$. Contrary to Hypotheses 1 and 2, respectively, between-women effects of variability in T1 economic abuse were unrelated to T1 quality of life ($\gamma = -.20$, *ns*) or change in quality of life over time ($\gamma = -.05$, *ns*). As expected (Hypothesis 3), within-woman change in economic abuse was significantly negatively associated with change in quality of life over time ($\gamma = -.24$, $p < .05$). A 1-unit increase in economic abuse, relative to T1, was associated with a 0.24-unit decrease, on average, in perceived quality of life.

Table 3
Fixed and Random Effects and Model Comparisons for Sequentially Nested Models Predicting Quality of Life

Fixed effects	Unconditional		Controls		Physical abuse		Psychological abuse		Economic abuse	
	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE
Between-women effects on quality of life at baseline										
Average (intercept)	3.847***	0.124	4.025***	0.188	3.996***	0.188	3.982***	0.185	3.958***	0.184
Condition	—	—	-0.177	0.239	-0.185	0.239	-0.169	0.236	-0.140	0.234
Baseline physical abuse	—	—	—	—	-0.028	0.114	0.057	0.128	0.087	0.127
Baseline psychological abuse	—	—	—	—	—	—	-0.298	0.215	-0.200	0.237
Baseline economic abuse	—	—	—	—	—	—	—	—	-0.201	0.159
Between-women effects on the linear slope of quality of life										
Average (linear slope over time)	0.088***	0.023	0.099**	0.034	0.017	0.042	0.012	0.042	-0.010	0.043
Condition	—	—	-0.015	0.047	-0.015	0.047	-0.015	0.047	-0.014	0.048
Baseline physical abuse	—	—	—	—	-0.068**	0.025	-0.058 ^t	0.030	-0.032	0.034
Baseline psychological abuse	—	—	—	—	—	—	0.010	0.041	0.022	0.045
Baseline economic abuse	—	—	—	—	—	—	—	—	-0.046	0.030
Within-woman effects on change in quality of life over time										
Living with assailant	—	—	-0.722**	0.213	-0.747**	0.231	-0.720**	0.226	-0.721**	0.225
Physical abuse	—	—	—	—	-0.293**	0.107	-0.202	0.125	-0.066	0.146
Psychological abuse	—	—	—	—	—	—	-0.077	0.053	-0.030	0.061
Economic abuse	—	—	—	—	—	—	—	—	-0.239*	0.119
Random effects										
Intercept (baseline)	1.138	***	1.016	***	1.029	***	1.000	***	0.987	***
Slope	0.019	***	0.020	***	0.021	***	0.022	***	0.024	***
Level 1 residual variance	0.359	—	0.344	—	0.325	—	0.319	—	0.306	—
Model comparisons										
Likelihood ratio χ^2 difference test relative to previous model	—	—	18.698	**	8.460	*	7.607	^t	9.276	*

Note. $N = 271$ observations at Level 1; $N = 94$ participants at Level 2.
^t $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

The purpose of this study was to expand upon the literature linking IPV with psychological well-being by longitudinally examining the effects of economic abuse on survivors' perceived quality of life. After accounting for the effects of physical and psychological abuse, T1 economic abuse was not related to quality of life at T1 (Hypothesis 1) or to change in quality of life over time (Hypothesis 2); however, within-woman change in economic abuse was significantly related to change in quality of life over time (Hypothesis 3). In other words, relative to T1, at times when economic abuse was higher, quality of life was lower, and vice versa.

These findings indicate that economic abuse diminishes women's quality of life above and beyond the effects of physical and psychological abuse. Economic abuse involves interfering with employment, restricting access to money, dictating and monitoring spending, hiding financial information, and generating debt in their partner's name, among other tactics (Adams et al., 2008). The consequences for victims include having less money to meet basic needs, greater material hardship, and reduced financial self-sufficiency (Adams et al., 2008; 2015; Postmus et al., 2012). Stress process theory predicts that financial strain is a stressor that diminishes psychological well-being (Hoyt et al., 1997; Kahn & Pearlin, 2006; Pearlin et al., 1981; Price et al., 2002). Quality of

life is a dimension of psychological well-being that reflects individuals' subjective appraisal of how things are going in life. It makes sense that assailants' economically abusive actions and the financial insecurities that follow would weaken how survivors feel about their lives overall, particularly with regard to their personal safety, and opportunities for fun and enjoyment, independence and freedom, and accomplishments.

In addition to demonstrating a negative relationship between economic abuse and quality of life, above and beyond other forms of abuse, the findings suggest the effect of economic abuse on quality of life appears to be rather immediate. Economic abuse at the beginning of the study did not relate to quality of life 4 months later; however, over that 4-month period, at times when economic abuse was higher, women's perceived quality of life was lower, and vice versa. This finding may suggest that the effect of economic abuse diminishes over time. Conservation of resources (COR) theory is useful for interpreting this finding (Hobfoll, 1989, 2001; Hobfoll & Lilly, 1993). COR theory asserts that perceived resource loss is a key factor in psychological distress. The theory states that people strive to build and protect their resources, which may be objects (e.g., shelter, transportation), personal characteristics (e.g., sense of mastery, job skills), conditions (e.g., loving relationship, seniority in a job), and/or energies (e.g., money, credit, knowledge) that have instrumental or symbolic value. Psy-

chological stress is a reaction to acute and chronic stressful conditions that result in threatened or actual resource loss. Economically abusive partners create such conditions by actively restricting and depleting women's resources. It may be that when the economic abuse ends—that is, when one regains control over their own resources and their resources are no longer being drained by the abuser—the sense of threatened or actual resource loss stemming from the abuse subsides, improving psychological well-being. The material hardship and economic insecurity initiated by the economic abuse may continue, but the direct threat to one's psychological well-being may abate.

It is important to note that the lack of relationship between T1 economic abuse and quality of life 4 months later is inconsistent with previous research demonstrating a lasting impact of economic abuse on psychological well-being. Specifically, Postmus et al. (2012) found baseline economic abuse significantly contributed to depression 5 years later, after accounting for the effects of physical and psychological abuse. Stress process theory suggests that financial strain would be a key mediator of that relationship. It may be that economic abuse has immediate effects that taper off in the short term and then resurface as women deal with the ongoing economic hardship (e.g., damaged credit, job loss that results in housing instability) resulting from the abuse.

Limitations

The study findings need to be considered in light of the following limitations. First, the women in this study had all experienced physical violence at the hands of an intimate partner in the 4 months before the start of the study. Further, they were all seeking services for IPV. Caution should be used in generalizing the findings beyond populations that share these characteristics. Additional research is needed to examine the relationship between economic abuse and quality of life among other populations of survivors. Second, the modified CTS used in this study conceptualizes sexual violence in intimate relationships as a physical abuse tactic by assessing how many times one's partner forced sexual activity. Consequently, although this study accounted for sexual violence, its unique effect was not assessed. Future research should account for each form of abuse separately when investigating the effect of IPV on psychological well-being. Third, the study design does not allow us to determine temporal ordering of constructs within each time point. Therefore, the time-varying effects only provide evidence of an association between women's experience of economic abuse and quality of life within each time point. Although these longitudinal data did allow us to explore the relationship between these constructs as they varied together across time, a lagged design with a greater number of measurement points over a longer period would allow for testing the relationship between economic abuse at an earlier time point and quality of life at a subsequent time point.

Research Implications

The current study has several important implications for future research. This study demonstrates that economic abuse contributes to IPV survivors' psychological well-being beyond the effects of physical and psychological abuse. Research examining the psychological consequences of IPV would benefit from expanding the

operationalization of IPV to include a measure of economic abuse. The use of a comprehensive definition of IPV may allow researchers to more thoroughly understand the contribution of IPV to survivors' psychological well-being.

Further, among the growing body of research suggesting that economic abuse has negative consequences for survivors' psychological well-being, this is the first study to look beyond pernicious mental health symptomology to a global dimension of subjective well-being. The findings suggest that economic abuse has implications for survivors' quality of life. Future research should continue to include indicators of quality of life when examining psychological consequences of economic abuse.

Future research should also examine mediating mechanisms that explain the association between economic abuse and quality of life. For instance, stress process theory suggests the inclusion of indicators of financial strain and social support (Hoyt et al., 1997; Pearlin et al., 1981), and COR theory suggests examining the explanatory role of threatened or actual resource loss (Hobfoll, 1989). Such mediational research would significantly advance our understanding of and ability to intervene to diminish the effects of economic abuse on survivors' quality of life.

Finally, the study findings suggest an immediate rather than lasting effect of economic abuse on quality of life. Additional longitudinal research is needed to further explicate how the relationship between economic abuse and quality of life unfolds over time, as mentioned previously.

Clinical and Policy Implications

The study findings support the need to attend to economic abuse in practice to improve the psychological well-being of IPV survivors. The first step in addressing economic abuse is to assess for its occurrence. It is critical that practitioners talk with their clients about the ways their abusive partners are controlling their ability to access, use, and maintain economic resources. For instance, one may focus on whether the perpetrator is keeping her from working, restricting her access to money, dictating and monitoring spending, hiding financial information, or generating debt in her name. When economic abuse is occurring, practitioners and their clients must identify strategies to prevent and minimize the risk of further economic harm, as well as concrete steps to regain control over survivors' economic resources. Of course, it is paramount to carefully consider the implications of any actions that may compromise the survivor's safety. In other words, one should consider how the assailant might react upon discovering his partner stashed away cash, contacted the utility company to find out whose name the bill was in and if it was being paid, or put a freeze on her credit. In addition to engaging in economic safety planning in collaboration with the survivor, it is important to identify opportunities for financial relief. For instance, requests can be made in criminal and civil proceedings (e.g., divorce and protection orders) for restitution or damages for financial losses stemming from economic abuse.

In addition to identifying and addressing economic abuse at the individual level, intervention at the organizational level is necessary to mitigate its effects on women's quality of life. For instance, employers need to be educated about tactics of economic abuse that interfere with women's employment. This would foster an environment in which women feel safe to disclose their abuse and

can work with supportive personnel to develop strategies to safely maintain productivity and prevent the loss of employment. Also, financial institutions and utility companies could take steps to ensure that survivors' accounts are protected from abuser interference. Judges presiding over personal protection order hearings could play a significant role in mitigating the economic harm stemming from economic abuse by honoring survivors' requests for financial relief. Finally, police departments must respond to economic crimes within intimate relationships as they do to all economic crimes, regardless of the relationship between the victim and the perpetrator. The study findings suggest that responding to economic abuse in these ways could be helpful for survivors' psychological well-being.

In conclusion, economic abuse is a distinct form of violence that directly impacts survivors' quality of life. Our findings call attention to the need for future research to attend to economic abuse when investigating the psychological consequences of IPV as well as to use longitudinal methods to determine temporal ordering of constructs and identify mediators that explain how economic abuse impacts psychological well-being. Also, the current study suggests that individual- and organizational-level interventions focused on economic abuse may support the overall psychological well-being of survivors of IPV.

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Correction to Adams and Beeble (2019)

In the article “Intimate Partner Violence and Psychological Well-Being: Examining the Effect of Economic Abuse on Women’s Quality of Life,” by Adrienne E. Adams and Marisa L. Beeble (*Psychology of Violence*, 2019, Vol. 9, No. 5, pp. 517–525, <https://doi.org/10.1037/vio0000174>), due to an editorial production error, the final two sentences of the introductory paragraph were incorrect: “However, to our knowledge only two studies to date have explored the psychological consequences of economic abuse (citations), and both have examined the link between economic abuse and depression. ‘to’ Limited research has explored the psychological consequences of economic abuse (Antai, Oke, Braithwaite, & Lopez, 2014; Haj-Yahia, 2000; Postmus, Huang, & Mathisen-Sylianou, 2012; Voth Schrag, 2015).” These sentences have been corrected to read “Limited research has explored the psychological consequences of economic abuse (Antai, Oke, Braithwaite, & Lopez, 2014; Haj-Yahia, 2000; Postmus, Huang, & Mathisen-Sylianou, 2012; Voth Schrag, 2015). The current study seeks to expand our understanding of the effects of IPV on women’s general psychological well-being by empirically investigating the longitudinal effects of economic abuse on subjective quality of life.” The online version of this article has been corrected.

<https://doi.org/10.1037/vio0000379>