

# **“Testing and Validating Financial Measures with Intimate Partner Violence Survivors”**

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## Executive Summary

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This project builds on previous evaluations of the “*Moving Ahead Through Financial Management*” curriculum conducted by the Center on Violence Against Women and Children (VAWC) at Rutgers University, School of Social Work. Results showed that survivors in the experimental group had significantly higher scores in financial attitudes, financial literacy, economic self-efficacy, economic self-sufficiency, financial intentions, and financial behaviors than those in the control group, and these changes were statistically significant over time. The current project, *Testing and Validating Financial Measures with IPV Survivors*, used the data collected from that study and conducted further analyses to learn about the English and Spanish language scales used. The overall purpose of this project was first to analyze the measures used in the financial empowerment study (Phase I) and then validate the scales related to the financial experiences of women who have experienced intimate partner violence (IPV) with a new sample of both English and Spanish-speaking IPV survivors (Phase II).

During Phase I, between June 2018 and September 2018, the original data from the evaluation of the “*Moving Ahead Through Financial Management*” was re-analyzed by separately examining the Spanish and English samples, and the financial scales were revised and finalized in English and Spanish. These nine scales were:

1. Financial Knowledge Scale to determine survivors’ knowledge about financial management
2. Financial Management Attitudes Scale to determine survivors’ attitudes about financial management
3. Scale of Economic Self-Efficacy to determine survivors’ confidence in their financial management abilities
4. Scale of Financial Behaviors to determine survivors’ actual financial management behaviors
5. Scale of Financial Intentions to determine survivors’ intentions to perform particular financial behaviors
6. Scale of Economic Self-Sufficiency to determine survivors’ abilities to accomplish financial tasks
7. Financial Strain Survey to determine survivors’ strain in managing their financial health
8. Abusive Behavior Inventory to determine survivors’ experiences with physical, emotional, and sexual violence
9. Scale of Economic Abuse - 12 to determine survivors’ experiences with economic abuse

During Phase II, between November 2018 and January 2020, 425 women were recruited from seven agencies in New York, New Jersey, and Puerto Rico. Face-to-face individual interviews were used to administer a questionnaire with the nine financial and abuse scales. Of the final sample, eight participants were removed due to missing data, duplication, or experience of violence other than IPV, resulting in a final analytical sample of 417 women, of which 209 completed the questionnaire in English and 208 completed the questionnaire in Spanish.

Participants were on average 40 years of age, with a range from 20 to 76 years. Almost two-thirds (63%) identified as Latina or Hispanic, 21% identified as non-Hispanic Black, 6%

identified as non-Hispanic White, and 10% identified as Other. Almost half of participants (49.3%) answered “no” when asked if they were born in the U.S.; over two thirds (69.9%) of those had lived in the U.S. for five years or more. Additionally, most of the participants had children (89%). One-third of participants reported an annual household income of less than \$10,000 per year, resulting in most participants (69.1%) reporting that it was somewhat extremely difficult to live on their income. Finally, most of the participants (87.8%) were not currently in an abusive relationship.

A series of exploratory factor analyses (EFAs) and confirmatory factor analyses (CFAs) were conducted to validate the nine financial behavior and abuse scales in both languages. EFAs were conducted on scales that were significantly modified during Phase I (Financial Management Attitudes, Scale of Financial Behaviors, Scale of Financial Intentions, and Scale of Economic Self-Sufficiency). CFAs were conducted to validate the psychometric properties of scales that were not significantly changed during Phase I (Financial Knowledge Scale, Scale of Economic Self-Efficacy, Abusive Behavior Inventory, Scale of Economic Abuse-12, and Financial Strain Survey).

The final structure of the Spanish and English scales is as follows:

1. Financial Knowledge Scale: 15 items across four factors (knowledge about investing and long-term planning, knowledge about a partner or joint assets, knowledge about obtaining resources, and knowledge about credit)
2. Financial Management Attitudes Scale - R: 11 items across one factor
3. Scale of Economic Self-Efficacy: 10 items across one factor
4. Scale of Financial Intentions: 6 items across one factor
5. Scale of Financial Behaviors: 6 items across one factor
6. Scale of Economic Self-Sufficiency: 8 items across two factors (ability to have discretionary funds and ability to manage financial needs)
7. Financial Strain Survey - R: 18 items across three factors (health impacts, relationship impacts, and meeting obligations)
8. Abusive Behavior Inventory – R2: 25 items across three factors (psychological violence, physical violence, and sexual violence)
9. Scale of Economic Abuse - 12: 12 items across three factors (economic control, employment sabotage, and economic exploitation)

**Implications for Research.** The results of this analysis provide evidence that four of the scales are appropriate for use with English and Spanish-speaking survivors of IPV (Scale of Economic Self-Sufficiency, Financial Management Attitudes Scale, and the Scales of Financial Behaviors and Intentions). These four scales demonstrate an ability to measure the intended construct in both languages. The remainder of the scales demonstrate that language differences do not bias the results, but several items did not meet measurement equivalence across English and Spanish-speaking survivors of IPV. Several recommendations emerge as a result of this study:

- Conduct further research on the measurement equivalence (the degree to which the same construct is being measured across groups) of the Scale of Economic Self-Sufficiency,

Financial Management Attitudes Scale, and the Scales of Financial Behaviors and Intentions.

- Conduct further exploration of how IPV survivors' experiences might impact the interpretation of items that did not meet measurement equivalence or whether the non-equivalence of items is based on trivial differences in these scales (Financial Knowledge Scale, Scale of Economic Self-Efficacy, Financial Strain Survey, Abusive Behavior Inventory, and Scale of Economic Abuse).
- Due to the systematic differences in the items that did not meet measurement equivalence, researchers and practitioners should avoid mean comparison across the two groups until further analyses with these scales are conducted with a new sample of survivors of IPV.
- Replicate this study with English and Spanish-speaking survivors not receiving services from domestic violence organizations to determine if the measures are equally valid with a community sample.
- Develop and implement a study to examine what training and supports are needed to help domestic violence organizations utilize these measures. This effort could include a follow-up survey with agencies that participated in this project to find out which scales they have incorporated into their practice and how they are using these scales to meet survivors' needs.

**Implications for Policy and Practice.** Understanding the factors affecting the economic empowerment of survivors of IPV is vital because achieving economic autonomy could enable survivors to leave abusive relationships and avoid further victimization. Given the additional cultural and linguistic barriers faced by Spanish-speaking survivors in accessing social services, valid language-specific measures are crucial. Recommendations include:

- Engage in widescale dissemination of the validated scales to service providers of English and Spanish-speaking survivors of IPV.
- Train advocates and agency staff on how to use these tools to assess survivors' needs and how these tools can be used to assess the effectiveness of current programming in meeting survivors' needs. Ensure advocates and agency staff also recognize these tools' limitations, particularly that any change to the validated instrument means that the instrument is no longer considered validated until further testing is done.
- Train practitioners working with IPV survivors to implement economic empowerment interventions such as financial literacy programs and to assess survivors using these valid and reliable scales.
- Promote the inclusion of economic abuse in standard assessments of abuse experience, along with physical, emotional, and sexual abuse.

**Dissemination.** The results of this study will be widely disseminated to participating agencies and the research and practice communities. Participating agencies were provided with a research summary report of the results specific to their agency as well as aggregate results of the entire study. Additional dissemination strategies include:

- Submit peer-reviewed articles for publication in academic journals and present at academic conferences.

- Develop and publish “Research Briefs” for publication on VAWC’s website, as well as the websites of the lead authors’ academic institutions.
- Present the findings of the project to participating agencies.
- Develop and implement a social media campaign to increase the dissemination of the findings through visual abstracts, infographics, and similar easily sharable formats.

## Introduction

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Economic empowerment is a promising intervention to address intimate partner violence (IPV). Those experiencing IPV are often faced with financial burdens and are often economically dependent on their abusers, making them less likely to leave the abusive relationship, finalize restraining orders or prosecute. Recently, financial education programs have been developed and tested with survivors of IPV. However, only a few rigorous evaluations of economic empowerment interventions exist with survivors of IPV in the U.S. Of these interventions, none assessed the language and cultural differences among Spanish-speaking survivors, the most spoken non-English language in the U.S. This study tested and validated measures related to financial empowerment and partner violence with English and Spanish-speaking IPV survivors to address this gap.

## Background

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Economic empowerment is a collaborative process aimed at increasing one's financial self-sufficiency by equipping individuals with the knowledge, skills, and confidence to engage in personal finance management (Postmus, 2010). While economic empowerment programs vary in nature, they include credit counseling, women's matched savings accounts, and financial education programs (Sanders & Schnabel, 2006). Financial education programs, which provide knowledge on how to make informed short and long-term financial decisions, have been tested on a number of vulnerable populations, including individuals with low incomes (Zhan, Anderson, & Scott, 2006) and adolescents (Bernheim, Garrett, & Maki, 2001).

Recently, financial education programs have been developed and tested with survivors of IPV, as survivors are often faced with financial burdens and are often economically dependent on their abusers. However, few rigorous evaluations of economic empowerment interventions exist with survivors of IPV in the U.S. Only two financial literacy programs have had more rigorous evaluations on their effectiveness of increasing financial knowledge among IPV survivors. Sanders and colleagues conducted an evaluation of "*Redevelopment Opportunities for Women's Economic Action Program*," an economic education program implemented with survivors of IPV. Overall, findings from their quasi-experimental study found that while changes to financial literacy were not statistically significant after controlling for the length of the relationship between survivor and abuser, increases in self-efficacy persisted at statistically significant levels from pretest to posttest (Sanders, Weaver, & Schnabel, 2007).

In 2008, Postmus and colleagues conducted an initial evaluation of the "*Moving Ahead Through Financial Management*" program, created by The Allstate Foundation in partnership with the National Network to End Domestic Violence. As part of the study, 93 survivors across ten states were interviewed per protocol at three-time points over a one-year period. Overall, there were significant improvements in financial literacy, economic self-efficacy, and economic self-sufficiency resulting from participating in the program (Postmus & Plummer, 2010). In July 2011, Postmus and colleagues began a 14-month longitudinal, randomized control evaluation of the "*Moving Ahead Through Financial Management*" curriculum. Results showed that survivors in the experimental group had significantly higher scores in financial attitudes, financial literacy,

economic self-efficacy, economic self-sufficiency, financial intentions, and financial behaviors than those in the control group, and these changes were statistically significant over time (Postmus, Hetling, & Hoge, 2015).

As part of the “*Moving Ahead Through Financial Management*” curriculum evaluation, Postmus and colleagues relied on the Theory of Planned Behavior (TPB) (Ajzen & Fishbein, 1970; Fishbein & Ajzen, 2010) to provide a framework of which variables to examine when determining a change in financial behavior. According to the TPB, changes in behavior are contingent on an individual’s intention to engage in behavioral action. The intention is influenced by multiple factors, including knowledge, attitudes, self-efficacy, and normative beliefs about a particular behavior’s social acceptability. The TPB has been used to examine a range of behaviors in the field of IPV, including examining women’s intentions to leave abusive relationships (Byrne & Arias, 2004; Edwards, Gidycz, & Murphy, 2011) and abuser behaviors (Kernsmith, 2005).

In the randomized control evaluation of the financial education curriculum, Postmus and colleagues used a number of scales to capture all of the variables in the TPB. For example, they used existing financial scales such as the Financial Strain Survey (FSS) (Aldana & Liljenquist, 1998) and the Scale for Economic Self-Sufficiency (Gowdy & Pearlmutter, 1993). They also used the Scale of Economic Abuse – 12 (SEA-12) (Postmus, Plummer, & Stylianou, 2016) and the Abusive Behavior Inventory (ABI) (Shepard & Campbell, 1992) to capture different forms of abuse experiences. Other existing scales, used in the general population, were adapted for application to IPV survivors, including the Financial Management Attitudes Scale (Parrotta & Johnson, 1998) and the Scale of Economic Self-Efficacy (adapted from the General Self-Efficacy Scale – Schwarzer & Jerusalem, 1995). Three additional scales were created specifically for the study: 1) Financial Knowledge Scale; 2) Financial Intentions Scale; and 3) Financial Behaviors Scale.

All of the measures used in the “*Moving Ahead Through Financial Management*” study were translated into Spanish; the interviews were then conducted in English or Spanish. While measurement testing was conducted on these scales as part of the evaluation study, the scales were only tested on the entire sample with no separate analyses testing the validity of the Spanish translation or if cultural differences impacted the validity and reliability of these scales for Spanish-speaking women of different ethnicities and dialects. Thus, the overall goal of the *Testing and Validating Financial Measures with IPV Survivors* was to analyze further the measures used in the financial empowerment study and then validate these scales with a new sample of both English and Spanish-speaking IPV survivors.

The specific objectives of this project were to:

1. Test and revise financial and abuse scales which were pre-existing or adapted from scales used in the general population for use with IPV survivors in both English and Spanish utilizing a secondary dataset
2. Further test and validate measures analyzed as part of Objective One with a similar sample of IPV survivors in both English and Spanish to determine if these scales are appropriate for use with IPV populations.



The project consisted of two phases. The first objective was completed during Phase I, and the second objective during Phase II.

The research questions guiding this project were:

- 1) Do the seven financial measures and two abuse measures accurately measure the constructs they are intended to reflect for both English and Spanish-speaking survivors of IPV?
- 2) Do these nine scales prove to be valid and reliable financial and abuse measures for both English and Spanish-speaking survivors of IPV when tested with a new sample?

## Literature Review

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### CONCEPTUALIZING EMPOWERMENT

While extensive research has been done on the concept of empowerment, there has yet to be a consensus on how it should be defined and foster amongst oppressed groups. For example, in 1984, Rappaport defined empowerment as “the mechanism by which people, organizations, and communities gain mastery over their lives” (p. 3). In 1990, Gutierrez suggested that “empowerment is a process of increasing personal, interpersonal, or political power so that individuals can take action to improve their life situations” (p. 149). Zimmerman (1995) expanded on these conceptualizations by developing a nomological network for psychological empowerment (i.e., empowerment at the individual level). He identified three primary components to empowerment: 1) intrapersonal, 2) interactional, and 3) behavioral.

One current issue in the study of empowerment is the inconsistent language being used to describe it. For instance, Zimmerman (1995) refers to the intrapersonal component, including self-efficacy, motivation, competence, and mastery. However, other scholars have also included self-esteem and a sense of causal importance as central elements of empowerment (Kieffer, 1984). Zimmerman’s (1995) interactional component includes critical awareness, skill development, resource mobilization, and understanding causal agents. Others have discussed similar concepts such as consciousness-raising (Mitchell, 1975) and critical consciousness (Freire, 2005). Lastly, the behavioral component of Zimmerman’s (1995) nomological network refers to actions taken to achieve a particular goal. Christens (2012) builds on Zimmerman’s nomological model for psychological empowerment but includes a relational component to incorporate the more communal nature of empowerment. In contrast, Prilleltensky and Gonick (1994) suggest three different empowerment pillars: self-determination, distributive justice, and collaborative and democratic participation.

In addition to the lack of consistent language used in empowerment literature, there is also some debate as to whether empowerment is a process, a goal, or a form of intervention (Gutierrez, DeLois, & GlenMaye, 1995). As a process, empowerment is a “mechanism” in which individuals are given the tools to utilize their personal competencies. It is not possible to specify what exactly the mechanism of empowerment entails because it looks so different across diverse

populations (Rappaport, 1984). Cattaneo and Chapman (2010) describe the empowerment process as “...an iterative process in which a person who lacks power sets a personally meaningful goal-oriented toward increasing power, takes action toward the goal, and observes and reflects on the impact of this action, drawing on his or her evolving self-efficacy, knowledge, and competence related to the goal” (p. 647). As an outcome or goal, empowerment can be viewed as the oppressed individual’s acquisition of power (Riger, 1993), control over resources (Rappaport, 1984), or their life (McWhirter, 1991). One criticism that has emerged in the empowerment literature is its focus on individual outcomes, such as mastery of a task, rather than collaboration and community, which are both viewed as more feminine ideals (Riger, 1993). Finally, empowerment is sometimes described as an intervention (Gutierrez et al., 1995). As part of the feminist movement, organizations have strived to empower individuals by providing services designed to reduce the impact of social issues (Riger, 1993). Kasturirangan (2008) cautions that these programs should reflect the priorities of the populations they serve, rather than those set by the organization, to ensure that individuals feel in control of their lives.

These diverse conceptualizations of empowerment pose a number of issues for both research and program implementation. Because empowerment is defined and conceptualized differently throughout the literature, it is difficult for researchers to draw broader implications for studies in this area (Cattaneo & Goodman, 2015). There is also a lack of clarity with regard to how to operationalize empowerment and whether it should be measured as an independent or an outcome variable (Cattaneo & Chapman, 2010; Cattaneo & Goodman, 2015). In terms of program implementation, service providers cannot effectively incorporate empowerment into their services if there is no consistent definition of empowerment, methods to empower individuals, or outcome measurements. Gutierrez and colleagues (1995) interviewed service providers about their understanding of empowerment and found that both definitions of empowerment and practice methods varied. Service providers generally conceptualized empowerment in terms of individual change; a problem since empowerment at the individual level does not necessarily equate to larger societal shifts in power.

## EMPOWERMENT EFFECTING CHANGE

Given the limitations to both the conceptualization and operationalization of empowerment, it is surprising that so few researchers have utilized the Theory of Planned Behavior (TPB) to model empowerment. A gap in current discussions of empowerment exists in determining how exactly the proposed components of empowerment work together to effect change. The TPB fills this gap, as it provides a conceptual model on behavioral change. According to the TPB, multiple factors come together to influence changes in one’s behavior (Fishbein & Ajzen, 2010). These factors include attitude, knowledge, and intentions, as well as preconceived beliefs associated with the behavior, the necessary skills to engage in a behavior, and self-efficacy (Postmus et al., 2015). These elements mirror those within the empowerment literature but provide a conceptual model to guide the process.

According to the TPB, changes in behavior are contingent on an individual’s intention to engage in a behavioral action (Ajzen & Fishbein, 1970). The intention is influenced by multiple factors, including knowledge, attitudes, self-efficacy, and normative beliefs about the social acceptability of a particular behavior (Ajzen & Fishbein, 1970). The TPB has been used to examine a range of

behaviors in the field of IPV, including women’s intentions to leave abusive relationships (Byrne & Arias, 2004; Edwards et al., 2011) and abuser behaviors (Kernsmith, 2005). In addition, TPB has been used to evaluate whether a financial knowledge curriculum was effective in empowering survivors of IPV (Postmus et al., 2015).

## IPV SURVIVORS’ NEED FOR ECONOMIC EMPOWERMENT

Perpetrators of IPV may use a range of tactics to maintain coercive control over their partners, including psychological, physical, sexual, and financial abuse (Stark, 2007). Researchers have identified three distinct forms of financial abuse: 1) economic exploitation (e.g., depleting the survivor of funds, damaging survivor’s credit history); 2) economic control (e.g., monitoring the survivor’s use of funds, limiting access to funds); and 3) employment sabotage (e.g., deliberately jeopardizing survivor’s job, restricting access to employment opportunities) (Stylianou, Postmus, & McMahon, 2013; Brush, 2011). In addition to these, abusers may also sabotage survivors’ access to public assistance by using violence to prevent women’s compliance with welfare requirements or conditioning child support payments on certain behaviors, such as child visitation (Brush, 2011).

Survivors may also become economically dependent on their abuser as a direct consequence of the abuse they experience. While the results of financial abuse greatly diminish a survivor’s financial security, other forms of abuse may do so as well. For example, IPV is associated with a range of health risks, which include physical injury (Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008), mental health issues (Bonomi, Thompson, Anderson, Reid, Carrell, Dimer, & Rivara, 2006; Bonomi, Anderson, Reid, Rivara, Carrell, & Thompson, 2009), chronic illness (Coker, Davis, Arias, Desai, Sanderson, Brandt, & Smith, 2002), and sexually transmitted infections (Campbell, 2002). These health issues may interfere with a survivor’s ability to find or maintain employment (Moe & Bell, 2004). In fact, survivors of IPV lose approximately eight million paid workdays per year as a result of their abuse experiences (Centers for Disease Control and Prevention, 2003).

The impact of IPV also increases the financial burden placed on women. It is already well documented that women are a vulnerable population, as illustrated by the “feminization of poverty.” Female-headed families are more likely than two-parent families to be poor (United States Bureau of the Census, 2018). In 2015, the poverty rate for female-headed households (36.5%) was almost five times that of two-parent families (7.5%). Despite significant changes in children’s living arrangements after divorce, women are still more likely than men to have custody of their children following separation (Cancian, Meyer, Brown, & Cook, 2014). The U.S. welfare system and labor market structure has continued to leave women in a precarious situation. The employment sector is largely sex-segregated, so even when women seek employment, they are not competing with men (Pierson, 1997). There is a great lifetime wage penalty for women due to absence from work for caregiving responsibilities; women may even lose employment opportunities or promotions because of it (Orloff, 2009).

IPV further exacerbates women’s preexisting vulnerability. As a result of IPV, women are more likely to face job insecurity or unemployment (Raphael, 2000; Moe & Bell, 2004; Hahn & Postmus, 2014). Shepard and Pence (1988) found that survivors in their sample often lost their

jobs as a result of absences, tardiness, and poor work performance, all as a result of their abusive experiences. In addition, Moe and Bell (2004) found that physical injuries and mental health issues resulting from the abuse often posed challenges to survivors maintaining involvement in the workforce. Notably, the impact of IPV may leave women financially insecure for years, even after the abusive relationship has ended (Voth Schrag, 2015).

Housing stability is also a significant concern for survivors of IPV. IPV is a primary cause of homelessness among women (NOW Legal Defense and Education Fund, 2002). Approximately one-fourth to one-half of IPV survivors report housing issues when attempting to leave an abusive relationship (Baker, Cook, & Norris, 2003). Housing insecurity is another factor that impacts a survivors' ability to work (NOW Legal Defense and Education Fund, 2002).

Immigrant women in abusive relationships have an additional layer of challenges that may keep them dependent on their abuser. Additional barriers to help-seeking include a lack of English proficiency, difficulties securing employment or accessing public assistance due to immigration status, and isolation due to relocation, which exacerbate victim dependency on their abuser (Erez, Adelman, & Gregory, 2009). Normative beliefs about the social acceptability of IPV in their country of origin may also hinder an immigrant's ability to seek help in the United States (Raj & Silverman, 2002). Moreover, these women may also come from impoverished backgrounds, have low education, and lack a clear understanding of the U.S. financial system, which leaves them at risk for exploitation (Postmus, 2010).

Notably, certain populations, such as Hispanic/Latina survivors, are at greater risk for the negative impacts of IPV and less likely to access needed resources (Lipsky, Caetano, Field, & Larkin, 2006), highlighting the need for culturally and linguistically appropriate measures and interventions. While economic empowerment interventions are widely used globally to address gender inequality, such interventions are used much less frequently in the U.S (Buvinic & Furst-Nichols, 2016; Kim, 2012).

## ECONOMIC EMPOWERMENT INTERVENTIONS: FINANCIAL LITERACY PROGRAMS AND VALID MEASURES

Interventions that focus on economic empowerment are beginning to emerge in the field of IPV to address the consequences of violence and avoid re-victimization. One way in which service providers have strived to empower survivors of IPV is through financial literacy programs. The U.S. Government Accountability Office defines financial literacy as “the ability to make informed judgments and to take effective actions regarding current and future use and management of money” (Dodaro, 2011, p. 2). As such, financial literacy programs geared towards survivors of IPV often focus on providing survivors with the knowledge and skills needed to navigate financial barriers that arise as a result of their IPV experiences (Peled & Krigel, 2016). For example, the “*Moving Ahead Through Financial Management*” curriculum includes information on how to deal with the misuse of financial records, day-to-day financial planning, and how to protect one's finances upon leaving an abusive relationship (Allstate Foundation & NNEDV, 2009). Similarly, the “*Realizing Your Economic Action Plan*” curriculum includes information on basic financial skills such as establishing good credit and making investments (Sanders et al., 2007).

Given that the ultimate goal of financial knowledge curriculums is to make informed decisions and encourage smart financial actions, Postmus and colleagues (2015) utilized the Theory of Planned Behavior to evaluate the “*Moving Ahead Through Financial Empowerment*” curriculum. Results of their evaluation showed that survivors in the experimental group had significantly higher scores in financial attitudes, financial literacy, economic self-efficacy, economic self-sufficiency, financial intentions, and financial behaviors than those in the control group, and these changes were statistically significant over time (Postmus et al., 2015). To measure both the empowerment process and outcomes, Postmus et al. (2015) adapted four financial scales being used in the general population for application to IPV survivors and developed another three. The developed scales mirror the processes proposed by the TPB. Postmus and colleagues also used two abuse measures to capture participants’ experiences with physical, emotional, psychological, and financial abuse (Scale of Economic Abuse-12; Postmus et al., 2015). The scales used are:

- 1) Financial Knowledge Scale
- 2) Financial Management Attitudes Scale
- 3) Scale of Economic Self-Efficacy
- 4) Financial Strain Survey
- 5) Scale of Financial Intentions
- 6) Scale of Financial Behaviors
- 7) Scale of Economic Self-Sufficiency
- 8) Abusive Behavior Inventory
- 9) Scale of Economic Abuse -12

While measurement testing was conducted on these scales as part of their evaluation study, the scales were tested with both the English and Spanish-speaking participant responses together. The *Testing and Validating Financial Measures with IPV Survivors* further analyzed these financial scales with English and Spanish-speaking IPV survivors separately using secondary data, as well as primary data collection methods. Given the additional cultural and linguistic barriers faced by Hispanic/Latina survivors in accessing social services (Lipsky et al., 2006), valid language-specific measures are crucial to minimizing barriers to service use.

## Methodology

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This study was conducted in two phases to address each of its objectives and achieve its goal. Phase I addressed Objective One – Test and revise pre-existing or adapted financial and abuse scales used in the general population for use with IPV survivors in both English and Spanish utilizing a secondary dataset. Phase II addressed Objective Two – Test and validate measures that were analyzed as part of Objective One with a similar sample of IPV survivors in both English and Spanish. Approval from the Institutional Review Board (IRB) at Rutgers University was received to ensure participants' protection.

## PHASE I – TEST AND REVISE PRE-EXISTING OR ADAPTED FINANCIAL AND ABUSE SCALES USED IN THE GENERAL POPULATION WITH IPV SURVIVORS IN BOTH ENGLISH AND SPANISH UTILIZING A SECONDARY DATASET

### Sample

Data from the “*Moving Ahead Through Financial Management*” curriculum program evaluation (hereinafter referred to as the parent study) was used during this phase. The parent study recruited IPV survivors from 14 domestic violence organizations across six states and Puerto Rico. The six states included New Jersey (3 agencies), New York (2 agencies), Connecticut (1 agency), Rhode Island (1 agency), Wisconsin (1 agency), Iowa (2 agencies), and Texas (2 agencies); Puerto Rico was also included as a seventh location (2 agencies). Eligibility criteria were participants must have received services for at least one month but less than six months from a partnering domestic violence organization, be female over the age of 18 and have experienced at least one form of partner violence in the previous 12 months. Women who received any financial education in the preceding 24 months were ineligible to participate.

Eligible participants were assigned to either an experimental group (receiving advocacy services and the “*Moving Ahead Through Financial Management*” curriculum during group and individual sessions) or a control group (receiving advocacy services only). A total of 456 women completed the first round of interviews (T1); 252 in English and 204 in Spanish. Additional follow-up interviews were completed at two months (T2), eight months (T3), and fourteen months (T4) following the original interview. For this current study, *Testing and Validating Financial Measures with IPV Survivors*, only data collected at T1 was used to validate all nine English and Spanish measures because the interviews happened before the intervention of the economic empowerment curriculum.

Since there were several states and Puerto Rico with large contingents of Spanish-speaking IPV survivors seeking services, all materials used in the parent study (e.g., survey instrument, consent forms) were translated into Spanish. First, a Puerto Rican social work researcher who studies IPV among Latina populations translated the scales. However, while Spanish-speaking samples are put together under a “Latina” umbrella, the Spanish language spoken and communicated differs depending on the specific country of origin. Several research assistants, with varying Latina backgrounds representing Mexico and countries in South America, reviewed the scales during the parent study to address such concerns. Additionally, bilingual interviewers were hired to assist with data collection. For more information about the parent study methods, refer to Postmus, Hetling, and Hoge (2013).

### Participants

In the parent study, participants from T1 ( $n=456$ ) ranged in age from 18 to 62 years of age with an average age of 36. More than half (53.8%) of the participants identified as Latina or Hispanic; 20% identified as non-Hispanic, Black. Less than 10% identified as “other” (i.e., Asian, Multi-ethnic), and 17.6% identified as non-Hispanic, White. Over 45% answered “no” when asked if they were born in the U.S.; 90% of those ( $n=195$ ) had lived in the U.S. for five years or more.

Additionally, most participants (84.7%) made less than \$25,000 in the past year for their entire household, resulting in most participants (78.9%) reporting that it was somewhat difficult to extremely difficult to live on their income. Finally, most of the participants (79.9%) were not currently in an abusive relationship.

### **Analytical Approach**

The current study conducted exploratory factor analysis (EFA) with each of the nine scales with the English and Spanish-speaking samples separately using SPSS statistical software. Following Tabachnick and Fidell's (2007) guidelines, we determined that the data was appropriate to conduct EFAs. We also examined the data for outliers and intercorrelations between items on the scales. Items that were not significantly correlated with at least half of the other scale items (Field, 2013) were flagged for removal from subsequent analyses. We used the Kaiser–Meyer–Olkin measure of sampling adequacy and the determinant of the correlation matrix for each scale to ensure no problems with multicollinearity existed (Field, 2013; Tabachnick & Fidell, 2007). We conducted EFAs with maximum likelihood estimation and oblimin rotation in order to determine the underlying structure of each scale (Costello & Osborne, 2005). We examined the scree plot for each scale to determine the number of factors to extract. Factor loadings were examined to identify problematic items. We retained items that loaded onto a factor at .30 or higher and removed items that cross-loaded onto two or more factors at .30 or higher. The EFA process was repeated until we obtained a scale in which each item loaded onto exactly one factor at .30 or higher.

In some cases, where the EFA process indicated differences between the English and Spanish language scales, we consulted with a Spanish language consultant and a native-Spanish speaker researcher. These consultations determined how to rephrase items, in either Spanish or English, to ensure that the scales' language and structure matched. All of the scales were reviewed for language accuracy and semantics, and changes were made accordingly. The analytical process to achieve Objective One was completed between June 2018 and September 2018. The results of these validations were used during Phase II of the *Testing and Validating Financial Measures with IPV Survivors* study.

### **PHASE II – TEST AND VALIDATE MEASURES THAT WERE ANALYZED AS PART OF OBJECTIVE ONE WITH A SIMILAR SAMPLE OF IPV SURVIVORS IN BOTH ENGLISH AND SPANISH**

#### **Sample**

Participants were recruited from domestic violence organizations across New Jersey (2 agencies), New York (2 agencies), and Puerto Rico (3 agencies). Recruitment took place from November 2018 to January 2020. The eligibility criteria to participate in the study mirrored those of the parent study: namely, being female, 18 years old or older, having experienced IPV in the last 12 months, having received services from the recruiting organization for less than six months, and not having received financial education services in the previous 24 months. Participants who were in crisis were not eligible for the study.

IPV survivors were invited to participate in a one-time interview using a range of outreach measures, including flyers posted at the participating organization, announcements made at group sessions, and case managers informing individual clients of the study. Interviews were conducted either face-to-face or over the phone at a time most convenient for the participant. A structured questionnaire in the participant's preferred language, English or Spanish, was used. Interviews lasted approximately one hour. Participants received a \$30.00 compensation for their time in cash or using a secure mobile transfer. Interviewers were trained in trauma-informed interviewing, and those who were conducting interviews with Spanish-speaking participants also received cultural-sensitive training. All methods were approved by the Rutgers University Institutional Review Board and the National Institute of Justice's Human Subjects Protection Officer. Before starting data collection, the study protocol and interview questions in both languages were shared with participating agencies. The purpose of sharing the study materials was to strengthen the relationship between the research team and participating agencies and ensure the protection of participants.

Interviewers assigned to the Spanish language interviews were fully bilingual, and almost all were bicultural. A total of 425 interviews were conducted. However, five cases were removed due to missing responses, two were removed because of duplicity, and one was removed because the abuse experienced was not from an intimate partner. The total analytical sample consists of 417 interviews; 209 in English and 208 in Spanish.

## **Participants**

Participants ranged in age from 20 to 76 years of age, with an average age of 40. More than half (63%) of the participants identified as Latina or Hispanic; 21% identified as non-Hispanic, Black. Figure 2 displays more information on participants' age and racial and ethnic background. Almost half (49.3%) answered "no" when asked if they were born in the U.S.; more than two-thirds (69.9%) of those ( $n=144$ ) had lived in the U.S. for five years or more. Additionally, most participants (89%) had children. One-third of participants reported an annual income of less than \$10,000 in the past year for their entire household, resulting in many participants (69.1%) reporting that it was somewhat difficult to extremely difficult to live on their income. Finally, most of the participants (87.8%) were not currently in an abusive relationship.



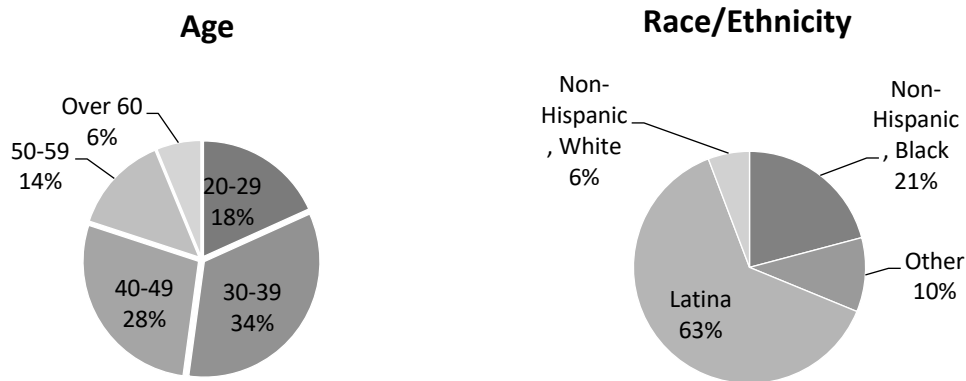


Figure 2. Participants' age and racial/ethnic background.

### Analytical Approach

The nine financial and abuse scales were further analyzed and validated. EFAs were conducted for the scales that were modified significantly during Phase I: Financial Management Attitudes, Scale of Financial Behaviors, and Scale of Financial Intentions. We used EFAs to assess whether the changes made during Phase I affected the factor structure of these scales (Worthington & Whittaker, 2006). Additionally, we conducted an EFA for the Scale of Economic Self-Sufficiency after results from the multigroup confirmatory factor analysis (MGCFA) indicated that the model was not a good fit for the data. The analytical procedure described in Phase I of this study was used for these four scales.

Confirmatory Factor Analysis (CFA) was conducted to validate the factor structure of the scales that were not significantly changed during Phase I: Financial Knowledge Scale, Scale of Economic Self-Efficacy, the Abusive Behavior Inventory, Scale of Economic Abuse-12, and the Financial Strain Survey. We conducted MGCFA to test the measurement equivalence between the English and Spanish language scales. AMOS statistical software was used to conduct MGCFA.

The data were conditioned for the analytical process. Outliers were removed, and we followed Roth's (1994) guidelines to determine the handling of missing data. Accordingly, if 5 percent or less of cases had missing data, we employed listwise data deletion. Conversely, if more than 5% of cases were missing, we used imputation procedures. The fit of the proposed model was evaluated using several model fit indices. We did not rely on the chi-square statistic because it is highly sensitive to sample size. We instead followed Hu and Bentler's (1999) guidelines by using a combinational approach (i.e., more than one fit index) to evaluate model fit. We used the following criteria to determine an acceptable model fit: the Tucker-Lewis Index (TLI) and comparative fit index (CFI) greater than or equal to .95, and the root mean square error of approximation (RMSEA) less than .06 (Hu & Bentler, 1999). Any scale that did not meet these criteria was further examined using modification indices. We made modifications that were theoretically justified (e.g., allowing correlated residual errors for items with similar wording). If the model did not provide an acceptable fit after theoretically-justified modifications were made, we conducted an EFA using the procedures outlined for Phase I.

Next, we tested for measurement invariance between the English and Spanish-speaking samples. Measurement invariance indicates that the same underlying constructs are being measured across two different samples. We followed the steps recommended by Reise, Widaman, and Pugh (1993) and Kline (2011) to test for measurement invariance by specifying increasingly restrictive models. To assess whether a more restrictive model fit the data equally or better than a less constrained model, we compared their fit indices. Changes in fit statistics of  $-.01$  or less in CFI and TLI or  $+.01$  or less in RSMEA indicated measurement equivalence (Vandenberg & Lance, 2000).

We first tested for configural invariance, in which the factor structure is the same for both samples, but the parameter estimates are free to vary between samples. In other words, we examined whether the same items load onto the same factors for both the English and Spanish samples but did not force the factor loadings to be equal between the samples (Reise et al., 1993; van de Schoot, Lugtig, & Hox, 2012). Metric invariance was assessed next. Achieving metric invariance indicates that the factor structure and the factor loadings are the same across groups. If metric invariance is established, then it is acceptable to compare variances and covariances between groups. If metric invariance was not achieved, we tested for partial invariance by freeing parameters sequentially according to the magnitude of their difference between the English and Spanish-speaking samples. Parameters were freed one at a time until partial metric invariance was achieved. This procedure allowed us to determine which items or factors differed between the two samples. Items or factors that differed between the two groups may have different cultural meanings. We then tested for scalar invariance. Scalar invariance indicates that the factor structure, factor loadings, and item intercepts are the same for both samples. Scalar invariance indicates that it is acceptable to compare means between groups. Finally, we constrained the item residuals to be equivalent for the two groups to examine whether specific variance and error variance were similar across them.

## Results

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This section presents results from the analyses conducted during Phase I and Phase II. Results are presented by scale. First, we provide information about the original development of the scale and then provide the results from Phase I and Phase II of this project. The final scales in English and Spanish are presented in the Appendix section.

### FINANCIAL KNOWLEDGE SCALE

Individuals' perceived financial knowledge was measured using the Financial Knowledge Scale (Postmus & Plummer, 2010) developed during the pilot study prior to the parent study. The original scale contained 51 items based on the "*Moving Ahead Through Financial Management*" curriculum. The scale was reduced to 17 and then to 15 items after Postmus and colleagues (2013) conducted EFAs after the second study. Response options ranged from 1 (strongly disagree) to 5 (strongly agree) on a five-point Likert scale. The final 15 items make up four subscales: Knowledge about Credit (5 items,  $\alpha = .887$ ), Knowledge about Obtaining Resources (4 items,  $\alpha = .68$ ), Knowledge about Investing and Long Term Planning (4 items,  $\alpha = .85$ ), and

Knowledge about Partner or Joint Assets (2 items,  $\alpha = .88$ ). The overall scale (15 items) had a Cronbach’s alpha of .896.

**Phase I**

During Phase I of this project, the Financial Knowledge Scale was tested with English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. The analyses included all of the 17-items used in the pilot study prior to the parent study. After performing EFAs, two items were dropped in the English language scale and five items in the Spanish language scale. Table 1 and Table 2 present pattern matrix loadings of the initially retained items. After discussing results with the Spanish language consultant and reviewing dropped items content, it was determined to retain the same items for English and Spanish-speaking populations, resulting in a 15-item scale with four subscales for the English and Spanish language scale. Table 3 shows the final items retained for further testing. No semantics changes were made after reviewing the scales for language accuracy.

**Table 1. Pattern Matrix Loadings on the English Language Financial Knowledge Scale**

	Factor 1: Knowledge about Credit	Factor 2: Knowledge about Obtaining Resources	Factor 3: Knowledge about Investing and Long Term Planning	Factor 4: Knowledge about Partner or Joint Assets
I know how to understand my credit report and credit history.	.800			
I know how to improve my credit rating.	.727			
I know how to access my credit card report.	.708			
I know how to create a budget.	.695			
I know how to create financial goals.	.642			
I know how to get legal assistance in my community (legal aid, restraining orders, etc.)		.719		
I know how to get the resources that are available in my community to help me leave my abuser (emergency shelter, hotline, etc.)		.576		
I know how to get public assistance benefits (TANF, food stamps, etc.)		.546		
I know how to create a financial safety plan (obtaining health records, obtaining IDs, etc.)		.438		
I know how to plan for my estate (such as planning a will or a trust fund.)			.859	
I know how to plan for retirement and the different types of plans available.			.837	

I know how to invest my savings through things like savings bonds, mutual funds, and stocks.	.587	
I know about community programs such as IDA's (Individual Development Accounts) and EITC's (federal and state earned-income-tax credits) that can help me with my financial goals.	.500	
I know how to identify joint or combined financial responsibilities and assets (savings accounts, property, etc.)		-.960
I know how to identify my partner's assets (savings accounts, property, etc.) and financial responsibilities (debt).		-.783

**Table 2. Pattern Matrix Loadings on the Spanish Language Financial Knowledge Scale**

	Factor 1: Knowledge about Investing and Long Term Planning	Factor 2: Knowledge about Partner or Joint Assets	Factor 3: Knowledge about Obtaining Resources	Factor 4: Knowledge about Credit
I know how to plan for retirement and the different types of plans available.	.922			
I know how to plan for my estate (such as planning a will or a trust fund.)	.787			
I know about community programs such as IDA's (Individual Development Accounts) and EITC's (federal and state earned-income-tax credits) that can help me with my financial goals.	.645			
I know how to invest my savings through things like savings bonds, mutual funds, and stocks.	.628			
I know how to identify my partner's assets (savings accounts, property, etc.) and financial responsibilities (debt).		-.935		
I know how to identify joint or combined financial responsibilities and assets (savings accounts, property, etc.)		-.916		
I know how to get the resources that are available in my community to help me leave my abuser (emergency shelter, hotline, etc.)			.791	
I know how to get legal assistance in my community (legal aid, restraining orders, etc.)			.629	

I know how to get public assistance benefits (TANF, food stamps, etc.)	.448
I know how to access my credit card report.	-.912
I know how to understand my credit report and credit history.	-.805
I know how to improve my credit rating.	-.682

**Table 3. Final Financial Knowledge Scale Used in Phase II**

For the following questions, please respond by how strongly you agree or disagree. *Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.*

1. I know how to access my credit report.
2. I know how to get public assistance benefits (TANF, food stamps, etc.).
3. I know about community programs such as IDAs (Individual Development Accounts) and EITCs (Federal and State Earned-Income Tax Credit) that can help me with my financial goals.
4. I know how to understand my credit report and credit history.
5. I know how to create a budget.
6. I know how to plan for my estate (such as creating a will or a trust fund).
7. I know how to create a financial safety plan (having access to money or other resources, having copies of important documents, etc.).
8. I know how to create financial goals.
9. I know how to get legal assistance in my community (legal aid, restraining orders, etc.).
10. I know how to plan for retirement and the different types of plans available.
11. I know how to improve my credit rating.
12. I know how to identify joint or combined financial responsibilities and assets (savings accounts, property, etc.).
13. I know how to invest my savings through things like savings bonds, mutual funds, and stocks.
14. I know how to identify my partner’s assets (saving accounts, property, etc.) and financial responsibilities (debt).
15. I know how to get the resources that are available in my community to help me leave my abuser (emergency shelter, hotline, etc.).

**Phase II**

The Financial Knowledge scale was then tested for measurement invariance with the new sample, or the degree to which it measures the same construct, across English and Spanish-speaking IPV survivors. The series of nested MGCFAs with increasingly restrictive set of parameters indicates that measurement equivalence was achieved across the two groups. Table 4 displays model fit statistics for the CFAs.

Results from the single group CFA suggested a less than optimal fit to the data. Modification indices, along with a review of the content of the items, were assessed to improve the model fit. It was determined appropriate to correlate two error terms, improving the model fit. The configural model results indicated that the four-factor scale structure is supported across English and Spanish-speaking IPV survivors. The metric invariance test demonstrated the equivalence of the factor loadings across the two groups. Partial scalar invariance was established, indicating that a difference in the latent construct caused the difference in the means of ten items across the

two groups. Residual invariance was achieved, indicating that error variance was similar across groups. Correlated items and items that did not meet scalar invariance are shown in Table 5.

**Table 4. Confirmatory Factor Analysis of Measurement Invariance Tests for English and Spanish-speaking IPV Survivors**

	$X^2$	$df$	p-Value	CFI	$\Delta$ CFI	TLI	$\Delta$ TLI	RMSEA	$\Delta$ RMSEA
Single-group CFA	460.82	84	<.001	0.874		0.842		0.104	
Configural invariance	451.68	164	<.001	0.903		0.876		0.065	
Metric invariance	478.36	175	<.001	0.898	0.005	0.878	0.002	0.065	–
Scalar invariance	509.72	185	<.001	0.891	0.007	0.876	0.002	0.065	–
Residual invariance	549.01	197	<.001	0.882	0.009	0.874	0.002	0.066	0.001

*Note.*  $Df$  = degree of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

**Table 5. Correlated Items and Items Not Meeting Invariance**

<i>Error terms correlated</i>
Item 1: I know how to access my credit card report correlated with Item 4: I know how to understand my credit report and credit history
Item 5: I know how to create a budget correlated with Item 8 I know how to create financial goals.
<i>Items non-equivalent at the scalar level</i>
Item 1: I know how to access my credit card report
Item 3: I know about community programs such as IDAs (Individual Development Accounts) and EITCs (Federal and State Earned-Income Tax Credit) that can help me with my financial goals.
Item 4: I know how to understand my credit report and credit history
Item 8: I know how to create financial goals.
Item 11: I know how to improve my credit rating.

The final Financial Knowledge Scale in English and Spanish languages remains the same as the one identified after Phase I (Table 3). All of the questions listed in Table 5 are still included in the Financial Knowledge scale. Refer to the Appendix to see the final measure in English and Spanish.

## FINANCIAL MANAGEMENT ATTITUDES SCALE

The Financial Management Attitudes Scale (Parrotta & Johnson, 1998) was used to measure financial attitudes. While developing this 15-item scale, Parrotta and Johnson combined items from previously existing scales (Godwin, 1994; Godwin & Carroll, 1986; Godwin & Koonce, 1992). Previous research (Chen, Dowling, & Yap, 2012; Parrotta & Johnson, 1998) found this scale to be a reliable and valid measure of financial management attitudes; however, no research had used this survey among IPV survivors. In the parent study, Postmus and colleagues added four questions to the Financial Management Attitudes Scale to capture gender norms related to finances. They conducted an EFA which resulted in a reduction from 19 questions to 14 questions and four subscales: Barriers to Financial Management (7 questions,  $\alpha=.73$ ), Attitudes about Financial Planning (3 questions,  $\alpha=.68$ ), Gender Attitudes Related to Finances (2 questions,  $\alpha=.60$ ), and Future Financial Planning (2 questions,  $\alpha=.70$ ). Participants indicated the extent to which they agreed with the statements by indicating 1 (never) to 5 (strongly agree).

**Phase I**

The Financial Management Attitudes Scale was tested with English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. The analyses included all of the original 19-items generated in the parent study. After conducting EFAs, eight items dropped in the English language scale, and 12 items dropped in the Spanish language scale. Table 6 and Table 7 show pattern matrix loadings of these initially retained items. Based on these results, the decision was made to revise the scales. Dropped items were assessed for inclusion or exclusion, items were revised for clarity, and negatively worded items were reworded. Items in the Spanish language scale were revised to enhance semantic equivalence in translation. The final scale used for further testing is shown in Table 8 and includes the same 13-items for both the English and Spanish language scales.

**Table 6. Pattern Matrix Loadings on the English Language Financial Management Attitudes Scale**

	Factor 1: Barriers to Financial Management	Factor 2: Attitudes about Financial Planning	Factor 3: Future Financial Planning
Having a savings plan is necessary in order to meet one’s financial needs.	.692		
Planning is necessary when families are just trying to get by.	.576		
Having a financial plan makes it difficult to make financial investment decisions.	.574		
Financial planning for retirement is necessary for assuring one’s security during old age.	.570		
Keeping track of your finances is a good use of time.	.522		
Saving money is important.	.471		
It is important to pay attention to how long it takes to pay off outstanding debts.	.465		
Planning for the future is the best way of getting ahead.		.877	
Thinking about where you will be financially in 5 or 10 years in the future is essential for financial success.		.550	
A written budget is absolutely essential for successful financial management.			.858
Families should have written financial goals that help them determine priorities in spending.			.576

**Table 7. Pattern Matrix Loadings on the Spanish Language Financial Management Attitudes Scale**

	Factor 1: Financial Management Attitudes	Factor 2: Financial Planning Attitudes
Families should have written financial goals that help them determine priorities in spending.	.805	

A written budget is absolutely essential for successful financial management.	.720
It is important for a family to develop a regular pattern of savings and stick to it.	.585
It is really essential to plan for the possible disability of a family wage earner.	.578
Having a savings plan is necessary in order to meet one’s financial needs.	.550
Planning is necessary when families are just trying to get by.	.513
It is important to pay attention to how long it takes to pay off outstanding debts.	.454

**Table 8. Final Financial Management Attitudes Scale used in Phase II**

For each of the following items, answer how strongly you agree or disagree with each statement. <i>Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.</i>	
1.	Financial success requires planning for 5 to 10 years in the future.
2.	Saving money is important.
3.	Planning is necessary when families are just trying to get by.
4.	A written budget is essential for successful financial management.
5.	Financial planning for retirement is necessary for assuring one’s security during old age.
6.	Families should have written financial goals that help them determine priorities in spending.
7.	Having a savings plan is necessary in order to meet one’s financial needs.
8.	Planning how to spend money is essential to manage one’s life.
9.	Keeping track of your finances is a good use of time.
10.	Planning for the future is the best way of getting ahead.
11.	It is important to pay attention to how long it takes to pay off outstanding debts.
12.	It is essential to plan for the potential disability of the family breadwinner.
13.	It is important for a family to develop a regular pattern of savings and stick to it.

**Phase II**

EFA’s were conducted separately for the English and Spanish-speaking IPV survivors from the new sample. Initial analysis was conducted on the 13-items and extracted factors without considering the results from the other sample set. Subsequent analyses considering both EFA initial results were then performed to develop a scale that is appropriate to use with both English and Spanish-speaking populations, resulting in the removal of 2-items. Table 9 and Table 10 show the pattern matrix loadings of the retained items for the English and Spanish language scale, respectively. A final one-factor structure scale with 11 items was generated for the English-speaking population ( $\alpha=.91$ ) and the Spanish-speaking population ( $\alpha=.88$ ). The revised Financial Management Attitudes Scale is presented in Table 11. The final scale, named Financial Management Attitudes Scale – R, can be found in the Appendix in English and Spanish.

**Table 9. Pattern Matrix Loadings on the English Language Financial Management Attitudes Scale**

	Factor 1
Planning how to spend money is essential to manage one’s life	.813
Having a savings plan is necessary in order to meet one’s financial needs.	.804



It is important for a family to develop a regular pattern of savings and stick to it.	.776
It is important to pay attention to how long it takes to pay off outstanding debts.	.715
Planning for the future is the best way of getting ahead.	.712
Families should have written financial goals that help them determine priorities in spending.	.669
Financial planning for retirement is necessary for assuring one’s security during old age.	.661
Keeping track of your finances is a good use of time.	.660
A written budget is essential for successful financial management.	.650
It is essential to plan for the potential disability of the family breadwinner.	.605
Saving money is important.	.595

**Table 10. Pattern Matrix Loadings on the Spanish Language Financial Management Attitudes Scale**

	Factor 1
Planning how to spend money is essential to manage one’s life	.709
It is essential to plan for the potential disability of the family breadwinner.	.661
Financial planning for retirement is necessary for assuring one’s security during old age.	.643
Having a savings plan is necessary in order to meet one’s financial needs.	.642
It is important to pay attention to how long it takes to pay off outstanding debts.	.634
Keeping track of your finances is a good use of time.	.633
Families should have written financial goals that help them determine priorities in spending.	.633
Planning for the future is the best way of getting ahead.	.623
A written budget is essential for successful financial management.	.622
Saving money is important.	.584
It is important for a family to develop a regular pattern of savings and stick to it.	.557

**Table 11. Final Financial Management Attitudes Scale in Both the English and Spanish Language**

For each of the following items, answer how strongly you agree or disagree with each statement.  
*Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.*

1. Saving money is important.
2. A written budget is essential for successful financial management.
3. Financial planning for retirement is necessary for assuring one’s security during old age.
4. Families should have written financial goals that help them determine priorities in spending.
5. Having a savings plan is necessary in order to meet one’s financial needs.
6. Planning how to spend money is essential to manage one’s life.
7. Keeping track of your finances is a good use of time.
8. Planning for the future is the best way of getting ahead.
9. It is important to pay attention to how long it takes to pay off outstanding debts.
10. It is essential to plan for the potential disability of the family breadwinner.
11. It is important for a family to develop a regular pattern of savings and stick to it.

SCALE OF ECONOMIC SELF-EFFICACY

The scale of Economic Self-Efficacy (Hoge, Stylianou, Hetling, & Postmus, 2017) was created by altering the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) to include economic language. This 10-item scale captures the participants' confidence in managing their finances. For each item, the wording was changed to specify economic self-efficacy. Hoge and colleagues (2017) performed an EFA, which resulted in a single factor solution that mirrored the General Self-Efficacy scale and demonstrated adequate internal reliability (10 items,  $\alpha=.88$ ). Response options ranged from 1 (strongly disagree) to 5 (strongly agree) on a five-point Likert scale.

### Phase I

The Scale of Economic Self-Efficacy was tested with English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. Results supported the one-factor solution of the Scale of Economic Self-Efficacy. All of the ten items were retained for both sample populations. Table 12 and Table 13 show pattern matrix loadings for the English and Spanish language scales, respectively. The scales were then reviewed for language accuracy and semantics, but no changes were needed. Table 14 displays the final Scale of Economic Self-Efficacy used during Phase II of this study.

**Table 12. Pattern Matrix Loadings on the English Language Scale of Economic Self-Efficacy**

	Factor 1
No matter what financial problem comes my way, I'm usually able to handle it.	.776
I am confident that I could deal efficiently with unexpected financial events.	.734
When I am confronted with a financial problem, I can usually find several solutions.	.720
Thanks to my resourcefulness, I know how to handle unforeseen financial situations.	.703
I can remain calm when facing financial difficulties because I can rely on my financial abilities.	.688
I can always manage to solve difficult financial problems if I try hard enough.	.657
It is easy for me to stick to and accomplish my financial goals.	.627
If I am in financial trouble, I can usually think of something to do.	.621
If I have a financial problem, I can find ways to get what I need.	.610
I can solve most financial problems if I invest the necessary effort.	.578

**Table 13. Pattern Matrix Loadings on the Spanish Language Scale of Economic Self-Efficacy**

	Factor 1
No matter what financial problem comes my way, I'm usually able to handle it.	.729
Thanks to my resourcefulness, I know how to handle unforeseen financial situations.	.697
When I am confronted with a financial problem, I can usually find several solutions.	.684
I can solve most financial problems if I invest the necessary effort.	.679
If I am in financial trouble, I can usually think of something to do.	.665
I am confident that I could deal efficiently with unexpected financial events.	.662
I can remain calm when facing financial difficulties because I can rely on my financial abilities.	.656
It is easy for me to stick to and accomplish my financial goals.	.597
If I have a financial problem, I can find ways to get what I need.	.497
I can always manage to solve difficult financial problems if I try hard enough.	.466

**Table 14. Final Scale of Economic Self- Efficacy Used in Phase II**

Please choose the answer that best represents your experience <u>in the last month</u> (30 days). <i>Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.</i>	
1.	I can always manage to solve difficult financial problems if I try hard enough.
2.	If I have a financial problem, I can find ways to get what I need.
3.	It is easy for me to stick to and accomplish my financial goals.
4.	I am confident that I could deal efficiently with unexpected financial events.
5.	Thanks to my resourcefulness, I know how to handle unforeseen financial situations.
6.	I can solve most financial problems if I invest the necessary effort.
7.	I can remain calm when facing financial difficulties because I can rely on my financial abilities.
8.	When I am confronted with a financial problem, I can usually find several solutions.
9.	If I am in financial trouble, I can usually think of something to do.
10.	No matter what financial problem comes my way, I’m usually able to handle it.

**Phase II**

The degree to which the Scale of Economic Self-Efficacy measures the same construct across English and Spanish-speaking IPV survivors was tested with the new sample. A series of nested MGCFA’s with an increasingly restrictive set of parameters was used. Table 15 shows the model fit statistics for the different models tested. Results from the single-group CFA indicated an adequate fit to the data. Results from the MGCFA’s support measurement equivalence across the two groups.

The model that specified configural invariance indicated that the one-factor structure of the Scale of Economic Self-Efficacy is supported across English and Spanish-speaking IPV survivors. The metric invariance model results showed that factor loadings’ equivalence is also supported across the two groups. Partial scalar invariance was established, indicating that a difference in the latent construct caused the difference in the means of eight items across the two groups. Items that did not meet scalar invariance are listed in Table 16. Residual invariance was established, indicating that error variance is also similar across the two groups.

**Table 15. Confirmatory Factor Analysis of Measurement Invariance Tests English and Spanish-speaking IPV Survivors**

	$X^2$	$df$	p-Value	CFI	$\Delta$ CFI	TLI	$\Delta$ TLI	RMSEA	$\Delta$ RMSEA
Single-group CFA	197.139	70	<.001	0.918		0.894		0.066	
Configural invariance	197.14	70	<.001	0.918		0.894		0.066	
Metric invariance	207.462	79	<.001	0.917	.001	0.905	0.011	0.063	0.003
Scalar invariance	223.543	87	<.001	0.912	.005	0.909	0.004	0.062	0.001
Residual invariance	232.345	97	<.001	0.912	—	0.919	0.01	0.058	0.004

*Note.*  $Df$  = degree of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

**Table 16. Items Not Meeting Invariance**

<i>Items non-equivalent at the scalar level</i>
Item 3: It is easy for me to stick to and accomplish my financial goals
Item 8: When I am confronted with a financial problem, I can usually find several solutions

The final scale in both languages remains the same as the one identified after Phase I (Table 14). The two questions listed above are still included in the Scale of Economic Self-Efficacy. Refer to the Appendix to see the Scale of Economic Self-efficacy in English and Spanish.

## SCALE OF FINANCIAL INTENTIONS

Financial intentions were measured by asking respondents 14 questions regarding their financial intentions in the upcoming month. These items were developed based on the “*Moving Ahead Through Financial Management*,” financial literacy curriculum evaluated during the parent study (Postmus, Plummer, & Stylianou, 2016). Participants were asked to indicate the frequency in which they would engage in a series of financial behaviors in the next month by indicating 1 (never) to 5 (always). After Postmus and associates (2016) conducted an EFA on the total sample, four items were removed, leaving ten items between two subscales: Intention to Engage in Personal Financial Planning (6 items,  $\alpha=.84$ ) and Intention to Use Financial Institutions (4 items,  $\alpha=.62$ ).

### Phase I

The Scale of Financial Intentions was tested with English and Spanish-speaking samples separately. The items in this scale mirror items in the Scale of Financial Behaviors, with this scale asking about participants’ intention to use a financial behavior; the latter scale on Behavior asks if participants actually used the particular financial behavior. EFAs were conducted to test the links between the scale items and subscales in the two groups. The analyses included all of the original 14-items generated in the parent study. Table 17 shows the EFA pattern matrix loading for the Spanish-speaking sample. Results extracted a three-factor solution, and five items dropped due to poor loading in the Spanish language scale. However, no theoretically or statistically logical solution was achieved for the English-speaking population. The decision was made to revise both scales. Dropped items were assessed for inclusion or exclusion, and items were revised for clarity. Items in the Spanish language scale were revised to enhance semantic equivalence in translation. The final scale for further testing is displayed in Table 18 and includes the same 10-items in both the English and Spanish language scales.

No theoretically or statistically logical solution was achieved for the English Language Scale of Financial Intentions.

**Table 17. Pattern Matrix Loadings on the Spanish Language Scale of Financial Intentions**

	Factor 1: Intention to Engage in Personal Financial Planning	Factor 2: Intention to Follow Budget	Factor 3: Intention to Save
How likely are you in the next month (30 days) to track down where money is spent (on paper, on the computer, on a spreadsheet, etc.)?	.873		

How likely are you in the next month (30 days) to estimate your monthly household income and expenses?	.756
How likely are you in the next month (30 days) to review and evaluate your spending habits?	.633
How likely are you in the next month (30 days) to identify your own financial goals for the future (pay off credit card, save money, etc.)?	.578
How likely are you in the next month (30 days) to follow your financial goals (pay off credit card, save money, etc.)?	.404
How likely are you in the next month (30 days) to pay your bills on time?	.832
How likely are you in the next month (30 days) to follow a weekly or monthly budget?	.556
How likely are you in the next month (30 days) to set aside money for savings?	.645
How likely are you in the next month (30 days) to contribute to a retirement savings account (like a 401k plan)?	.469

**Table 18. Final Scale of Financial Intentions Used in Phase II**

For each of the following questions, please answer how likely you are to engage in the behavior in the next month (next 30 days). *Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.*

1. How likely are you to estimate your monthly household incomes and expenses next month?
2. How likely are you to follow a weekly or monthly budget next month?
3. How likely are you to review and evaluate your spending habits next month?
4. How likely are you to follow your financial goals (paid off your credit card, saved money, etc.) next month?
5. How likely are you to pay your bills on time next month?
6. How likely are you to keep track of where money was spent (on paper, on the computer, on your phone, etc.) next month?
7. How likely are you to use a bank account (checking or savings) next month?
8. How likely are you to identify your own financial goals for the future (pay off your credit card, save money, etc.) next month?
9. How likely are you to contribute to a retirement savings account like a 401k plan next month?
10. How likely are you to make payments towards your debt (credit cards, money owed to family or friends, etc.) next month?

## Phase II

EFAs were performed separately for the English and Spanish-speaking samples. EFAs examined all ten items; results from the two samples were then compared. A further analysis was performed to develop a scale that is appropriate to use with both populations. Results indicated a two-factor structure with eight items for both the English and Spanish-speaking samples.

However, additional analyses were carried out to create a Scale of Financial Intentions and a Scale of Financial Behaviors that can be provided concurrently to participants in both languages since the items are linked. Results from the additional set of EFAs are presented in Table 19 and Table 20 for the English and Spanish samples, respectively. The analysis extracted a one-factor solution for both sample groups. Six items were retained, and two items were removed due to poor loading or to make the scales comparable. The final Scale of Financial Intentions, shown in

Table 21, consists of a one-factor solution with six items in both languages: English ( $\alpha=.87$ ) and Spanish ( $\alpha=.86$ ). Refer to the Appendix to see the final measure, Scale of Financial Behaviors & Intentions, in English and Spanish.

**Table 19. Pattern Matrix Loadings on the English Language Scale of Financial Intentions**

	Factor 1
How likely are you to review and evaluate your spending habits next month?	.806
How likely are you to follow your financial goals (paid off your credit card, saved money, etc.) next month?	.778
How likely are you to follow a weekly or monthly budget next month?	.774
How likely are you to estimate your monthly household incomes and expenses next month?	.772
How likely are you to keep track of where money was spent (on paper, on the computer, on your phone, etc.) next month?	.640
How likely are you to identify your own financial goals for the future (pay off your credit card, save money, etc.) next month?	.567

**Table 20. Pattern Matrix Loadings on the Spanish Language Scale of Financial Intentions**

	Factor 1
How likely are you to review and evaluate your spending habits next month?	.817
How likely are you to follow your financial goals (paid off your credit card, saved money, etc.) next month?	.748
How likely are you to follow a weekly or monthly budget next month?	.736
How likely are you to estimate your monthly household incomes and expenses next month?	.716
How likely are you to keep track of where money was spent (on paper, on the computer, on your phone, etc.) next month?	.700
How likely are you to identify your own financial goals for the future (pay off your credit card, save money, etc.) next month?	.586

**Table 21. Final Scale of Financial Intentions in Both the English and Spanish Language**

For each of the following questions, please answer how likely you are to engage in the behavior in the <u>next month</u> (next 30 days). <i>Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.</i>	
1.	How likely are you to estimate your monthly household incomes and expenses next month?
2.	How likely are you to follow a weekly or monthly budget next month?
3.	How likely are you to review and evaluate your spending habits next month?
4.	How likely are you to follow your financial goals (paid off your credit card, saved money, etc.) next month?
5.	How likely are you to keep track of where money was spent (on paper, on the computer, on your phone, etc.) next month?
6.	How likely are you to identify your own financial goals for the future (pay off your credit card, save money, etc.) next month?

## SCALE OF FINANCIAL BEHAVIORS

Financial behaviors were measured by asking participants 14 questions regarding their financial behaviors in the past month; response options ranged from 1 (never) to 5 (always). These items

were developed during the parent study based on the “*Moving Ahead Through Financial Management*” curriculum (Postmus, Plummer, & Stylianou, 2016). During the parent study, four items were removed after conducting an EFA, resulting in a 10-item scale with three subscales: Engagement in Personal Financial Planning (4 items;  $\alpha=.78$ ), Budgeting (3 items,  $\alpha=.74$ ), and Extra Funds (3 items,  $\alpha=.55$ ).

**Phase I**

The Scale of Financial Behaviors was tested with English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. The analyses included all of the original 14-items generated in the parent study. Analyses extracted a four-factor solution for the English-speaking sample and a one-factor solution for the Spanish-speaking sample. Additionally, two items were not retained in the English-speaking sample due to poor loading, and eight items dropped in the Spanish-speaking population due to poor loading. Pattern matrix loadings are shown in Table 22 and Table 23.

Because of the different EFA results, the decision was made to revise the scales. Dropped items were assessed for inclusion or exclusion, and items were revised for clarity. Items in the Spanish language survey were revised to enhance semantic equivalence in translation. The final scale for further testing is presented in Table 24. It includes the same 10-items in both the English and Spanish language scales.

**Table 22. Pattern Matrix Loadings on the English Language Scale of Financial Behaviors**

	Factor 1: Engagement in Personal Financial Planning	Factor 2: Manage- ment of Extra Funds	Factor 3: Budgeting	Factor 4: Savings
How often in the last month (30 days) did you review and evaluate your spending habits?	.761			
How often in the last month (30 days) did you track down where money was spent (on paper, on the computer, on a spreadsheet, etc.)?	.715			
How often in the last month (30 days) did you estimate your monthly household income and expenses?	.578			
How often in the last month (30 days) did you identify your own financial goals for the future (pay off credit card, save money, etc.)?	.470			
How often in the last month (30 days) did you make payments towards your debt (credit cards, money owed to friends/family, etc.)?		.597		
How often in the last month (30 days) did you pay more than the interest on your loans, credit, etc.?		.577		
How often in the last month (30 days) did you use a bank account (checking or savings)?		.512		

How often in the last month (30 days) did you follow your financial goals (paid off credit card, saved money, etc.)?	-.726
How often in the last month (30 days) did you follow a weekly or monthly budget?	-.651
How often in the last month (30 days) did you pay your bills on time?	-.559
How often in the last month (30 days) did you contribute to a retirement savings account (like a 401k plan)?	.632
How often in the last month (30 days) did you set aside money for savings?	.563

**Table 23. Pattern Matrix Loadings on the Spanish Language Scale of Financial Behaviors**

	Factor 1
How often in the last month (30 days) did you follow your financial goals (paid off credit card, saved money, etc.)?	.813
How often in the last month (30 days) did you follow a weekly or monthly budget?	.716
How often in the last month (30 days) did you identify your own financial goals for the future (pay off credit card, save money, etc.)?	.683
How often in the last month (30 days) did you estimate your monthly household income and expenses?	.675
How often in the last month (30 days) did you review and evaluate your spending habits?	.637
How often in the last month (30 days) did you pay your bills on time?	.462

**Table 24. Final Scale of Financial Behaviors Used in Phase II**

For each of the following questions, please answer how often you have engaged in this behavior in the last month (last 30 days). *Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.*

1. How often did you estimate your monthly household incomes and expenses last month?
2. How often did you follow a weekly or monthly budget last month?
3. How often did you review and evaluate your spending habits last month?
4. How often did you follow your financial goals (paid off your credit card, saved money, etc.) last month?
5. How often did you pay your bills on time last month?
6. How often did you keep track of where money was spent (on paper, on the computer, on your phone, etc.) last month?
7. How often did you use a bank account (checking or savings) in the last month?
8. How often did you identify your own financial goals for the future (pay off your credit card, save money, etc.) last month?
9. How often did you contribute to a retirement savings account like a 401k plan last month?
10. How often did you make payments towards your debt (credit cards, money owed to family or friends, etc.) last month?

## Phase II

EFA was conducted with English and Spanish-speaking IPV survivors separately. Initial analysis was conducted on all 10-items and extracted factors without considering the other



sample set results. Those results were compared across groups and further analyzed to develop one appropriate scale for use with both English and Spanish-speaking populations. Results indicated a two-factor structure scale with nine items for both groups. However, further analyses were then performed to create a Scale of Financial Behaviors and a Scale of Financial Intentions that can be provided concurrently to participants in both languages. Results from the additional analyses indicated a one-factor structure. Three items were removed due to poor loading or to make the scales comparable. Pattern matrix loadings for the English and Spanish language scales are displayed in Table 25 and Table 26, respectively. The final scale consists of 6 items, in both languages: English ( $\alpha=.84$ ) and Spanish ( $\alpha=.87$ ). The Scale of Financial Behaviors is presented in Table 27. Refer to the Appendix to see the final measure, Scale of Financial Behaviors & Intentions, in English and Spanish.

**Table 25. Pattern Matrix Loadings on the English Language Scale of Financial Behaviors**

	Factor 1
How often did you review and evaluate your spending habits last month?	.769
How often did you follow a weekly or monthly budget last month?	.725
How often did you keep track of where money was spent (on paper, on the computer, on your phone, etc.) last month?	.708
How often did you follow your financial goals (paid off your credit card, saved money, etc.) last month?	.683
How often did you estimate your monthly household incomes and expenses last month?	.656
How often did you identify your own financial goals for the future (pay off your credit card, save money, etc.) last month?	.587

**Table 26. Pattern Matrix Loadings on the Spanish Language Scale of Financial Behaviors**

	Factor 1
How often did you follow a weekly or monthly budget last month?	.828
How often did you review and evaluate your spending habits last month?	.809
How often did you estimate your monthly household incomes and expenses last month?	.798
How often did you follow your financial goals (paid off your credit card, saved money, etc.) last month?	.698
How often did you keep track of where money was spent (on paper, on the computer, on your phone, etc.) last month?	.639
How often did you identify your own financial goals for the future (pay off your credit card, save money, etc.) last month?	.602

**Table 27. Final Scale of Financial Behaviors in Both the English and Spanish Language**

For each of the following questions, please answer how likely you are to engage in the behavior in the next month (next 30 days). *Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.*

1. How often did you estimate your monthly household incomes and expenses last month?
2. How often did you follow a weekly or monthly budget last month?
3. How often did you review and evaluate your spending habits last month?
4. How often did you follow your financial goals (paid off your credit card, saved money, etc.) last month?

- 
5. How often did you keep track of where money was spent (on paper, on the computer, on your phone, etc.) last month?
  6. How often did you identify your own financial goals for the future (pay off your credit card, save money, etc.) last month?
- 

## SCALE OF ECONOMIC SELF-SUFFICIENCY

The Scale of Economic Self-Sufficiency-14 (SESS-14) is a 14-question scale that asks participants to indicate their ability to accomplish financially-related tasks regarding their economic situation during the 30 days prior to the interview (Hetling, Hoge, & Postmus, 2016). The scale is an adaptation of the Scale for Economic Self-Sufficiency (Gowdy & Pearlmutter, 1993), a 15-item scale. Response options ranged from 1 (not at all) to 5 (all the time) on a five-point Likert scale. Hetling and associates (2016) removed four items due to skewed participant responses. One item was removed because one-third of the sample indicated that the question did not apply to them. They then conducted an EFA, resulting in a 10-item scale named the Scale for Financial Security-10 (SFS-10) with two subscales: Ability to Manage Daily (Immediate) Financial Needs (7 items,  $\alpha=.80$ ) and Ability to Have Discretionary Funds (3 items,  $\alpha=.84$ ).

### Phase I

EFA's were conducted to test the links between the scale items and subscales in the English and Spanish-speaking samples separately. The analyses included all of the original 15 items the parent study adapted to measure financial self-sufficiency. Results from the EFA indicated a two-factor structure for both samples, but three items were not retained in the English-speaking sample, and five did not load in the Spanish-speaking sample. Dropped items were due to poor loadings. Table 28 and Table 29 show the pattern matrix loading for both sample groups for retained items.

Both of the scales were reviewed. Dropped items were assessed for inclusion or exclusion in Phase II of this study. Language accuracy, semantics, and Spanish translation were also reviewed, but no significant changes were needed. The final scale for further testing included the 10-items of the Scale for Financial Security-10 (SFS-10) for both the English and Spanish language scales. The final scale used in Phase II is displayed in Table 30.

**Table 28. Pattern Matrix Loadings on the English Language Scale of Economic Self-Sufficiency**

	Factor 1: Extras	Factor 2: Basics
Pursue your own interests and goals	.749	
Afford to take trips	.721	
Buy extras for your family and yourself	.646	
Do what you want to do, when you want to do it	.617	
Put money in a savings account	.598	
Stay on budget	.447	
Buy the kind and amount of food you like	.404	
Afford to have decent housing		.789
Afford to have a reliable car		.598
Be free from government programs like TANF, food stamps, GA, etc.		.523

Make payments on your debts	.495
Pay your own way without borrowing from family or friends	.436

**Table 29. Pattern Matrix Loadings on the Spanish Language Scale of Economic Self-Sufficiency**

	Factor 1: Meet Financial Obligations	Factor 2: Afford Extras
Pay your own way without borrowing from family or friends	.738	
Meet your obligations	.661	
Stay on budget	.653	
Buy the kind and amount of food you like	.627	
Pursue your own interests and goals	.572	
Make payments on your debts	.555	
Do what you want to do, when you want to do it	.545	
Afford to take trips		.818
Buy extras for your family and yourself		.701
Put money in a savings account		.523

**Table 30. Final Scale of Economic Self- Sufficiency Used in Phase II**

For each item, think about your personal financial situation over the last month (last 30 days) and answer how often were you able to do the following. *Response Options: Scale of 1-5; (1) not at all (2) occasionally (3) sometimes (4) most of the time or (5) all the time.*

1. Pursue your own interests and goals.
2. Buy extras for your family and yourself.
3. Meet your financial obligations.
4. Do what you want to do, when you want to do it.
5. Buy the kind and amount of food you like.
6. Stay on a budget.
7. Put money in a savings account.
8. Make payments on your debts.
9. Pay your own way without borrowing from family or friends.
10. Afford to take trips.

## Phase II

The scale measuring economic self-sufficiency in both languages was tested for measurement invariance or the degree to which it measures the same construct across English and Spanish-speaking IPV survivors. A series of nested MGCFAs with an increasingly restrictive set of parameters was used. Results from the single-group CFA and MGCFA indicated that the model was not a good fit for the data. Modification indices and critical ratio difference estimates were used to improve the model fit, but results did not improve. See Table 31 for model fit statistics of the single-group CFA and measurement equivalence testing.

The decision was then made to conduct EFAs for both sample sets separately to explore the scale's factor structure and the link between items and subscales. Results extracted a two-factor structure scale, with all ten items for the Spanish-speaking population and a two-factor structure with eight items for the English-speaking population. Additional EFAs were conducted with the

Spanish-speaking population considering results obtained from the analysis with the English-speaking population to develop one scale structure that is appropriate to use with both populations. Two items were removed. Table 32 shows the scale pattern matrix loadings for the English-speaking sample, and Table 33 displays the scale pattern matrix for the Spanish-speaking sample. Results from the final EFAs extracted a two-factor scale with the same 8-items for both sample populations: English scale (8 items,  $\alpha=.84$ ), Ability to Have Discretionary Funds (4 items,  $\alpha=.79$ ); Ability to Manage Financial Needs (4-items,  $\alpha=.76$ ); Spanish scale (8 items,  $\alpha=.85$ ); Ability to Have Discretionary Funds (4 items,  $\alpha=.77$ ); Ability to Manage Financial Needs (4 items,  $\alpha=.82$ ). The final Scale of Economic Self-Sufficiency is presented in Table 34. Refer to the Appendix to see the final measure in English and Spanish.

**Table 31. Confirmatory Factor Analysis of Measurement Invariance Tests English and Spanish-speaking IPV Survivors**

	$X^2$	$df$	p-Value	CFI	$\Delta$ CFI	TLI	$\Delta$ TLI	RMSEA	$\Delta$ RMSEA
Single-group CFA	217.985	68	<.001	0.883		0.845		0.073	
Configural invariance	217.984	68	<.001	0.883		0.845		0.073	
Metric invariance	230.088	76	<.001	0.880	0.003	0.858	0.013	0.070	0.003
Scalar invariance	245.492	84	<.001	0.874	0.006	0.865	0.007	0.069	0.001
Residual invariance	252.797	92	<.001	0.875	0.001	0.878	0.013	0.065	0.004

*Note.*  $Df$  = degree of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

**Table 32. Pattern Matrix Loadings on the English Language Scale of Economic Self- Sufficiency**

	Factor 1: Ability to Have Discretionary Funds	Factor 2: Ability to Manage Financial Needs
Buy extras for your family and yourself	.761	
Do what you want to do, when you want to do it	.705	
Pursue your own interests and goals	.667	
Buy the kind and amount of food you like	.550	
Pay your own way without borrowing from family or friends		.694
Make payments on your debts		.663
Stay on a budget		.597
Meet your financial obligations		.583

**Table 33. Pattern Matrix Loadings on the Spanish Language Scale of Economic Self- Sufficiency**

	Factor 1: Ability to Manage Financial Needs	Factor 2: Ability to Have Discretionary Funds
Make payments on your debts	.924	
Meet your financial obligations	.829	
Stay on a budget	.579	

Pay your own way without borrowing from family or friends	.478
Buy extras for your family and yourself	.706
Buy the kind and amount of food you like	.682
Do what you want to do, when you want to do it	.649
Pursue your own interests and goals	.455

**Table 34. Final Scale of Economic Self- Sufficiency in Both the English and Spanish Language**

For each item, think about your personal financial situation over the last month (last 30 days) and answer how often were you able to do the following. *Response Options: Scale of 1-5; (1) not at all (2) occasionally (3) sometimes (4) most of the time or (5) all the time.*

1. Pursue your own interests and goals.
2. Buy extras for your family and yourself.
3. Meet your financial obligations.
4. Do what you want to do, when you want to do it.
5. Buy the kind and amount of food you like.
6. Stay on a budget.
7. Make payments on your debts.
8. Pay your own way without borrowing from family or friends.

## FINANCIAL STRAIN SURVEY

The Financial Strain Survey (Aldana & Liljenquist, 1998) is an 18-item scale that measures five financial strain areas. Participants were asked to indicate how often the items applied to them over the past 12 months by indicating 1 (never) to 5 (always). A prior study found that the scale had five subscales: Financial Education (3 items,  $\alpha=.81$ ), Relationships (4 items,  $\alpha=.80$ ), Physical Symptoms (4 items,  $\alpha=.87$ ), Credit Card Use (3 items,  $\alpha=.54$ ), and Ability to Meet Financial Obligations (4 items,  $\alpha=.82$ ) (Hetling, Stylianou, & Postmus, 2015).

### Phase I

The 18-item scale was tested with English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. One item from the English-speaking sample and six items from the Spanish-speaking sample dropped out due to poor loadings. Table 35 and Table 36 show the pattern matrix loadings for English and Spanish-speaking samples, respectively.

The items not retained during the EFA were assessed for inclusion or exclusion. It was decided to include 17 items, keeping the six items that dropped out in the Spanish-speaking sample for further testing. Negatively worded items were reworded, but no changes were made to the meaning of the items. No other changes were needed. Therefore, it was determined that no significant changes were made to the scales in either language. Table 37 shows the final Financial Strain Survey used in Phase II.

**Table 35. Pattern Matrix Loadings on the English Language Financial Strain Survey.**

	Factor 1:	Factor 2:	Factor 3:	Factor	Factor
	Physical	Financial	Relationship	4:	5:
	Problems	Education	Problems	Bills	Credit

		Card Misuse
Do you ever get headaches from worry over money matters?	.888	
Does your financial situation cause you to feel heartburn or an upset stomach?	.762	
Are you ever unable to sleep well because of financial worries?	.712	
Do your muscles get tense when you add up your bills?	.712	
I feel financially educated	-.930	
I feel well informed about financial matters	-.831	
I know how interest works on my current debts	-.584	
Financial problems hurt my relationships.		.789
I tend to argue with others about money.		.747
There are disagreements about money in my home.		.631
My relationships with others are affected by financial problems.		.600
Many of my bills are past due.		-.968
I don't have enough money to pay my bills.		-.819
I find it difficult to pay my bills.		-.655
I pay my bills on time		-.598
I make purchases on credit cards hoping that I will have the money later.		.880
I get new credit cards to pay off old ones.		.506

**Table 36. Pattern Matrix Loadings on the Spanish Language Financial Strain Survey.**

	Factor 1: Health Impacts	Factor 2: Relationship Impacts	Factor 3: Meeting Obligations
Do you ever get headaches from worry over money matters?	1.015		
Do your muscles get tense when you add up your bills?	.783		
Are you ever unable to sleep well because of financial worries?	.660		
Does your financial situation cause you to feel heartburn or an upset stomach?	.598		
I tend to argue with others about money.		.765	
Financial problems hurt my relationships.		.752	
My relationships with others are affected by financial problems.		.700	

There are disagreements about money in my home.	.584
Many of my bills are past due.	.852
I don't have enough money to pay my bills.	.607
I find it difficult to pay my bills.	.569
I pay my bills on time.	.471

**Table 37. Final Financial Strain Survey Used in Phase II.**

Below are a number of questions and statements. Please indicate how often they describe you in the past month (30 days). *Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.*

1. I find it difficult to pay my bills.
2. I have not received education on financial management.
3. Do your muscles get tense when you add up your bills?
4. Do you ever get headaches from worry over money matters?
5. I borrow money to make purchases hoping that I will have the money later.
6. Are you ever unable to sleep well because of financial worries?
7. I don't know how interest works on my current debts.
8. I tend to argue with others about money.
9. I get loans or use credit cards to buy nicer things.
10. I get new loans or credit cards to pay off old ones.
11. Many of my bills are past due.
12. Does your financial situation cause you to feel heartburn or an upset stomach?
13. There are disagreements about money in my home.
14. I don't have enough money to pay my bills.
15. Financial problems hurt my relationships.
16. I don't pay my bills on time.
17. I don't feel well informed about financial matters.
18. My relationships with others are affected by financial problems.

**Phase II**

A series of MGCFA with an increasingly restrictive set of parameters was used to test the degree to which the Financial Strain Survey measures the same construct across English and Spanish-speaking IPV survivors. Results from the single-group CFA and the MGCFA are presented in Table 38. Model fit statistics from the single-group CFA indicated that the model fit to the data could be improved. After assessing the modification indices along with reviewing the content of the items, it was determined appropriate to correlate four error terms, which improved the model fit. Results from the MGCFA demonstrated measurement equivalence across the English and Spanish language scales.

Results from the configural invariance model showed that the five-factor structure is supported across the English and Spanish-speaking IPV survivors. Partial metric invariance and partial scalar invariance were achieved. These results indicated that the factor loadings of 14 items are equivalent across both groups. The difference in the latent construct causes the difference in the means of three items across the two groups. Partial residual invariance was established, indicating that error variance was similar across groups. Correlated items and items that did not achieve measurement equivalence are shown in Table 39.

**Table 38. Confirmatory Factor Analysis of Measurement Invariance Tests English and Spanish-speaking IPV Survivors**

	$\chi^2$	<i>df</i>	p- Value	CFI	$\Delta$ CFI	TLI	$\Delta$ TLI	RMSEA	$\Delta$ RMSEA
Single-group CFA	324.051	125	<.001	0.921		0.903		0.062	
Configural invariance	392.886	246	<.001	0.944		0.931		0.038	
Metric invariance	410.025	255	<.001	0.941	0.003	0.930	0.001	0.038	–
Scalar invariance	438.232	266	<.001	0.935	.006	0.925	0.005	0.039	0.001
Residual invariance	471.315	277	<.001	0.926	0.009	0.919	0.006	0.041	0.002

*Note.* *Df* = degree of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

**Table 39. Correlated Items and Items Not Meeting Invariance**

<i>Error terms correlated</i>
Item 1: I find it difficult to pay my bills.
Item 9: I get loans or use credit cards to buy nicer things.
Item 17: I don't feel well informed about financial matters.
Item 18: My relationships with others are affected by financial problems.
<i>Items non-equivalent at the metric level</i>
Item 4: Do you ever get headaches from worry over money matters?
Item 6: Are you ever unable to sleep well because of financial worries?
Item 11: Many of my bills are past due.
Item 13: There are disagreements about money in my home.
<i>Items non-equivalent at the scalar level</i>
Item 1: I find it difficult to pay my bills.
Item 9: I get loans or use credit cards to buy nicer things.
Item 17: I don't feel well informed about financial matters.
<i>Items non-equivalent at the residual level</i>
Item 7: I don't know how interest works on my current debts.
Item 16: I don't pay my bills on time.

The final scale in both languages remains the same as the one identified after Phase I (Table 37). The questions listed in Table 39 are still included in the Financial Strain Survey. The final measure, the Financial Strain Survey – R, is presented in the Appendix in both English and Spanish.

## ABUSIVE BEHAVIOR INVENTORY

The original 30-item Abusive Behavior Inventory (ABI) (Shepard & Campbell, 1992) was used in the parent study to measure IPV (Postmus, Stylianou, & McMahon, 2016). Participants were asked to rate how often a partner had exhibited physically, sexually, and psychologically abusive behaviors in the past 12 months by indicating 1 (never) to 5 (very often). Postmus and colleagues (2016) conducted a CFA using the original scale composed of two subscales that were a poor fit with the dataset, so an EFA was run to explore the factor structure of the ABI among IPV survivors. As a result of the EFA, five items were dropped, resulting in a 25-item revised ABI scale with three subscales: Psychological Abuse (13 items, .92), Physical Abuse (9 items,  $\alpha=.93$ ),



and Sexual Abuse (3 items,  $\alpha=.85$ ). The scale was renamed the Abusive Behavior Inventory-Revised (ABI-R) (Postmus, Stylianou, & McMahon, 2016).

### Phase I

The original ABI was tested with the English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. The analyses included all of the 30 items from the original ABI (Shepard & Campbell, 1992). Results from the EFA extracted a three-factor solution in both sample groups. Additionally, four items dropped in each scale due to poor loading. Table 40 shows results for the EFA pattern matrix loadings conducted with the English-speaking sample, and Table 41 shows results for the Spanish-speaking sample. The dropped items in both sample groups were assessed for inclusion or exclusion. One minor change to the wording was made to one item, and five items were removed, resulting in the same 25-item scale for both languages. The final ABI scale used in Phase II is displayed in Table 42.

**Table 40. Pattern Matrix Loadings on the English Language Abusive Behavior Inventory (ABI)**

	Factor 1: Psychological Violence	Factor 2: Sexual Violence	Factor 2: Physical Violence
Ended a discussion with you and made the decision him/herself.	.846		
Put down your family and friends.	.744		
Prevented you from having money for your own use.	.734		
Gave you angry stares or looks.	.721		
Called you a name and/or criticized you.	.695		
Told you that you were a bad person.	.693		
Made you do something humiliating or degrading (examples: begging for forgiveness, having to ask permission to use the car or do something).	.686		
Checked up on you (examples: listened to your phone calls, checked the mileage on your car, called you repeatedly at work).	.676		
Tried to keep you from doing something you wanted to do (example: going out with friends, going to meetings).	.660		
Became very upset with you because dinner, housework, or laundry was not ready when he/she wanted it or done the way he/she thought it should be.	.637		
Said things to scare you (examples: told you something “bad” would happen, threatened to commit suicide).	.591		
Accused you of paying too much attention to someone or something else.	.578		
Used your children to threaten you (example: told you that you would lose custody, said he/she would leave town with the children).	.474		
Refused to do housework or childcare.	.468		
Physically forced you to have sex.		-.673	
Physically attacked the sexual parts of your body.		-.638	
Spanked you.		-.586	

Pressured you to have sex in a way that you didn't like.	-550
Slapped, hit, or punched you.	-.899
Pushed, grabbed, or shoved you.	-.836
Threw you around.	-.809
Choked or strangled you.	-.725
Threatened to hit or throw something at you.	-.681
Threw, hit, kicked, or smashed something.	-.645
Kicked you.	-.638
Threatened you with a knife, gun, or other weapon.	-.517

**Table 41. Pattern Matrix Loadings on the Spanish Language Abusive Behavior Inventory (ABI)**

	Factor 1: Psychological Violence	Factor 2: Physical Violence	Factor 3: Sexual Violence
Accused you of paying too much attention to someone or something else.	.809		
Put down your family and friends.	.801		
Tried to keep you from doing something you wanted to do (example: going out with friends, going to meetings).	.791		
Prevented you from having money for your own use.	.685		
Ended a discussion with you and made the decision him/herself.	.665		
Gave you angry stares or looks.	.630		
Told you that you were a bad person.	.592		
Checked up on you (examples: listened to your phone calls, checked the mileage on your car, called you repeatedly at work).	.590		
Said things to scare you (examples: told you something "bad" would happen, threatened to commit suicide).	.589		
Became very upset with you because dinner, housework, or laundry was not ready when he/she wanted it or done the way he/she thought it should be.	.573		
Made you do something humiliating or degrading (examples: begging for forgiveness, having to ask permission to use the car or do something).	.548		
Refused to do housework or childcare.	.536		
Called you a name and/or criticized you.	.480		
Slapped, hit, or punched you.		-.943	
Threw you around.		-.859	
Kicked you.		-.785	
Spanked you.		-.759	
Pushed, grabbed, or shoved you.		-.724	
Threatened to hit or throw something at you.		-.630	
Used a knife, gun, or other weapon against you.		-.629	
Threw, hit, kicked, or smashed something.		-.546	
Threatened you with a knife, gun, or other weapon.		-.539	
Choked or strangled you.		-.453	
Physically forced you to have sex.			.905
Pressured you to have sex in a way that you didn't like.			.812

**Table 42. Final Abusive Behavior Inventory (ABI) used in Phase II**

Listed below are behaviors that many women report have been used by their intimate partners or former partners. Please indicate whether it has happened in your relationship with your partner or former partner in the last 12 months. *Your answer can range from 1-5. 1=Never, 2=Hardly Ever, 3=Sometimes, 4=Often, 5=Quite Often.*

1. Insulted or criticized you.
2. Pushed, grabbed, or shoved you.
3. Told you that you were a bad person.
4. Threatened you with a knife, gun, or other weapon.
5. Became very upset with you because dinner, housework, or laundry was not ready when he/she wanted it or done the way he/she thought it should be.
6. Checked up on you (examples: went through your phone, checked the mileage on your car, called you repeatedly at work).
7. Refused to do housework or childcare.
8. Threatened to hit or throw something at you.
9. Accused you of paying too much attention to someone or something else.
10. Said things to scare you (examples: told you something “bad” would happen, threatened to commit suicide).
11. Gave you angry stares or looks.
12. Prevented you from having money for your own use.
13. Put down your family and friends.
14. Made you do something humiliating or degrading (examples: begging for forgiveness, having to ask permission to use the car or do something).
15. Ended a discussion with you and made the decision him/herself.
16. Tried to keep you from doing something you wanted to do (example: going out with friends, going to meetings).
17. Pressured you to have sex in a way that you didn’t like.
18. Slapped, hit, or punched you.
19. Threw, hit, kicked, or smashed something.
20. Used a knife, gun, or other weapon against you.
21. Choked or strangled you.
22. Physically attacked the sexual parts of your body.
23. Physically forced you to have sex.
24. Kicked you.
25. Threw you around.

## Phase II

The degree to which the revised ABI measures the same construct across English and Spanish-speaking IPV survivors was tested using MGCFA with an increasingly restrictive set of parameters. Table 43 shows the results from the single-group CFA and the MGCFA. Results support measurement equivalence across the two groups. Results from the single group CFA indicated that the model fit could be improved. After assessing the modification fit indices and reviewing the items' content, it was determined appropriate to correlate the error terms of four items.

The configural invariance test indicated that the ABI's three-factor structure is supported across English and Spanish-speaking IPV survivors. The model that specified metric invariance showed the equivalence of factor loading across the two groups. Partial scalar invariance was established,

indicating that a difference in the latent construct caused the difference in the means of 23 items across the two groups. Partial residual invariance was established and supported equivalence of item residual across the two groups. Correlated items and items that did not meet scalar and residual equivalence are listed in Table 44.

**Table 43. Confirmatory Factor Analysis of Measurement Invariance Tests English and Spanish-speaking IPV Survivors.**

	$X^2$	$df$	p-Value	CFI	$\Delta$ CFI	TLI	$\Delta$ TLI	RMSEA	$\Delta$ RMSEA
Single-group CFA	974.246	273	<.001	0.893		0.883		0.078	
Configural invariance	1173.794	540	<.001	0.907		0.896		0.053	
Metric invariance	1209.981	562	<.001	0.905	.002	0.898		0.053	
Scalar invariance	1294.34	585	<.001	0.896	.009	0.893	0.005	0.54	0.001
Residual invariance	1365.181	608	<.001	0.889	.007	0.890	0.003	0.055	0.001

*Note.*  $Df$  = degree of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

**Table 44. Correlated Items and Items Not Meeting Invariance**

*Error terms correlated*

Item 4: Threatened you with a knife, gun, or other weapon.

Item 20: Used a knife, gun, or other weapon against you.

Item 12: Prevented you from having money for your own use

Item 14: Made you do something humiliating or degrading (examples: begging for forgiveness, having to ask permission to use the car or do something).

*Items non-equivalent at the scalar level*

Item 19: Threw, hit, kicked, or smashed something.

Item 23: Physically forced you to have sex.

*Items non-equivalent at the residual level*

Item 1 Insulted or criticized you.

Item 17 Pressured you to have sex in a way that you didn't like.

The final and newly revised Abusive Behavior Inventory in both languages remains the same as the one identified after Phase I (Table 42). All the questions listed in Table 44 are still included in the revised ABI. To see the final measure, the Abusive Behavior Inventory – Revised 2 (ABI-R2), in English and Spanish, refer to the Appendix.

## SCALE OF ECONOMIC ABUSE

The Scale of Economic Abuse – 12 (SEA-12; Postmus, Plummer, & Stylianou 2016) is a 12-item scale that identifies the frequency of economic abuse participants experienced in their relationships. The SEA-12 was created after a pilot study through confirmatory and EFA of the original 28-item SEA (Adams, Sullivan, Bybee, & Greeson, 2008). Participants were asked to rate how often a partner had exhibited financially abusive behaviors in the past 12 months by indicating 1 (never) to 5 (quite often). The SEA-12 has three subscales: Economic Control (5 items,  $\alpha=.84$ ), Economic Exploitation (3 items,  $\alpha=.81$ ), and Economic Sabotage (4 questions,  $\alpha=.80$ ).

**Phase I**

The SEA-12 was tested with English and Spanish-speaking samples separately. EFAs were conducted to test the links between the scale items and subscales in the two groups. The analyses included all of the 12-items identified in a previous study. EFA results extracted a three-factor structure for both the English and Spanish-speaking groups. Additionally, all of the items were retained in both of the two sample groups. Table 45 and Table 46 shows the pattern matrix loadings for the English and Spanish-speaking samples, respectively.

The scales were reviewed for language accuracy and semantics, and it was determined that no changes were needed. The final Scale of Economic Abuse used in Phase II of this study is presented in Table 47.

**Table 45. Pattern Matrix Loadings on the English Language Scale of Economic Abuse**

	Factor 1: Economic Control	Factor 2: Employment Sabotage	Factor 3: Economic Exploitation
Keep financial information from you.	.808		
Make important financial decisions without talking with you about it first.	.751		
Demand to know how money was spent.	.729		
Make you ask him/her for money.	.693		
Demand that you give him/her receipts and/or change when you spent money.	.660		
Threaten you to make you leave work.		-.905	
Demand that you quit your job.		-.837	
Beat you up if you said you needed to go to work.		-.747	
Do things to keep you from going to your job.		-.562	
Pay bills late or not pay bills that were in your name or in both of your names.			.832
Build up debt under your name by doing things like using your credit card or running up the phone bill.			.708
Spend the money you needed for rent or other bills.			.670

**Table 46. Pattern Matrix Loadings on the Spanish Language Scale of Economic Abuse**

	Factor 1: Economic Control	Factor 2: Employment Sabotage	Factor 3: Economic Exploitation
Demand to know how money was spent.	.871		
Demand that you give him/her receipts and/or change when you spent money.	.772		
Make important financial decisions without talking with you about it first.	.536		
Make you ask him/her for money.	.520		
Keep financial information from you.	.477		
Threaten you to make you leave work.		-.908	
Demand that you quit your job.		-.801	
Beat you up if you said you needed to go to work.		-.634	
Do things to keep you from going to your job.		-.422	

Pay bills late or not pay bills that were in your name or in both of your names.	.766
Build up debt under your name by doing things like using your credit card or running up the phone bill.	.676
Spend the money you needed for rent or other bills.	.626

**Table 47. Final Scale of Economic Abuse Used in Phase II.**

I'm going to go through a list of things some individuals do to hurt their partner or ex-partner financially. Could you tell me, to the best of your recollection, how frequently your partner or ex-partner has done any of the following things in the last 12 months. *Your answer can range from 1-5. 1=Never, 2=Hardly ever, 3=Sometimes, 4=Often, 5=Quite Often.*

1.	Demanded to know how money was spent.
2.	Threatened you to make you leave work.
3.	Spent the money you needed for rent or other bills.
4.	Built up debt under your name by doing things like use your credit card or run up the phone bill.
5.	Demanded that you quit your job.
6.	Paid bills late or did not pay bills that were in your name or in both of your names.
7.	Beat you up if you said you needed to go to work.
8.	Made important financial decisions without talking with you about it first.
9.	Made you ask him for money.
10.	Kept financial information from you.
11.	Demanded that you give him receipts and/or change when you spent money.
12.	Did things to keep you from going to your job.

**Phase II**

The SEA-12 scale was tested for measurement invariance or the degree to which it measures the same construct across English and Spanish-speaking IPV survivors. In order to ensure over-identification of the hierarchical model (i.e., second-order model) of the SEA-12, equal constraints were placed in the residual variance of the upper level of the model using the pairwise parameter comparison. A series of nested MGCFA with an increasingly restrictive set of parameters was conducted. Results are shown in Table 48 and support the equivalence of the SEA-12 scale across the English and Spanish-speaking IPV survivors.

After reviewing the modification indices and content of the scale items, four error terms were correlated. The items with correlated error terms are displayed in Table 49. The configural invariance test indicated that the second-order, three-factor structure was supported across the English and Spanish-speaking samples. The metric invariance model indicated the equivalence of factor loadings. The scalar invariance was established, indicating that a difference in the latent construct caused the difference in the means of all of the items across the two groups. Residual invariance was established, indicating that error variance is equivalent across groups.

**Table 48. Confirmatory Factor Analysis of Measurement Invariance Tests English and Spanish-speaking IPV Survivors**

	$X^2$	$df$	p-Value	CFI	$\Delta$ CFI	TLI	$\Delta$ TLI	RMSEA	$\Delta$ RMSEA
Single-group CFA	212.635	52	<.001	0.922		0.901		0.087	
Configural invariance	203.336	102	<.001	0.952		0.937		0.050	

Metric invariance	213.270	111	<.001	0.951	.001	0.942	0.006	0.048	0.002
Scalar invariance	236.334	123	<.001	0.946	.005	0.942	–	0.048	–
Residual invariance	269.366	137	<.001	0.937	.009	0.939	0.003	0.049	0.001

*Note.* *Df* = degree of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

**Table 49. Correlated Items and Items Not Meeting Invariance**

<i>Error terms correlated</i>
Item 1: Threatened you to make you leave work
Item 11: Did things to keep you from going to your job
Item 2: Demanded to know how money was spent
Item 12: Demanded that you give him receipts and/or change when you spent money.

The final scale in both languages remains the same as the one identified after Phase I (Table 47). Refer to the Appendix to see the Scale of Economic Abuse – 12 in both English and Spanish.

## Implications and Recommendations

The overall goal of the *Testing and Validating Financial Measures with IPV Survivors* was to validate the nine scales listed below for use with English and Spanish-speaking IPV survivors.

- 1) Financial Knowledge Scale
- 2) Financial Management Attitudes Scale
- 3) Scale of Economic Self-Efficacy
- 4) Financial Strain Survey
- 5) Scale of Financial Intentions
- 6) Scale of Financial Behaviors
- 7) Scale of Economic Self-Sufficiency
- 8) Abusive Behavior Inventory
- 9) Scale of Economic Abuse -12

Our findings indicate that the nine scales are appropriate tools to assess the economic empowerment and abusive experiences of IPV survivors whose primary or only language is English or Spanish. We provide empirical support for these scales' psychometric properties developed or adapted during the evaluation of the “*Moving Ahead Through Financial Management*” conducted by the parent study. During the present study, we further analyzed and revised the scales as needed in order to provide appropriate measures to use in both languages. The final scales are:

- 1) Financial Knowledge Scale
- 2) Financial Management Attitudes Scale - R
- 3) Scale of Economic Self-Efficacy
- 4) Financial Strain Survey - R
- 5) Scale of Financial Behaviors and Intentions<sup>1</sup>
- 6) Scale of Economic Self-Sufficiency

<sup>1</sup> This scale combined the Scale of Financial Intentions and Scale of Financial Behaviors for ease of use.

- 7) Abusive Behavior Inventory – R2
- 8) Scale of Economic Abuse -12

The utilization of these scales will help to accurately measure the influence of financial burdens on survivors' experiences and assess positive increases in their financial self-efficacy. Understanding the experiences of IPV survivors as it relates to financial security, empowerment, and burden is important because it plays a key role in their ability to support criminal justice professionals in seeking justice and reducing crime. When survivors feel financially insecure and dependent on their abusive partner, they may be less likely to finalize restraining orders or prosecute. Although several policies, such as mandatory arrest and victimless prosecutions, have been implemented to ensure criminal justice responses even in the absence of survivor support, some advocates argue that these practices further deplete survivors of agency and are invasive (McDermott & Garofalo, 2004). As such, the validation of these scales provides professionals with tools to better understand IPV survivors' experiences and identify areas to assist them in increasing their economic empowerment. The increased autonomy of survivors will positively influence their decision to leave an abusive relationship and report the violence to local authorities, creating a more effective and fair justice system.

## IMPLICATIONS FOR RESEARCH AND MEASUREMENT DEVELOPMENT

The Scale of Economic Self-Sufficiency, Financial Management Attitudes Scale, and Scale of Financial Behaviors and Intentions are appropriate tools for English and Spanish-speaking IPV survivors. We provide evidence of these scales' validity in measuring their intended construct in both languages, highlighting that their factor structure is suitable for both populations. Further research is needed to test the measurement equivalence, the degree to which the same construct is being measured across English and Spanish-speaking communities, because culture may influence the degree to which items of these scales are understood and applied.

Overall, we provide evidence that measurement invariance related to language differences does not bias the Financial Knowledge Scale, Scale of Economic Self-Efficacy, Financial Strain Survey – R, Abusive Behavior Inventory – R2, and Scale of Economic Abuse – 12. Although we identified items that did not meet measurement equivalence across English and Spanish-speaking IPV survivors, we established partial invariance for all the models in the scales in which multigroup confirmation factor analysis was conducted. Nonetheless, our results warrant further exploration of how IPV survivors' experiences may influence such items' interpretation and whether the non-equivalence of items is based on trivial differences. Thus, we caution researchers and practitioners when comparing mean responses across the two groups. Although the mean comparison is possible, we cannot discard the existence of systematic differences in the items that did not meet measurement equivalence.

## IMPLICATIONS FOR POLICY AND PRACTICE

Understanding the factors affecting the economic empowerment of survivors of IPV is vital because achieving economic autonomy would enable them to act strategically to leave an abusive relationship and avoid further victimization. The nine scales are useful for assessing and identifying areas of relative strength and weakness in relation to survivors' economic



empowerment and needs. Given the additional cultural and linguistic barriers faced by Spanish-speaking survivors in accessing social services, valid language-specific measures are crucial. The validation of these scales in Spanish will minimize barriers for Latina/Hispanic IPV survivors to access and maintain service use, decreasing their likelihood of IPV re-victimization. We recommend training practitioners working with IPV survivors to implement economic empowerment interventions such as financial literacy programs and to assess survivors using these valid and reliable scales.

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## APPENDIX

### Financial Knowledge Scale

Instructions: For the following questions, please respond by how strongly you agree or disagree.  
 Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.

		1=strongly disagree	2=disagree	3=neutral	4=agree	5=strongly agree
1.	I know how to access my credit report.*					
2.	I know how to get public assistance benefits (TANF, food stamps, etc.).					
3.	I know about community programs such as IDAs (Individual Development Accounts) and EITCs (Federal and State Earned-Income Tax Credit) that can help me with my financial goals.*					
4.	I know how to understand my credit report and credit history.*					
5.	I know how to create a budget.					
6.	I know how to plan for my estate (such as creating a will or a trust fund).					
7.	I know how to create a financial safety plan (having access to money or other resources, having copies of important documents, etc.).					
8.	I know how to create financial goals.*					
9.	I know how to get legal assistance in my community (legal aid, restraining orders, etc.).					
10.	I know how to plan for retirement and the different types of plans available.					
11.	I know how to improve my credit rating.*					
12.	I know how to identify joint or combined financial responsibilities and assets (savings accounts, property, etc.).					
13.	I know how to invest my savings through things like savings bonds, mutual funds, and stocks.					
14.	I know how to identify my partner’s assets (saving accounts, property, etc.) and financial responsibilities (debt).					
15.	I know how to get the resources that are available in my community to help me leave my abuser (emergency shelter, hotline, etc.).					

Scoring: Higher mean scores indicate more financial knowledge.

Caution is recommended when comparing scale means between English and Spanish-speaking participants. They tend to respond differently to the items with an asterisk.

### Escala del Conocimiento Financiero

Instrucciones: Por favor indique que tan de acuerdo está con las siguientes afirmaciones. *Las opciones de respuesta: Escala del 1-5; (1) Estoy totalmente en desacuerdo (2) Estoy en desacuerdo (3) Neutral (4) Estoy de acuerdo (5) Estoy totalmente de acuerdo.*

		1=Estoy totalmente en desacuerdo	2=Estoy en desacuerdo	3=Neutral	4=Estoy de acuerdo	5=Estoy totalmente de acuerdo
1.	Sé cómo conseguir o tener acceso a mi informe de crédito.*					
2.	Sé cómo obtener los beneficios de asistencia pública o programas sociales (como TANF, estampillas de alimentos, etc.).					
3.	Sé sobre programas en la comunidad tales como IDAs (cuentas de desarrollo individual) y EITC (crédito de impuestos federal y estatal) que pueden ayudarme con mis metas financieras.*					
4.	Sé cómo entender mi informe de crédito y mi historial de crédito.*					
5.	Sé cómo hacer un presupuesto.					
6.	Sé cómo planificar mi herencia (como crear un testamento o fideicomiso).					
7.	Sé cómo crear un plan de seguridad financiera (teniendo acceso a dinero u otros recursos, teniendo copias de documentos importantes, etc.).					
8.	Sé cómo establecer metas financieras.*					
9.	Sé cómo obtener asistencia legal en mi comunidad (servicios legales, orden de restricción u orden de protección, etc.).					
10.	Sé cómo planificar mi jubilación y los diferentes planes que hay disponibles.					
11.	Sé cómo mejorar mi puntaje de crédito.*					
12.	Sé cuáles son los bienes y responsabilidades financieras que tengo conjuntamente con mi pareja/expareja (cuentas de ahorros, propiedad, etc.).					
13.	Sé cómo invertir mis ahorros en cosas como bonos de ahorros, fondos mutuos, y acciones.					
14.	Sé cuáles son los bienes (cuentas de ahorros, propiedades, etc.) y las responsabilidades financieras (deudas) de mi pareja.					
15.	Sé cómo acceder a los recursos disponibles en mi comunidad que podrían ayudarme a escapar de mi agresor (refugio, ayuda de emergencia, etc.).					

*Puntaje:* Promedios mas altos indican mas conocimiento financiero.

Se recomienda cautela al comparar los promedios de participantes que hablan inglés con los que hablan español, ya que estos dos grupos suelen responder de manera diferente a las afirmaciones con asterisco.

**Financial Management Attitudes Scale - R**

Instructions: For each of the following items, answer how strongly you agree or disagree with each statement. *Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.*

		1=strongly disagree	2=disagree	3=neutral	4=agree	5=strongly agree
1.	Saving money is important.					
2.	A written budget is essential for successful financial management.					
3.	Financial planning for retirement is necessary for assuring one’s security during old age.					
4.	Families should have written financial goals that help them determine priorities in spending.					
5.	Having a savings plan is necessary in order to meet one’s financial needs.					
6.	Planning how to spend money is essential to manage one’s life.					
7.	Keeping track of your finances is a good use of time.					
8.	Planning for the future is the best way of getting ahead.					
9.	It is important to pay attention to how long it takes to pay off outstanding debts.					
10.	It is essential to plan for the potential disability of the family breadwinner.					
11.	It is important for a family to develop a regular pattern of savings and stick to it.					

*Scoring:* Higher mean scores indicate more positive financial management attitudes.

**Escala de Creencias sobre las Gestiones Financieras - R**

Instrucciones: Para cada una de las siguientes afirmaciones, conteste en qué medida está de acuerdo o no con cada una de ellas. *Las opciones de respuesta: Escala del 1-5; (1) Estoy totalmente en desacuerdo (2) Estoy en desacuerdo (3) Neutral (4) Estoy de acuerdo (5) Estoy totalmente de acuerdo.*

		1=Estoy totalmente en desacuerdo	2=Estoy en desacuerdo	3=Neutral	4=Estoy de acuerdo	5=Estoy totalmente de acuerdo
1.	Ahorrar es importante.					
2.	Un presupuesto por escrito es esencial para manejar las finanzas exitosamente.					
3.	La planificación financiera para la jubilación es necesaria para garantizar la seguridad durante la vejez.					
4.	Las familias deberían tener metas financieras por escrito para ayudarles a determinar sus prioridades a la hora de gastar.					
5.	Tener un plan de ahorros es necesario para satisfacer las necesidades financieras de cada persona.					
6.	Planificar los gastos es esencial para manejar nuestra vida.					
7.	Mantener un registro de ingresos y gastos es una buena forma de usar el tiempo.					
8.	Planificar para el futuro es la mejor manera de echar hacia adelante.					
9.	Es importante prestar atención al tiempo que toma pagar las deudas pendientes.					
10.	Es esencial planificar para la posibilidad de que la persona que sostiene a la familia económicamente sufra una discapacidad.					
11.	Es importante que una familia desarrolle una práctica habitual de ahorro y se apegue a ella.					

*Puntaje:* Promedios mas altos indican creencias mas positivas sobre las gestiones financieras.

### Scale of Economic Self-Efficacy

Instructions: Please choose the answer that best represents your experience **in the last month** (30 days). *Response Options: Scale of 1-5; (1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree.*

		1=strongly disagree	2=disagree	3=neutral	4=agree	5=strongly agree
1.	I can always manage to solve difficult financial problems if I try hard enough.					
2.	If I have a financial problem, I can find ways to get what I need.					
3.	It is easy for me to stick to and accomplish my financial goals.*					
4.	I am confident that I could deal efficiently with unexpected financial events.					
5.	Thanks to my resourcefulness, I know how to handle unforeseen financial situations.					
6.	I can solve most financial problems if I invest the necessary effort.					
7.	I can remain calm when facing financial difficulties because I can rely on my financial abilities.					
8.	When I am confronted with a financial problem, I can usually find several solutions.*					
9.	If I am in financial trouble, I can usually think of something to do.					
10.	No matter what financial problem comes my way, I'm usually able to handle it.					

*Scoring:* Higher mean scores indicate more economic self-efficacy.

Caution is recommended when comparing scale means between English and Spanish-speaking participants. They tend to respond differently to the items with an asterisk.

### Escala de Auto-Eficacia Económica

Instrucciones: Por favor, escoja la respuesta que mejor represente su experiencia en **el mes pasado** (los últimos 30 días). Las opciones de respuesta: Escala del 1-5; (1) Estoy totalmente en desacuerdo (2) Estoy en desacuerdo (3) Neutral (4) Estoy de acuerdo (5) Estoy totalmente de acuerdo.

		1=Estoy totalmente en desacuerdo	2=Estoy en desacuerdo	3=Neutral	4=Estoy de acuerdo	5=Estoy totalmente de acuerdo
1.	Si lo intento lo suficiente, siempre logro resolver problemas económicos difíciles.					
2.	Si tengo un problema económico, puedo encontrar maneras de obtener lo que necesito.					
3.	Para mí es fácil mantener mis objetivos económicos y alcanzar mis metas económicas.*					
4.	Estoy segura de que puedo manejar eventos económicos inesperados de manera eficiente.					
5.	Gracias a mi ingenio, sé cómo manejar situaciones económicas imprevistas.					
6.	Si invierto el esfuerzo necesario, puedo resolver la mayoría de mis problemas económicos.					
7.	Puedo mantenerme en calma cuando enfrente dificultades económicas porque cuento con mis habilidades financieras.					
8.	Cuando me enfrente a un problema económico, usualmente puedo encontrar varias soluciones.*					
9.	Si me enfrente a un problema económico, usualmente se me ocurre qué hacer para resolverlo.					
10.	No importa el tipo de problema económico que enfrente, usualmente soy capaz de manejarlo.					

*Puntaje:* Promedios mas altos indican mas auto-eficacia económica.

Se recomienda cautela al comparar los promedios de participantes que hablan inglés con los que hablan español, ya que estos dos grupos suelen responder de manera diferente a las afirmaciones con asterisco.

**Scale of Financial Behaviors & Intentions (SFBI)**

Instructions: For each of the following questions, please answer how often you have engaged in this behavior in the **last month** (last 30 days) **and** how likely you are to engage in the behavior in the **next month** (next 30 days). *Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.*

		1=never	2=rarely	3=sometimes	4=often	5=always
1a.	How often did you estimate your monthly household incomes and expenses last month?					
1b.	How likely are you to estimate your monthly household incomes and expenses next month?					
2a.	How often did you follow a weekly or monthly budget last month?					
2b.	How likely are you to follow a weekly or monthly budget next month?					
3a.	How often did you review and evaluate your spending habits last month?					
3b.	How likely are you to review and evaluate your spending habits next month?					
4a.	How often did you follow your financial goals (paid off your credit card, saved money, etc.) last month?					
4b.	How likely are you to follow your financial goals (paid off your credit card, saved money, etc.) next month?					
5a.	How often did you keep track of where money was spent (on paper, on the computer, on your phone, etc.) last month?					
5b.	How likely are you to keep track of where money was spent (on paper, on the computer, on your phone, etc.) next month?					
6a.	How often did you identify your own financial goals for the future (pay off your credit card, save money, etc.) last month?					
6b.	How likely are you to identify your own financial goals for the future (pay off your credit card, save money, etc.) next month?					

*Scoring:* Financial behaviors (items a) and financial intentions (items b) are scored separately. Higher mean scores indicate more positive financial behaviors or financial intentions accordingly.

**Escala del Comportamiento e Intenciones Financieras (SFBI)<sup>a</sup>**

Instrucciones: Para cada una de las preguntas siguientes, por favor conteste con qué frecuencia usted ha demostrado cada tipo de comportamiento en el **mes pasado** (los últimos 30 días) **y** que tan probable es que usted demuestre cada tipo de comportamiento en el **mes siguiente** (los 30 días siguientes). *Las opciones de respuesta: Escala del 1-5; (1) Nunca (2) Rara vez (3) A veces (4) Con frecuencia (5) Siempre.*

		1=Nunca	2=Rara vez	3=A veces	4=Con frecuencia	5=Siempre
1a.	¿Con que frecuencia hizo un cálculo mensual de sus ingresos y gastos en el mes pasado?					
1b.	¿Qué probabilidad hay de que usted haga un cálculo mensual de sus ingresos y gastos en el mes siguiente?					
2a.	¿Con qué frecuencia siguió un presupuesto semanal o mensual el mes pasado?					
2b.	¿Qué probabilidad hay de que siga un presupuesto mensual o semanal el mes siguiente?					
3a.	¿Con qué frecuencia revisó y evaluó sus hábitos de gastos el mes pasado?					
3b.	¿Qué probabilidad hay de que revise y evalúe sus hábitos de gastos el mes siguiente?					
4a.	¿Con que frecuencia siguió sus metas financieras (pagó su tarjeta de crédito, ahorró dinero, etc.) en el mes pasado?					
4b.	¿Qué probabilidad hay de que siga sus metas financieras (pagar su tarjeta de crédito, ahorrar dinero, etc.) en el mes siguiente?					
5a.	¿Con qué frecuencia revisó en qué se gastó el dinero (ya sea haciendo un cálculo con lápiz y papel, en la computadora, en el celular, etc.) el mes pasado?					
5b.	¿Qué probabilidad hay de que revise en qué se gasta el dinero (ya sea haciendo un cálculo con lápiz y papel, en la computadora, en el celular, etc.) el mes siguiente?					
6a.	¿Con qué frecuencia identificó sus metas financieras para el futuro (pagar su tarjeta de crédito, ahorrar dinero, etc.) el mes pasado?					
6b.	¿Qué probabilidad hay de que usted identifique sus metas financieras para el futuro (pagar su tarjeta de crédito, ahorrar dinero, etc.) el mes siguiente?					

*Puntaje:* Los promedios del comportamiento financiero (preguntas a) e intenciones financieras (preguntas b) se calculan por separado. Promedios mas altos indican comportamientos financieros o intenciones financieras mas positivas, segun las preguntas.

<sup>a</sup> Por sus siglas en Inglés



### Scale of Economic Self-Sufficiency

Instructions: For each item, think about your personal financial situation **over the last month** (last 30 days) and answer how often were you able to do the following. *Response Options: Scale of 1-5; (1) not at all (2) occasionally (3) sometimes (4) most of the time or (5) all the time.*

		1=not at all	2= occasionally	3= sometimes	4=most of the time	5=all the time
1.	Pursue your own interests and goals.					
2.	Buy extras for your family and yourself.					
3.	Meet your financial obligations.					
4.	Do what you want to do, when you want to do it.					
5.	Buy the kind and amount of food you like.					
6.	Stay on a budget.					
7.	Make payments on your debts.					
8.	Pay your own way without borrowing from family or friends.					

*Scoring:* Higher mean scores indicate more economic self-sufficiency.

### Escala de Auto-Suficiencia Económica

Instrucciones: Para cada una de las siguientes afirmaciones piense en su propia situación económica durante **el mes pasado** (los últimos 30 días) y conteste con qué frecuencia pudo hacer lo siguiente. *Las opciones de respuesta: Escala del 1-5; (1) Para nada (2) En ocasiones (3) A veces (4) La mayor parte del tiempo o (5) Todo el tiempo.*

		1=Para nada	2= En ocasiones	3= A veces	4=La mayor parte del tiempo	5=Todo el tiempo
1.	Seguir sus propios intereses y metas.					
2.	Comprar cosas extras para usted y su familia.					
3.	Cumplir con sus obligaciones financieras.					
4.	Hacer lo que quiere y cuando quiere.					
5.	Comprar la cantidad y la clase de alimentos que le gustan.					
6.	Mantenerse en un presupuesto.					
7.	Pagar sus deudas.					
8.	Pagar sus cosas sin tener que pedir prestado a su familia o amistades.					

*Puntaje:* Promedios mas altos indican mas auto-suficiencia económica.

**Financial Strain Survey - R**

Instructions: Below are a number of questions and statements. Please indicate how often they describe you **in the past month** (30 days). *Response Options: Scale of 1-5; (1) never (2) rarely (3) sometimes (4) often (5) always.*

		1=never	2=rarely	3=sometimes	4=often	5=always
1.	I find it difficult to pay my bills.*					
2.	I have not received education on financial management.					
3.	Do your muscles get tense when you add up your bills?					
4.	Do you ever get headaches from worry over money matters?*					
5.	I borrow money to make purchases hoping that I will have the money later.					
6.	Are you ever unable to sleep well because of financial worries?*					
7.	I don't know how interest works on my current debts.*					
8.	I tend to argue with others about money.					
9.	I get loans or use credit cards to buy nicer things.*					
10.	I get new loans or credit cards to pay off old ones.					
11.	Many of my bills are past due.*					
12.	Does your financial situation cause you to feel heartburn or an upset stomach?					
13.	There are disagreements about money in my home.*					
14.	I don't have enough money to pay my bills.					
15.	Financial problems hurt my relationships.					
16.	I don't pay my bills on time.*					
17.	I don't feel well informed about financial matters.*					
18.	My relationships with others are affected by financial problems.					

*Scoring:* Higher mean scores indicate more financial strain.

Caution is recommended when comparing scale means between English and Spanish-speaking participants. They tend to respond differently to the items with an asterisk.

**Encuesta de Tensiones Financieras- R**

Instrucciones: A continuación hay una lista de preguntas y afirmaciones. Por favor, indique con qué frecuencia estas afirmaciones describen sus experiencias durante **el mes pasado** (los últimos 30 días). *Las opciones de respuesta: Escala del 1-5; (1) Nunca (2) Rara vez (3) A veces (4) Con frecuencia (5) Siempre.*

		1=Nunca	2=Rara vez	3=A veces	4=Con frecuencia	5=Siempre
1.	Se me hace difícil pagar mis deudas.*					
2.	No he recibido educación sobre el manejo de mis finanzas personales.					
3.	¿Sus músculos se ponen tensos cuando se pone a sumar sus deudas?					
4.	¿Alguna vez ha sentido dolores de cabeza por las preocupaciones relacionadas con asuntos de dinero?*					
5.	Pido dinero prestado para hacer compras esperando tener dinero más adelante para pagar el préstamo.					
6.	¿Alguna vez no ha podido dormir bien por las preocupaciones financieras?*					
7.	No sé cómo funciona el pago de intereses en mis deudas actuales.*					
8.	Suelo discutir con otros sobre dinero.					
9.	Obtengo préstamos o uso tarjetas de crédito para comprar cosas más bonitas.*					
10.	Obtengo nuevas tarjetas de crédito para poder pagar deudas en otras tarjetas de crédito.					
11.	Tengo muchas deudas en las cuales los pagos están atrasados.*					
12.	¿Su situación financiera hace que sienta acidez o dolor de estómago?					
13.	Existen desacuerdos sobre el dinero en mi hogar.*					
14.	No tengo suficiente dinero para pagar mis cuentas.					
15.	Los problemas financieros perjudican mis relaciones con otros.					
16.	No pago mis deudas a tiempo.*					
17.	No me siento bien informada en asuntos financieros.*					
18.	Mis relaciones con otros se ven afectadas por los problemas financieros.					

*Puntaje:* Promedios mas altos indican mas tensiones financieras.

Se recomienda cautela al comparar los promedios de participantes que hablan inglés con los que hablan español, ya que estos dos grupos suelen responder de manera diferente a las afirmaciones con asterisco.

**Abusive Behavior Inventory-R2 (ABI-R2)**

Instructions: Listed below are behaviors that many women report have been used by their intimate partners or former partners. Please indicate whether it has happened in your relationship with your partner or former partner **in the last 12 months**. *Your answer can range from 1-5. 1=Never, 2=Hardly Ever, 3=Sometimes, 4=Often, 5=Quite Often.*

		1=never	2=hardly ever	3=sometimes	4=often	5=quite often
1.	Insulted or criticized you.*					
2.	Pushed, grabbed, or shoved you.					
3.	Told you that you were a bad person.					
4.	Threatened you with a knife, gun, or other weapon.					
5.	Became very upset with you because dinner, housework, or laundry was not ready when he/she wanted it or done the way he/she thought it should be.					
6.	Checked up on you (examples: went through your phone, checked the mileage on your car, called you repeatedly at work).					
7.	Refused to do housework or childcare.					
8.	Threatened to hit or throw something at you.					
9.	Accused you of paying too much attention to someone or something else.					
10.	Said things to scare you (examples: told you something “bad” would happen, threatened to commit suicide).					
11.	Gave you angry stares or looks.					
12.	Prevented you from having money for your own use.					
13.	Put down your family and friends.					
14.	Made you do something humiliating or degrading (examples: begging for forgiveness, having to ask permission to use the car or do something).					
15.	Ended a discussion with you and made the decision him/herself.					
16.	Tried to keep you from doing something you wanted to do (example: going out with friends, going to meetings).					
17.	Pressured you to have sex in a way that you didn’t like.*					
18.	Slapped, hit, or punched you.					
19.	Threw, hit, kicked, or smashed something.*					
20.	Used a knife, gun, or other weapon against you.					
21.	Choked or strangled you.					
22.	Physically attacked the sexual parts of your body.					
23.	Physically forced you to have sex.*					
24.	Kicked you.					
25.	Threw you around.					

*Scoring:* Higher mean scores indicate more frequent experiences of intimate partner violence. Caution is recommended when comparing scale means between English and Spanish-speaking participants. They tend to respond differently to the items with an asterisk.

### Inventario del Comportamiento Abusivo-R2 (ABI-R2)<sup>a</sup>

**Instrucciones:** A continuación, hay una lista de comportamientos que muchas mujeres reportan han sido usados por su pareja o ex-pareja. Por favor indique si le ocurrió esto en su relación con su pareja o ex-pareja **en los pasados 12 meses**. *Sus respuestas pueden variar del 1-5. 1=Nunca, 2=Casi Nunca, 3=A veces, 4=Con frecuencia, 5=Con mucha frecuencia.*

		1=Nunca	2=Casi Nunca	3= A veces	4=Con frecuencia	5=Con mucha frecuencia
1.	La insultó o criticó.*					
2.	La empujó, la agarró con fuerza o bruscamente, la sacudió.					
3.	Le dijo que usted era una mala persona.					
4.	La amenazó con cuchillo, pistola, o alguna otra arma.					
5.	Se enojó con usted porque la cena, las tareas del hogar, o aseo de ropa no estuvieron listos cuando él/ella quería o de la manera en que él/ella creía que debían estar.					
6.	La espió o vigiló (por ejemplo: revisó su teléfono, revisó las millas del carro, la llamó repetidamente al trabajo).					
7.	Se negó a ayudar con las tareas del hogar o cuidar a los niños(as).					
8.	Amenazó con golpearla o tirarle algo.					
9.	Le acusó de prestar demasiada atención a alguien o algo más.					
10.	Le dijo cosas para asustarla (por ejemplo: le dijo que pasarían cosas malas, la amenazó con suicidarse).					
11.	La miraba fijamente con coraje/rabia					
12.	Le impidió tener dinero para su propio uso.					
13.	Minimizó o habló negativamente de su familia y amistades.					
14.	Le hizo hacer cosas humillantes o degradantes (por ejemplo: rogar por perdón, tener que pedir permiso para usar el carro o hacer algo).					
15.	Dio por terminada una discusión y tomó una decisión por sí mismo(a).					
16.	Trató de prevenir de que hiciera cosas que usted quería hacer (por ejemplo: salir con sus amistades, ir a reuniones).					
17.	La presionó a tener relaciones sexuales de una forma que usted no quería.*					
18.	La abofeteó, golpeó o le dio con el puño.					
19.	Tiró, golpeó, pateó, o destruyó algo.*					
20.	Usó un cuchillo, pistola, u otra arma en contra suya.					
21.	La estranguló o asfixió.					
22.	La atacó físicamente en las partes sexuales de su cuerpo.					
23.	La forzó físicamente a tener relaciones sexuales.*					
24.	La pateó.					
25.	La tiró o aventó.					

*Puntaje:* Promedios mas altos indican experiencias de violencia de pareja más frecuentes.

Se recomienda cautela al comparar los promedios de participantes que hablan inglés con los que hablan español, ya que estos dos grupos suelen responder de manera diferente a las afirmaciones con asterisco.

<sup>a</sup> Por sus siglas en Inglés

**Scale of Economic Abuse-12 (SEA-12)**

Instructions: I’m going to go through a list of things some individuals do to hurt their partner or ex-partner financially. Could you tell me, to the best of your recollection, how frequently your partner or ex-partner has done any of the following things in the **last 12 months**. *Your answer can range from 1-5. 1=Never, 2=Hardly ever, 3=Sometimes, 4=Often, 5=Quite Often.*

		1=never	2=hardly ever	3=sometimes	4=often	5=quite often
1.	Demanded to know how money was spent.					
2.	Threatened you to make you leave work.					
3.	Spent the money you needed for rent or other bills.					
4.	Built up debt under your name by doing things like use your credit card or run up the phone bill.					
5.	Demanded that you quit your job.					
6.	Paid bills late or did not pay bills that were in your name or in both of your names.					
7.	Beat you up if you said you needed to go to work.					
8.	Made important financial decisions without talking with you about it first.					
9.	Made you ask him for money.					
10.	Kept financial information from you.					
11.	Demanded that you give him receipts and/or change when you spent money.					
12.	Did things to keep you from going to your job.					

*Scoring:* Higher mean scores indicate more frequent experiences of economic abuse.

**Escala del Abuso Económico (SEA-12)<sup>a</sup>**

**Instrucciones:** Voy a mencionar varias cosas que hacen algunos individuos para herir a su actual pareja o ex-pareja financieramente. ¿Puede decirme, basado en lo que mejor recuerde, con qué frecuencia su pareja o ex-pareja hizo algunas de las siguientes cosas en los **últimos 12 meses**? *Sus respuestas pueden variar del 1-5. 1=Nunca, 2=Casi nunca, 3=A veces, 4=Con frecuencia, 5=Con mucha frecuencia.*

		1=Nunca	2=Casi nunca	3=A veces	4=Con frecuencia	5=Con mucha frecuencia
1.	Exigió saber en qué se gastó el dinero.					
2.	La amenazó para hacerla irse de su trabajo.					
3.	Gastó el dinero que usted necesitaba para pagar la renta y otras cuentas.					
4.	Le creó deudas a su nombre al usar sus tarjetas de crédito o elevar la cuenta del teléfono.					
5.	Le exigió que renuncie a su trabajo.					
6.	Hizo pagos tardíos o no pagó las cuentas que estaban a nombre de usted o de ambos.					
7.	La golpeó si usted decía que tenía que ir a trabajar.					
8.	Tomó decisiones financieras importantes sin consultarle a usted primero.					
9.	Hizo que le pidiera dinero.					
10.	Le ocultó información financiera.					
11.	Exigió que le entregara recibos y/o el cambio cuando usted hizo alguna compra.					
12.	Hizo cosas para impedir que usted vaya a trabajar.					

*Puntaje:* Promedios mas altos indican experiencias de abuso económico más frecuentes.

<sup>a</sup> Por sus siglas en Inglés