Advancing Domestic Violence Program Evaluation: Development and Validation of the Measure of Victim Empowerment Related to Safety (MOVERS)

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CITATION
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Objective: As budgets tighten and demand grows, domestic violence (DV) programs are facing enormous pressure to demonstrate the impact of their work. A critical challenge to doing so is the absence of outcome measures that reflect DV programs’ missions and survivors’ goals for themselves. Academic-community partnerships are critical to developing such measures. The 2 aims of this study were to (a) develop and validate a measure—the Measure of Victim Empowerment Related to Safety (MOVERS)—that taps a key goal shared by DV program staff and program participants, and (b) draw on and model the benefits of community-based participatory research. Method: We evaluated the factor structure, reliability, and validity of MOVERS through a 2-stage process in which we developed a university-community partnership with 17 DV programs across the Northeast and administered a survey to 230 help-seeking survivors. Results: A scree plot and parallel analysis supported a 3-factor solution, with subscales assessing the extent to which a survivor (a) has developed a set of safety-related goals and a belief in her ability to accomplish them, (b) perceives that she has the support she needs to move toward safety, and (c) senses that her actions toward safety will not cause new problems in other domains. Each subscale demonstrated good internal reliability and construct validity. Conclusion: MOVERS provides a tool for assessing a key dimension of survivors’ experience and enables the evaluation of domestic violence program practices in ways that are consistent with core program and survivor goals.

Keywords: community-based participatory research, domestic violence, empowerment, evaluation, intimate partner violence, outcome measure, safety

Intimate partner violence (IPV)—that is, physical abuse, sexual assault, psychological abuse, stalking, and coercion—causes devastating physical and psychological damage to millions of people in the United States each year (Black et al., 2011). In response, residential and community-based organizations have sprung up in communities across the country to provide temporary and longer-term shelter, advocacy, counseling, and legal and economic support (Davies & Lyon, 2013; Goodman & Epstein, 2008).

In recent years, these programs have come under enormous pressure to assess and demonstrate the impact of their work, often without the guidance or resources necessary to do so (Sullivan, 2011; Sullivan & Alexy, 2001). Perhaps the most fundamental
Obstacle is the absence of outcome measures that reflect programs’ missions and survivors’ goals for themselves (Goodman & Epstein, 2008; Kulkarni, Bell, & Rhodes, 2012; Song, 2012). Indeed, evaluators, practitioners, and scholars have long noted the need for outcome measures that are relevant to both DV programs and their participants (Sullivan, 2011), and rigorously developed, tested, and refined (e.g., Bennett, Riger, Schewe, Howard, & Wasco, 2004). Although few scholars have attempted to identify key outcomes that extend across various types of DV programs (see Sullivan, 2011 for an especially thorough discussion), they tend to reflect specific program activities (e.g., “client obtained a restraining order”) rather than survivors’ progress toward goals they have set for themselves. Moreover, they tend not to be theoretically based or rigorously tested (Cattaneo & Goodman, in press). This study’s primary aim was to address this gap. Through a university-community partnership, we developed and validated a measurement tool, called the Measure of Victim Empowerment Related to Safety (MOVERS; see the Appendix for English and Spanish versions) that taps a construct central to DV programs’ missions and many survivors’ goals for themselves: Empowerment within the domain of safety. In this literature review, we describe the scholarly and practice-based rationale for the selection and conceptualization of this construct.

A secondary aim of this study was to draw on and model the benefits to both DV researchers and DV programs of community-based participatory research. Referred to variously as community-engaged research, participatory action research, and empowerment evaluation, partnership approaches to research and evaluation have gained momentum across academic disciplines (Israel, Eng, Schulz, & Parker, 2005). Although such approaches involve community partners in many aspects of the research process, collaboration usually does not extend to the process of developing measures to assess intervention outcomes (Hausman et al., 2013). Instead, researchers tend to draw on academically derived and validated outcome measures. When community stakeholders are left out of the process of defining the outcomes that would be most relevant to them, however, the resulting information is also less relevant and important program effects may be missed (Hausman et al., 2013). By contrast, when community stakeholders actively engage in the process, not only do they develop a sense of ownership, but they also increase the validity and utility of evaluation efforts for all involved (Fetterman, Kaftarian, & Wandersman, 1996).

To develop the measure at the heart of this study, we established an ongoing collaboration called the Domestic Violence Program Evaluation and Research Collaborative (DVPERC), composed of researchers, advocates, supervisors, and executive directors from 17 DV organizations representing residential (shelter and transitional living) and community programs across northeastern United States. The first part of the Method section describes the DVPERC’s process of developing the initial draft of the measure. The second part describes the procedures we used to evaluate its psychometrics, including an exploratory factor analysis and evaluation of the measure’s reliability and validity. In addition to administering background questions and the MOVERS itself, we administered a set of standardized measures of depression, self-efficacy, social support, and satisfaction with services to test MOVERS’ convergent validity. These variables were selected based on prior research demonstrating the relationship between empowerment and social support and satisfaction with services (Corrigan, Faber, Rashid, & Leary, 1999) and depression (Rogers et al, 1997). Next, we turn to the theoretical foundations of the measure.

The Conceptual and Practice Foundation of MOVERS

Empowerment Scholarship and the Empowerment Process Model

Although rarely measured or even consistently defined, the notion of empowerment—encompassing themes of personal choice; finding voice; a focus on strength versus deficit; and transcending oppression—remains an animating principle of most DV programs, as it has from the earliest days of the domestic violence movement (Cattaneo & Goodman, in press; Kasturirangan, 2008; Song, 2012; Macy, Giattina, Sangster, Crosby, & Montijo, 2009). The pivotal role of empowerment in DV program ideology and practice is supported by research showing its association with other key aspects of survivor wellbeing, such that those who experience a greater degree of empowerment (variably defined) in the short-term appear more likely to be satisfied with services and to reach positive longer-term outcomes such as mental health and safety (e.g., Cattaneo & Goodman, 2010; Buzawa & Hotaling, 2003; Johnson, Zlotnick, & Perez, 2011; Zweig & Burt, 2007). Thus, the construct of empowerment has the potential to be useful as a measure of the proximal or immediate impact of DV services and as an indicator of distal or longer-term outcomes that any organization working with IPV survivors would target.

Although the evidence for the centrality of empowerment to DV program missions and survivor wellbeing is compelling, there is little consensus in the literature both inside and outside of IPV on how to define or measure it. At the same time, several key themes cut across scholarly discussions of the construct: Empowerment scholars often describe empowerment as a shift in an individual’s psychological sense of control as well as a person’s actual power to affect the social world; an iterative process rather than an outcome at a single point in time; a process that can be hindered or facilitated by others, though not gifted by one person to another; and driven by priorities that are personally meaningful rather than imposed (see, e.g., Gutierrez, 1990; Rappaport, 1987; and Zimmerman, 1995 for critical discussions of the idea of empowerment; and see Cattaneo & Chapman, 2010). For example, in foundational work on empowering practices with women of color, Gutierrez touches on each of these themes, noting that empowerment represents an ongoing process of growth and change that combines “a sense of personal control with the ability to affect the behavior of others” (p. 150). Empowering practices therefore entail strategies that address both the structural and the psychological impediments to gaining power. As should be evident from this description, the very richness of the empowerment construct that makes it so appealing also makes it difficult to define and measure with precision.

Consistent with the consensus on key aspects of empowerment, the Empowerment Process Model (EPM), a conceptual model of empowerment that integrates prior research and theory (see Cattaneo & Chapman, 2010 for original model and Cattaneo & Goodman, in press for model revised for DV context), defines empow-
erment as a meaningful shift in the experience of power attained through interaction in the social world. This shift occurs iteratively through a process in which a survivor (a) sets personally meaningful goals oriented toward increasing power; (b) takes action to accomplish those goals, drawing on both internal (e.g., self-efficacy, knowledge and skills) and external (e.g., formal and informal support) resources; and (c) makes meaningful progress without creating new sources of disempowerment in the process. It is possible for others (e.g., service providers, friends and family) to facilitate or hinder any part of the process, from the refinement of goals to the building or degrading of resources, to the curtailing of new problems (sources of disempowerment) that might arise as a person works toward her goals.

To develop a measure of the empowerment of DV survivors that would be theoretically grounded as well as ecologically valid, we proceeded along two highly integrated tracks, one focusing on scholarship, highlighting the EPM, and the other reflecting the on-the-ground-expertise brought by the members of academic-community partnership we established and the voices of survivors with whom they talked. These two tracks quickly became indistinguishable as we moved from scholarly discussions of the empowerment literature to conversations about what we were learning through focus groups at each member organization and then back again (a process described under Methods, below). Ultimately, these discussions became the basis for four key principles that integrate scholarship and practice observations, described next. These principles guided the development of the measure.

Principles Resulting From Integration of Scholarship and Program Expertise

Principle #1: The measure should be domain specific, with a focus on safety. Research on empowerment suggests that it takes on different meanings across specific populations and settings (Zimmerman & Warschauisky, 1998), and that even within specific populations and settings, most people are empowered in some areas but not in others. Scholars have noted that DV survivors can be enormously empowered with respect to parenting or professional accomplishment, for example, but disempowered with respect to physical safety at home (Goodman & Epstein, 2008). DVPERC members found this to be the case for many of their program participants, and wanted to assess survivors’ empowerment within a specific domain.

As for which domain to target, DVPERC members were unanimous on this question: They named increased safety from abuse as the most salient (though by no means the only) program-related goal for DV survivors accessing their services. Though this may seem obvious, in fact it is not: First, DVPERC members made clear that freedom from physical abuse is only one dimension of safety and that survivors in their programs struggled to find freedom from emotional abuse as much as from physical abuse. This observation is consistent with research showing that emotional abuse may be particularly damaging to survivors’ psychological wellbeing (Coker et al., 2002; Dutton et al., 2006). Second, DVPERC members echoed a growing chorus of voices (e.g., Goodman, Smyth, Borges, & Singer, 2009) suggesting that for some survivors, the quest for safety extends beyond the context of their relationships with their partners to relationships with other people (e.g., abusers’ friends and family members) and to the social service and justice system actors that so often revictimize as much as they help. Thus, DVPERC members agreed that a measure of empowerment that is tailored to survivors’ experience must focus on empowerment as it relates to safety, defined broadly as freedom from physical or emotional abuse from another person.

Principle #2: The measure should be sufficiently flexible to allow for variability in survivors’ safety-related goals. Consistent with the overall goal of empowerment, DVPERC members were committed to a survivor-defined approach to their work (Davies & Lyon, 2013; Kulkarni et al., 2012). That is, to the extent possible, they saw their role as facilitating survivors’ efforts to become safer in whatever way worked best for them, rather than following a rigid protocol laid out by the program. Within a relationship with a current or former intimate partner, the dynamics that interfere with safety can vary widely, and interact in infinite ways with other aspects of a survivor’s situation; the route to safety varies just as widely.

Indeed, within the domain of safety, survivors describe a broad range of goals (Davies & Lyon, 2013; Goodman, Dutton, Vankos, & Weinfurt, 2005). For example, a survivor may want to find a new place to live; gain financial independence to increase her range of options within or outside the relationship; or increase her social support system so that she will have people to help her pursue safety. Within the context of broad goals such as these, there is further variety. For example, the survivor seeking financial independence might wish to find a job, seek public benefits to help with expenses such as childcare, or decrease expenses by moving in with a family member (Cattaneo & Goodman, in press). Moreover, these goals may be short-term (e.g., learning about available services and resources) or longer-term (e.g., gaining job skills). In sum, a measure that takes this complex reality into account must allow for survivors to define their own route to safety. Thus, DVPERC members agreed that the measure needed to be standardized so as to produce a quantitative assessment of survivors’ safety-related empowerment, yet sufficiently flexible to accommodate survivors’ individualized safety-related goals.

Principle #3: The measure should bridge the psychological (internal) and the social (external). As research makes clear, empowerment is neither solely a psychological phenomenon nor solely a social or contextual one, but involves interaction between individuals and their social contexts (Christens, 2012; Gutiérrez, 1990; Neal & Neal, 2011; Riger, 1993). In the case of DV, a survivor’s belief (internal) in the potential helpfulness of formal supports informs her likelihood of using those supports; and the supports’ responses (external), whether positive or negative, inform her future choices. The measure, therefore, needed to reflect this dynamic interplay and include internal psychological aspects (e.g., goal identification) and external contextual aspects (e.g., access to community resources).

Principle #4: The measure should assess the trade-off that seeking safety creates as a component of empowerment. Finally, both scholarship and DVPERC discussions highlighted a complexity experienced by programs and survivors: The very process of increasing safety from an abusive partner can create other problems of equal or even greater magnitude (Goodman et al., 2009). Does the survivor take the job that gives her financial independence but leave her children alone with the abusive partner? Does she seek a shelter that means moving away from the immigrant
community that has been her sole support since she moved to this country? In these situations, responses that might externally appear “empowered” in that they seem to represent movement toward a specific goal could, in reality, cause greater levels of instability and crisis and ultimately even compromise safety further (Hamby, 2014). DVPERC members agreed that empowerment should involve a reduction in these kinds of difficult trade-offs so that the survivor can move out of crisis orientation and toward longer-term goals. Put differently, it is not enough to measure empowerment in terms of movement toward a specific goal without also assessing the degree to which that very movement creates new and equally difficult challenges. *The measure therefore needed to capture participant trade-offs related to safety.*

Building on these principles, we generated items for the measure, and piloted the resulting draft. This process is described in detail next.

**Method**

The method is presented in two sections: The first describes the DVPERC and its process for developing a draft measure. The second delineates the psychometric evaluation of the draft measure, including procedures for recruiting participants, administering the larger survey in which our target measure was embedded, and conducting an exploratory factor analysis.

**Stage I: The DVPERC Process of Developing the MOVERS**

An explicit secondary aim of this project was to develop a strong partnership between academics and DV program staff and participants for the purpose of developing useful tools for program evaluation. This process proceeded through several phases, described next.

**DVPERC establishment and composition.** The collaboration started when the directors of three local DV organizations asked the first author to consult with them as they worked to develop an outcome measure they could use to respond to internal and external demands for evaluation. We met biweekly for two months to refine our focus, during which time other organizations heard about the project and asked to join. Eventually, we decided to open the project to others and it quickly expanded to include researchers from several institutions, doctoral students, and representatives of DV programs across the northeast. Most of these organizations joined in the first four months of the project, though a few did not join until 10 months in. By the end of 12 months, 17 programs had joined and we had adopted our formal title.

**DVPERC process.** Over the course of a 12-month period, DVPERC members met monthly to define and generate items for an evaluation tool. Those researchers who could not be at the meetings themselves provided consultation to the group through the first author, and the three programs that were too far away to send representatives participated mainly in the second stage of the project, the survey administration. Between meetings, three of the researchers (the first, third, and fourth authors) collected and disseminated relevant research and conducted focus groups with staff at seven of the member programs and with survivors at one of the programs. Meanwhile DV program representatives talked more informally with staff and survivors to elicit further guidance and feedback. During in-person meetings, we discussed the literature and results of our conversations with staff and survivors.

Very quickly, these conversations resulted in our selection of the construct of empowerment as our outcome of interest. This construct rose to the top for several reasons: First, all DVPERC member programs felt that it was a core part of their mission and had been from the beginning. Second, it was less contingent on outside conditions than other key priorities such as safety alone (dependent on abuser actions) and residential stability (dependent on community’s level of affordable housing stock). Once we had established empowerment as the outcome of interest, we turned to the identification of key principles for defining the construct, as described above. As already noted, these principles, in turn, shaped our decision to focus still further on the idea of empowerment within the domain of safety. The EPM both influenced these principles and was influenced by them, ultimately resulting in a formal revision of the model. Finally, during this process we determined that we wanted the measure to be available in English and Spanish (the two most common languages spoken at member programs), and that it had to be relatively brief to be usable.

The remainder of the year was devoted to generating items for each piece of the revised EPM, taking draft items back to program staff meetings for further discussion and refinement along the lines of our principles, and then drafting new items. Overall, this iterative process went through at least four rounds before we finally settled on a set of 36 items that became the penultimate draft of MOVERS. The last step was to pilot test the draft with the first 20 participants recruited into the study (15 English speakers and five Spanish speakers). We asked these participants to complete the survey and give us feedback about confusing items. On the basis of these miniconversations, we changed the wording of a number of the items to render them clearer to participants. Once we had arrived at the final draft measure (as elaborated below under measures), we were ready to begin the psychometric component of the study. Every single DVPERC member program signed on for this next stage.

**Stage II: Psychometric Evaluation of the MOVERS**

**Participants.** We collected data from a convenience sample of survivors currently accessing DV services at 17 urban and suburban organizations in three states in the Northeastern United States. All programs provided safety planning, counseling, and information and referrals in person and over the phone to survivors living in the community. Thirteen programs also provided emergency shelter, with stay lengths of several weeks to approximately six months. Shelter sizes ranged from small (i.e., five families) to medium (i.e., approximately 15 families) to large (i.e., approximately 50 families), though most were medium in size. Five of the programs that provided emergency shelter also provided transitional living programs (TLP), with stay lengths of up to two years. An additional two programs provided TLP only. All programs were “mainstream” in that they did not focus services on one particular population.

Eligible participants were (a) aged 18 or over and (b) English- or Spanish-speaking. Participant retention in the study was high; only one participant decided to withdraw partway through because she felt overwhelmed, having arrived at the shelter the day before. From the original sample of 309, we
eliminated data from the four men who participated in the study, and from four participants who responded to less than 50% of the entire survey. After preliminary analysis (as presented in the results section), we excluded 71 participants who endorsed “not applicable” and/or blank responses among the retained MOVERS items (see Figure 1 for a description of the progress of sample selection). We did not impute these data because we considered “not applicable” a substantive response. This left a final sample size of 230. Compared with the final sample, the 71 excluded participants included an overrepresentation of Hispanic/Latina-identified women, as well as participants who reported being born outside of the U.S. who completed the survey in Spanish, or reported reading and speaking English “not well” or “okay.” There is an obvious need to replicate these analyses with diverse samples (see Limitations below). Nevertheless, this sample size was sufficiently large for analyses given that it provided statistical power of .80 to detect correlations of .18 in magnitude at the .05 alpha level.

The final sample of 230 women had a mean age of 36.2 (SD = 10.9) with a self-identified racial and ethnic composition of 37.8% White, 28.3% Black/African American, 20.0% Hispanic/Latina, and 11.7% other. Most of the sample (71.7%) was born in the United States. Participants’ socioeconomic status was mixed, with about half (52.2%) reporting they attended some college, graduated from college, or pursued an advanced degree; but 54.8% were unemployed, and almost three fourths (71.3%) reported receiving some type of need-based government assistance. A minority (17.0%) reported a physical disability, but half (49.6%) reported mental health concerns, 72.8% of which interfered with daily functioning. The majority (87.4%) identified as heterosexual; 20.4% reported being in a relationship, 27.7% of whom reported the relationship was with the partner whose abuse led them to seek DV services. Most (88.3%) had children; of those, 45.8% reported that the abuser was the father of at least one child.

The sample was evenly divided between residential program (48.7%) and community-based program (51.3%) participants. Among community participants, 35.6% reported current contact with the program about once a week; the next most frequent responses were a few times a month (15.3%) and every few months (10.2%). Among residential participants, 28.6% of participants had been at the shelter or transitional living program for less than one month, 44.7% for one to six months, and 18.8% for more than six months.

**Procedures.** Staff at each program posted flyers, described the study at client meetings, and scheduled administration times. Depending on the number of expected participants, anywhere from one to four members of the research team administered the surveys to participants in groups of up to 15 people. While survey administration was done at programs for survivors’ convenience, no program staff was ever present during survey administration. The survey administration team included the first, third, and fourth authors, along with 11 trained graduate students pursuing degrees in mental health counseling or social work. Research team members described the study and procedures, administered the informed consent form orally, and answered questions while participants filled out the survey. For administrations with Spanish-speaking participants, a bilingual member of the research team was present and all instructions and materials were provided in Spanish. To prevent anyone with literacy issues from feeling uncomfortable, we offered to read the survey to any participant who “did not feel like” doing the survey on her own, and we stressed that no survey information would be shared with program staff. Snacks and childcare were provided, and all participants received a $20 TARGET gift card. Survey administrations lasted between 60 and 90 minutes.

![Figure 1. The progress of sample selection.](image-url)
Measures

Background questions. As reported in participant characteristics, we asked about demographics and use of DV services within the past year.

Measure of Victims’ Safety Related to Empowerment (MOVERS). MOVERS started as a draft with 36 items and, following the factor analysis, ended as a 13-item scale composed of three subscales: Internal Tools (six items), Expectations of Support (four items), and Trade-Offs (three items). Participants responded using a 5-point Likert scale (from never true to always true). The measure introduction defined safety as freedom from physical or emotional abuse from another person and encouraged respondents to think broadly, if applicable, i.e., When you are responding to these questions, it is fine to think about your family’s safety along with your own if that is what you usually do. Information on reliability is presented below.

Depressive symptoms. The 20-item Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was used to measure severity of depressive symptoms. Participants responded to items (e.g., I could not get going) on a 4-point Likert scale ranging from rarely to all of the time in the past week. This scale has been used extensively with community samples of low-income women and has strong construct and concurrent validity when compared with clinical diagnostic criteria, as well as to other self-report scales of depression (e.g., Belle, 1982; Goodman, 1991). Cronbach’s alpha was .93.

Self-efficacy. The 10-item General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995) measured level of perceived self-efficacy. Participants responded to items (e.g., I can usually handle whatever comes my way) on a 4-point Likert scale ranging from not at all true to exactly true. The GSE has demonstrated high construct validity across diverse countries and samples (Luszczynska, Gutiérrez-Dona, & Schwarzer, 2005). Cronbach’s alpha was .91.

Social support. The 12-item Social Support Network Scale (SSN) from the Chicago Women’s Health Risk Study (Block et al., 2000) measured informal social support. The scale, developed for adult women challenged by abuse or poverty, assesses three aspects of informal social support: acceptance and support (five items), emergency help (four items), and access to resources related to basic needs (three items). We chose to use the first two of these subscales only since the third did not fit the situations of participants living in a shelter who had temporary access to resources they might not normally have. Participants responded with either agree or disagree. The SSN has been shown to have high reliability and construct validity with abused women (Block et al., 2000). Cronbach’s alpha for the first two subscales combined was .84.

Client satisfaction with services. The Client Satisfaction Questionnaire-8 (CSQ-8; Attkisson & Greenfield, 2004) measured level of satisfaction with the program from which participants were recruited. Participants responded to eight items (e.g., How would you rate the quality of services you received?) on a 4-point scale depending on the nature of the question (e.g., poor to excellent vs. quite dissatisfied to quite satisfied). The CSQ-8 has been demonstrated high internal consistency and predictive validity in a variety of samples, including inpatients and outpatients in mental health settings. Cronbach’s alpha was .95.

Spanish translation. A bilingual translator who was also a DV advocate conducted the initial translation of MOVERS. Four bilingual doctoral students suggested refinements to this translation to enhance its clarity and cultural sensitivity across Spanish dialects. A second translator then translated the Spanish version back into English as a final check for consistency of meaning. We used this same process for all measures used, except those already translated and published in Spanish. When we compared the participants who completed the survey in Spanish (or in English with assisted translations) who were excluded (n = 22) with their counterparts who were not excluded (n = 30), we noted no significant difference in any demographics or scale scores. In addition, results based on participants who completed the survey in English were very similar to those based on the full sample that included the 30 Spanish-speaking participants. Therefore, unless stated otherwise, we reported results based on the full sample.

Results

We used exploratory factor analysis (EFA) to identify latent constructs (factors) underlying MOVERS items and to reduce the number of items in the measure (DeVellis, 2012; Worthington & Whittaker, 2006). Although we had a theoretical model of empowerment guiding our work, the model was too new and untested to assume that the items would map onto its dimensions precisely. EFA is appropriate in such cases, where there is no assumption that items conform to existing theory. All of the following analyses were conducted using SPSS 20.

Preliminary Analysis

Before conducting EFAs, we evaluated the quality of the MOVERS items by examining their corrected item-total correlations and the frequency of “not applicable” responses (DeVellis, 2012; Worthington & Whittaker, 2006). Unless there was an overriding conceptual reason to keep them, we eliminated items that were not applicable below .20 with the total scale score to ensure factorability; and items with a “not applicable” response rate of over 4% to confirm applicability and legibility. Through this process, we removed most of our negatively valenced items (10 out of 13), in addition to three others, leaving 23 items for further analysis (see Table 1). Item-total correlations were between .22 and .76 for the retained items.

Exploratory Factor Analyses

Estimating factorability. The Kaiser–Meyer–Olkin index (.93; on a possible range of 0–1) indicated excellent sampling adequacy and Bartlett’s test of sphericity was significant (p < .001), suggesting that the correlation matrix was appropriate for EFA.

Determining number of factors. We determined the number of factors to extract from a scree plot and parallel analysis (DeVellis, 2012; Worthington & Whittaker, 2006). Our scree plot supported a three-factor solution. Next, using the SPSS syntax developed by O’Connor (2000), we conducted a parallel analysis with a generation of 100 random permutations from our data set. Given the absence of consensus in the field as to which technique is best, we conducted the analysis using both principal-axis factoring (PAF) and principal components analysis (PCA) (O’Connor, 2000). Our analyses based on PAF and PCA suggested...
extracting six and three factors, respectively. With this range, we used PAF to separately extract the three-, four-, five-, and six-factor solutions. For each factor solution, we applied an oblique rotation using the direct oblimin method to aid factor interpretation due to our assumption that the factors would be correlated. We then considered whether the rotated factor solutions fit our conceptual priorities and interpretability, demonstrated satisfactory internal consistency, and consisted of factors with at least three items (Worthington & Whittaker, 2006). Among all factor solutions, the three-factor solution was best in meeting the above criteria.

Table 1
Factor Loadings of the Pattern Matrix and Extracted Communalities for MOVERS

<table>
<thead>
<tr>
<th>Item</th>
<th>Structure coefficients*</th>
<th>Structure coefficients*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F1</td>
<td>F2</td>
</tr>
<tr>
<td>Clear sense of goals</td>
<td>.86</td>
<td>.00</td>
</tr>
<tr>
<td>Making progress</td>
<td>.83</td>
<td>.07</td>
</tr>
<tr>
<td>Know my next steps (Strategy) seems to be working</td>
<td>.84</td>
<td>.01</td>
</tr>
<tr>
<td>Can try something else when something doesn’t work</td>
<td>.69</td>
<td>.02</td>
</tr>
<tr>
<td>Feel safe</td>
<td>.68</td>
<td>.11</td>
</tr>
<tr>
<td>Confident in decisions I make</td>
<td>.60</td>
<td>.13</td>
</tr>
<tr>
<td>Can do what it takes to keep safe</td>
<td>.67</td>
<td>.05</td>
</tr>
<tr>
<td>Can cope with challenges</td>
<td>.61</td>
<td>.07</td>
</tr>
<tr>
<td>Can picture my life in 6 months</td>
<td>.57</td>
<td>.04</td>
</tr>
<tr>
<td>Have skills I need to keep safe</td>
<td>.56</td>
<td>.09</td>
</tr>
<tr>
<td>Know what to do in response to threats</td>
<td>.55</td>
<td>.02</td>
</tr>
<tr>
<td>Know about my legal rights</td>
<td>.50</td>
<td>.03</td>
</tr>
<tr>
<td>Know ways to keep safe</td>
<td>.46</td>
<td>.13</td>
</tr>
<tr>
<td>Have a good sense of my needs</td>
<td>.46</td>
<td>.10</td>
</tr>
<tr>
<td>New problems for me</td>
<td>.01</td>
<td>.84</td>
</tr>
<tr>
<td>New problems for people I care about</td>
<td>-.08</td>
<td>.82</td>
</tr>
<tr>
<td>Have to give up too much</td>
<td>.00</td>
<td>.48</td>
</tr>
<tr>
<td>(Know) kinds of support from programs and services</td>
<td>-.09</td>
<td>-.05</td>
</tr>
<tr>
<td>Feel comfortable asking for help</td>
<td>-.03</td>
<td>-.08</td>
</tr>
<tr>
<td>(Know) kinds of support from people in community</td>
<td>.09</td>
<td>-.04</td>
</tr>
<tr>
<td>Know about community resources available</td>
<td>.25</td>
<td>.03</td>
</tr>
<tr>
<td>Programs and services able to provide support</td>
<td>.17</td>
<td>-.03</td>
</tr>
</tbody>
</table>

Note. F1 = Internal Tools; F2 = Trade-Offs; F3 = Expectations of Support. Items and structure coefficients in italic indicate items uniquely loaded onto a specific factor. Items and structure coefficients in bold indicate items retained in the final version of MOVERS.

* Statistics were calculated based on the full sample (n = 230). Statistics were calculated based on the sample of participants who completed the survey in English (n = 200).

Descriptive Statistics, Reliability, and Validity of MOVERS

We computed subscale scores by averaging item scores corresponding to each subscale, and generated a total score by averaging item scores with the Trade-Offs items reverse-scored. Table 2 minimizing the length of the final measure. This resulted in a total of 13 MOVERS items—six for Internal Tools, three for Trade-Offs, and four for Expectations of Support (see Table 1, bold items). A final EFA confirmed these changes had not altered our factor structure (Worthington & Whittaker, 2006). The final three-factor solution accounted for 56.9% of the shared variance in the 13 items (eigenvalues for unrotated Factors 1–3 were 5.18, 1.41, and 0.80, respectively). Communalities were in an adequate range of .24–.83. The absolute values of the two strongest factor loadings across each item differed by at least .32, which indicated a simple factor structure. Specifically, the six items for Internal tools loaded most strongly on Factor 1 with their coefficients ranging from .61 to .87. I know what my next steps are on the path to keep safe was its top-loading item. The three items for Trade-Offs loaded most strongly on Factor 2 with their coefficients ranging from .48 to .86. Working to keep safe creates (or will create) new problems for people I care about was its top-loading item. Lastly, the four items for Expectations of Support loaded most strongly on Factor 3 with their coefficients ranging from .49 to .92. I have a good idea about what kinds of support for safety I can get from programs, services, and/or government agencies was its top-loading item.
lists subscale correlations, means, standard deviations, and Cronbach’s alpha estimates. The correlations among subscales were in the expected directions, with Trade-Offs negatively correlated with Internal Tools and Expectations of Support. Further supporting the scale’s construct validity, its total score was significantly related to the other study measures as hypothesized: MOVERS was negatively associated with depressive symptom scores on the CES-D \( (r = -0.42) \), and positively associated with General Self-Efficacy \( (r = 0.50) \), the two subscale version of the Social Support Network Scale \( (r = 0.35) \), and the Client Satisfaction Questionnaire \( (r = 0.35) \). Correlations with subcales were also consistent with theory: Among the three MOVERS subscales, Internal Tools was most strongly associated with the General Self-Efficacy Scale \( (r = 0.55) \); Expectations of Support was most highly correlated with the Social Support Network Scale; and the Client Satisfaction Questionnaire \( (r = 0.38 \text{ and } 0.41) \).

### Discussion

This study attempted to address a major challenge of DV program evaluation through the development of a theory and practice-informed measure of safety-related empowerment. Members of the DVPERC, a university–community partnership including the authors and representatives of 17 DV programs across the Northeast collaborated in an iterative year-long process to create a measure that could be used across program models and timeframes to assess program participants’ empowerment as it relates to their safety from domestic violence. An exploratory factor analysis based on 230 survivors seeking support from DV programs and validation of the measure based on its relationship with other hypothesized variables supported the measure’s reliability and validity. MOVERS (available from first author upon request) assesses empowerment within a single domain (safety), is sufficiently flexible to accommodate participants’ individualized safety-related goals, bridges the psychological and social dimensions of empowerment, and incorporates measurement of the trade-offs inherent in seeking safety.

This section reviews the factor structure of the measure, the value of the university–community partnership that created it, and the limitations of the study. We then discuss some of the research questions to which the measure lends itself, as well as the measure’s potential uses in practice contexts.

### The MOVERS’ Structure and Content

The structure of MOVERS that emerged through the EFA fits well with the theoretical model of empowerment (the EPM) that helped to guide item generation, described earlier. The EPM suggests that a survivor experiences a meaningful shift in the experience of power related to safety from an abusive partner through a process of setting personally meaningful goals oriented toward increasing safety, and taking action to accomplish those goals—drawing on both internal and external resources—making meaningful progress without creating new sources of disempowerment in the process (Cattaneo & Goodman, in press). The three factors that emerged from the EFA encompass all of the components of the original model, grouping them together in a way that is parsimonious and clear.

Specifically, Internal Tools, the first factor of MOVERS, measures the extent to which a survivor has developed a set of safety-related goals and a belief in her ability to accomplish them, encompassing the goals, self-efficacy, knowledge, and skill components of the model. Higher scores on this subscale represent the survivor’s perception that she knows what she wants to do to increase safety and that she has the internal resources to accomplish those goals. Trade-Offs, the second factor of MOVERS, measures the survivor’s sense that action toward the goal of safety will create new problems to contend with. Higher scores reflect a greater sense of risk in moving toward safety (and need to be reverse scored in order to obtain a total MOVERS score). This factor encompasses the EPM idea that the process of empowerment entails the survivor’s evaluation of his or her progress toward goals in light of whether that progress has brought about new problems (e.g., new sources of disempowerment) that may be just as daunting as the threats to safety. Expectations of Support, the third factor, measures the survivor’s sense that others can and will assist her as needed, incorporating the formal and informal support component of the model. Higher scores reflect the survivor’s perception that the support she needs exist, and that she can access it. These factors fit with the principles described earlier, and are thus consistent with both the scholarly and on-the-ground expertise that undergirded the project.

MOVERS demonstrated satisfactory psychometric properties. The communalities of the final 13 items were adequate (i.e., above .20). The factor structure was distinctive, as reflected by a lack of equally high loadings across factors. The reliability of the subscale scores were satisfactory (i.e., Cronbach’s alphas above .70). Finally, the construct validity of the MOVERS, both as a full measure and as a set of subscales, was excellent: As expected, MOVERS was related to global measures of psychological wellbeing (i.e., depression, general self-efficacy) and perceived quality of support systems (i.e., informal social support, satisfaction with services), though correlations were moderate. Also consistent with expectations, Internal Tools was most strongly associated with general self-efficacy and Expectations of Support was most highly correlated with informal social support and satisfaction with services.

In sum, MOVERS appears to be a theoretically grounded, ecologically valid, and psychometrically sound measure that assesses a distinct and key component of survivors’ experience in DV programs and potentially beyond.

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**Table 2**  
Subscale Correlations, Means, Standard Deviations, and Internal Consistency

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal tools</td>
<td>—</td>
<td>—</td>
<td>.62**</td>
<td>3.94</td>
<td>.79</td>
<td>.88</td>
</tr>
<tr>
<td>Trade-offs</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2.10</td>
<td>.103</td>
<td>.74</td>
</tr>
<tr>
<td>Expectations of support</td>
<td>.62**</td>
<td>—</td>
<td>—</td>
<td>3.78</td>
<td>.96</td>
<td>.83</td>
</tr>
</tbody>
</table>

**Note.** Statistics under the diagonal are based on the entire sample \( (n = 230) \) whereas those above the diagonal are based on the sample of which only participants who completed the survey in English were included \( (n = 200) \).  
**p < .01.**
University–Community Partnerships for Outcome Measure Development

This project represents a unique contribution to the literature on community-based participatory evaluation. Despite compelling evidence of the value of research and evaluation efforts that engage stakeholders, the critical task of developing outcome measurement tools has often been left out of the collaborative process (Hausman et al., 2013). This project countered that pattern by integrating practitioner and survivor input throughout the entire measurement development process. Researchers contributed literature on empowerment and a conceptual model that community stakeholders could work with, as well as the expertise required to develop a psychometrically valid measure; and community members brought their deep knowledge of the target population, the mission and practices of their programs, and the pragmatic requirements for a measure that could be useful in the context of sometimes chaotic and generally underresourced settings. This collaboration contributed dramatically to the quality of the final measure and ensured its conceptual integrity, relevance, face validity, and utility. It provides an example of how academic–community partnerships can produce something powerful and useful that neither academics nor practitioners could produce alone.

Limitations

Several sampling issues limit the generalizability of this study’s findings. First, although the sample was ethnically diverse and drawn from programs across the Northeast, thereby increasing ecological validity and generalizability, we were not able to recruit from other regions of the country where safety-related empowerment might be felt differently. Second, the small number of Spanish-speaking survivors in the sample made it impossible to conduct a separate EFA with this subsample, and we recognize the urgent need to replicate the study with non-English speaking groups. In particular, given that Hispanic/Latina participants who were born outside of the United States, who completed the survey in Spanish, or who reported speaking English “not well” or only “okay” were overrepresented among participants dropped from the final sample, generalization to this group requires additional study. Third, the sample was entirely female and almost entirely heterosexual. The extent to which the measure would be useful for men or gay, lesbian, bisexual, transgender, and/or queer survivors is unclear. Despite these limitations, it is heartening in terms of generalizability to note that demographics of this sample (including race/ethnicity, immigration status, and educational background) are almost identical to those of a national sample obtained in a study of community-based domestic violence programs (Lyon, Bradshaw, & Menard, 2011). This suggests that the measure may well be generalizable to survivors seeking help from mainstream DV programs. Still, further investigation is needed to learn whether the measure is applicable to those survivors who do not access formal support.

In terms of sample size, although 230 participants was a large enough sample to conduct an EFA, it was not large enough for a random split to conduct a confirmatory factor analysis (CFA) for cross-validation. For this reason, the findings presented here represent preliminary analyses only. A CFA will be required to learn whether the MOVERS factor structure stays stable in a new sample (Van Prooijen & Van Der Kloot, 2001). Finally, the cross-sectional nature of the sample prevented evaluation of the measure’s ability to capture change over time. However, DVPERC members are committed to using MOVERS to assess program participants at multiple time points, providing an opportunity for the partnership to fill this gap in the future.

Implications for Research and Evaluation

Assuming that a CFA confirms the factor structure of the MOVERS, it’s development and validation opens the way for several new lines of evaluation and research. First, despite the central role of empowerment as a guiding concept in the DV movement, there has been relatively little empirical research on how to conceptualize or measure it. This project provides a measure that can be used to evaluate program practices in ways that are consistent with core program and survivor goals. It also enables the evaluation of practices in terms of their effectiveness for specific survivor subgroups over time, and with respect to the specific subscales of MOVERS.

In terms of research, the development of MOVERS allows for investigation of a range of new questions, including what individual, interpersonal, programmatic, and larger contextual factors contribute to safety-related empowerment, whether certain subgroups of survivors have different trajectories in their path toward empowerment, and most importantly, whether safety-related empowerment indeed predicts longer-term safety and wellbeing. Most of these questions require longitudinal follow-up, a challenge for researchers who focus on marginalized and often residentially unstable groups. Here too, university–community partnerships can enhance researchers’ capacity to engage survivors safely and over time.

Implications for Practice

MOVERS enables the concrete evaluation of programs’ efforts to facilitate safety-related empowerment—a central tenet of their practice. For DVPERC programs and many others, facilitating a survivor’s empowerment means partnering with her to envision a set of goals and strengthen the internal resources necessary to move toward them, learn about and connect with potential external sources of assistance, and access some of the resources necessary to prevent the emergence of impossible double-binds and trade-offs. Not only does MOVERS allow for research and evaluation related to these activities, it also opens up the possibility of individual assessment of survivors’ experience and progress. Administering MOVERS periodically could increase staff’s capacity to conduct ongoing assessment of their own delivery on the three aspects of program support described above. Indeed, noting that a laser focus on survivors’ highest priorities sometimes resulted in other important issues falling off the proverbial table, several DVPERC member programs have begun to use the measure as an ongoing check on how survivors are faring within each of the three dimensions of empowerment—internal resources, external supports, and a diminishment of difficult trade-offs. The Trade-Offs subscale in particular may be valuable to programs, reminding them to assess the existence and severity of difficulties that are external to but intertwined with the central issue of safety and pointing the way toward various types of system-level collaborations. Indeed, documentation of the nature and extent of program participant tradeoffs may enable programs to fight successfully for greater system-wide collaboration and increased funding for new types of support.
Conclusion

In this article, we describe a process of collaboration that was arduous at times but that we feel was well worth the investment. It is our hope that the measure it generated will be useful to programs and researchers as we move toward our common, overriding goal of survivor safety.

References


Appendix

Measure of Victim Empowerment in Relation to Safety

You may be facing a variety of different challenges to safety. When we use the word safety in the next set of statements, we mean safety from physical or emotional abuse by another person.

Please circle the number that best describes how you think about your and your family’s safety right now. When you are responding to these statements, it is fine to think about your family’s safety along with your own if that is what you usually do.

Your Safety

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never true</th>
<th>Sometimes true</th>
<th>Half the time true</th>
<th>Mostly true</th>
<th>Always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can cope with whatever challenges come at me as I work to keep safe.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I have to give up too much to keep safe.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I feel confident in the decisions I make to keep safe.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I know what to do in response to threats to my safety.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I know what my next steps are on the path to keeping safe.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Working to keep safe creates (or will create) new problems for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. When something doesn’t work to keep safe, I can try something else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. When I think about keeping safe, I have a clear sense of my goals for the next few years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Working to keep safe creates (or will create) new problems for people I care about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I have a good idea about what kinds of support for safety I can get from community programs and services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Community programs and services provide support I need to keep safe.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Note. Measure of Victim Empowerment in Relation to Safety (MOVERS). © Lisa Goodman, 2014. No part of this measure may be reproduced or distributed without the prior written permission of the first author.
### Su Seguridad

<table>
<thead>
<tr>
<th></th>
<th>No es verdad</th>
<th>A veces es verdad</th>
<th>La mitad del tiempo es verdad</th>
<th>Casi siempre es verdad</th>
<th>Siempre es verdad</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Puedo enfrentarme a cualquier reto para mantener mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Tengo que renunciar demasiadas cosas para mantener mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Yo sé cómo responder a amenazas a mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Yo sé que tipos de apoyo con respeto a seguridad puedo obtener en mi comunidad (amigos, familia, vecinos, gente de mi espiritual)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Yo sé cuáles son los siguientes pasos para mantenerme seguro/a.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Mis intentos para mantener mi seguridad crean o van a crear nuevos problemas para mí.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Cuando algo no está funcionando para mantener mi seguridad, yo puedo intentar algo diferente.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Me siento co'modo/a pidiendo ayuda para mantener mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Cuando pienso en mi seguridad, tengo claras mis metas para el futuro.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Mis intentos para mantener mi seguridad crean o van a crear nuevos problemas para la gente que yo quiero.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Me siento seguro de las decisiones que hago para mantener mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Tengo una buena idea de qué tipo de apoyo puedo conseguir de las programas comunitarios para mantener mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Hay programas en mi comunidad y servicios sociales que pueden proveer el apoyo y los recursos que yo necesito para mantener mi seguridad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Nota.** Medida de Empoderamiento del Victima en Relación con la Seguridad (MOVERS).